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He is an author of 8 monographs, 12 manuals, 6 inventions, 3 laws – the law of survival of populations, the law of survival of real generations and the law of preservation of health (registered in the International Information Intellectual Novelty Registration Chamber of CEC UNO), 36 novelties, 20 methodical recommendations, 270 scientific and training-methodical articles. His scientific achievements are as follows: elaboration of leading aspects of the theory of health, the theory of health protection, the theory of population health management, the theory of diagnosis, the theory of cybernetic modeling of diagnostics and diseases clinical course, the methodological basis of the system research of medical and social objects and phenomena. He established leading system constituent elements of health, defined current integral indicators, their norms and standards, criteria of habitability of territories for population from the point of view of its health preservation. V.L.Tarallo developed the methods of the system analysis of morbidity, clinical course of diseases and mortality of them by all classes of ISC, the methods of measurement of the limit age of homo sapiens existing, the methods of measurement of "full" risks to people's life and health, directions and resource conditions of their terminating for all territories of the world, the methods of control of efficiency of the current health improvement programs by created prognosticating tables of population health for any territories of the world. He is a doctor-organizer of health care of the highest category.

CLASSICS OF POPULATION HEALTH

TARALLO V.L.

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Chernovtsy - 2015

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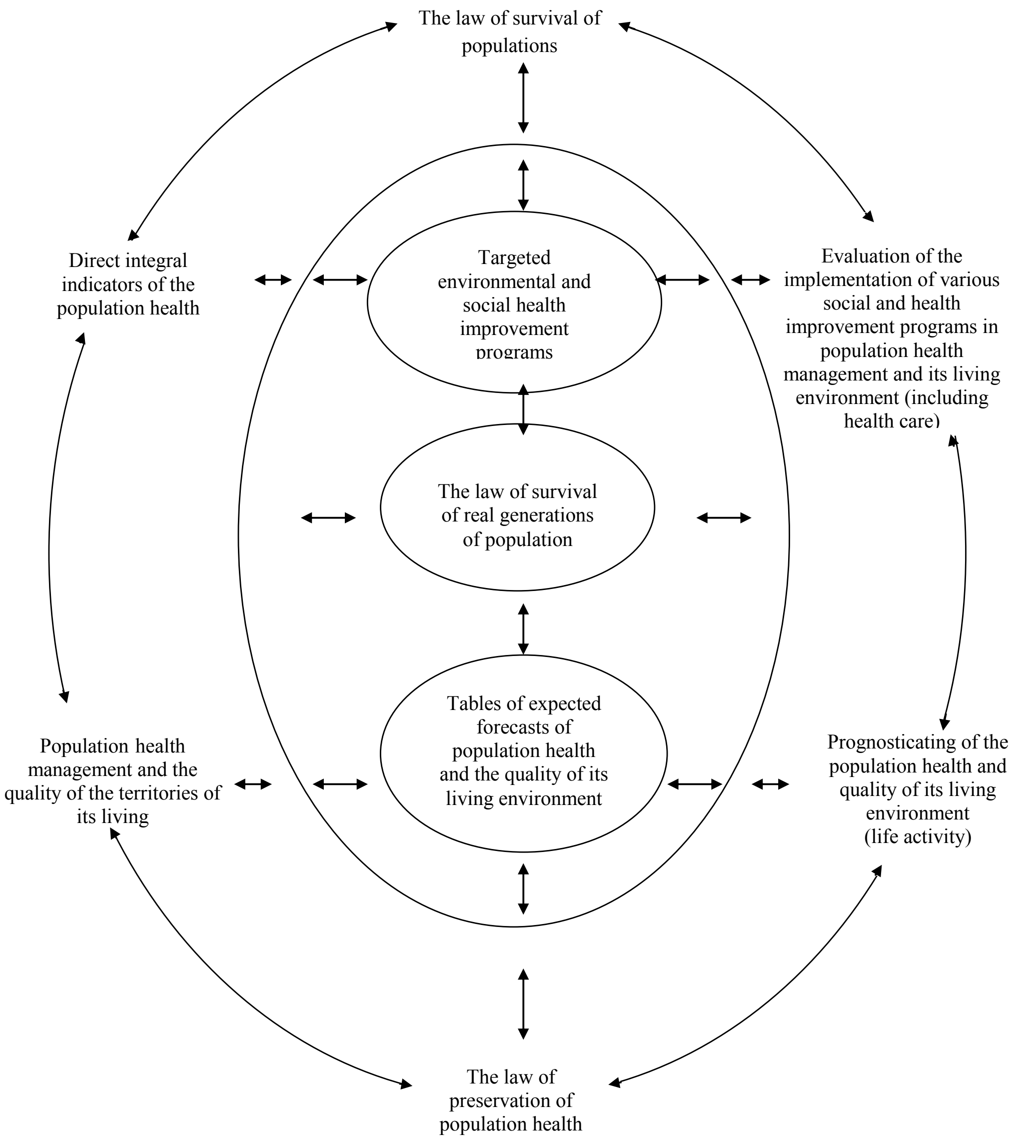

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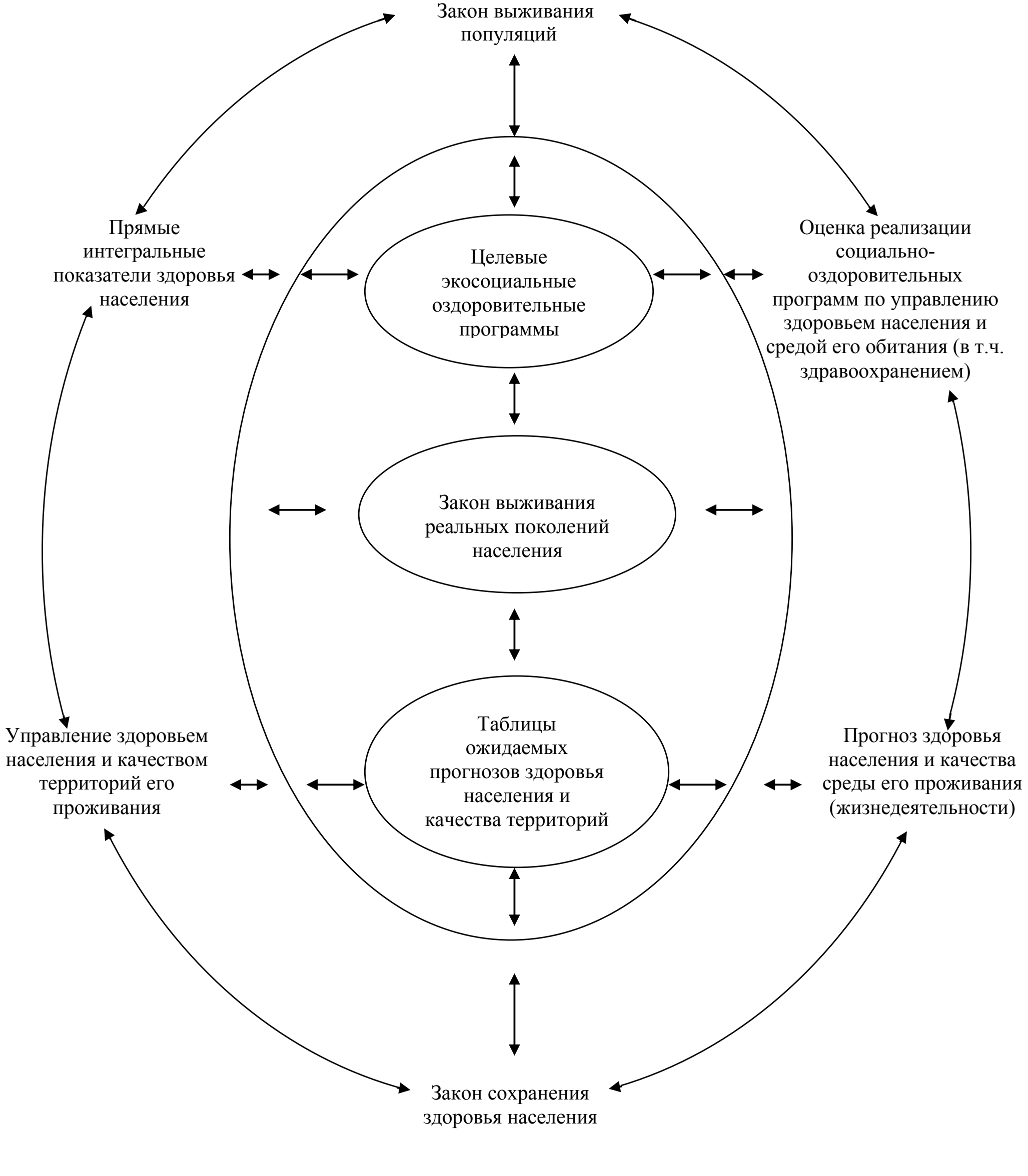

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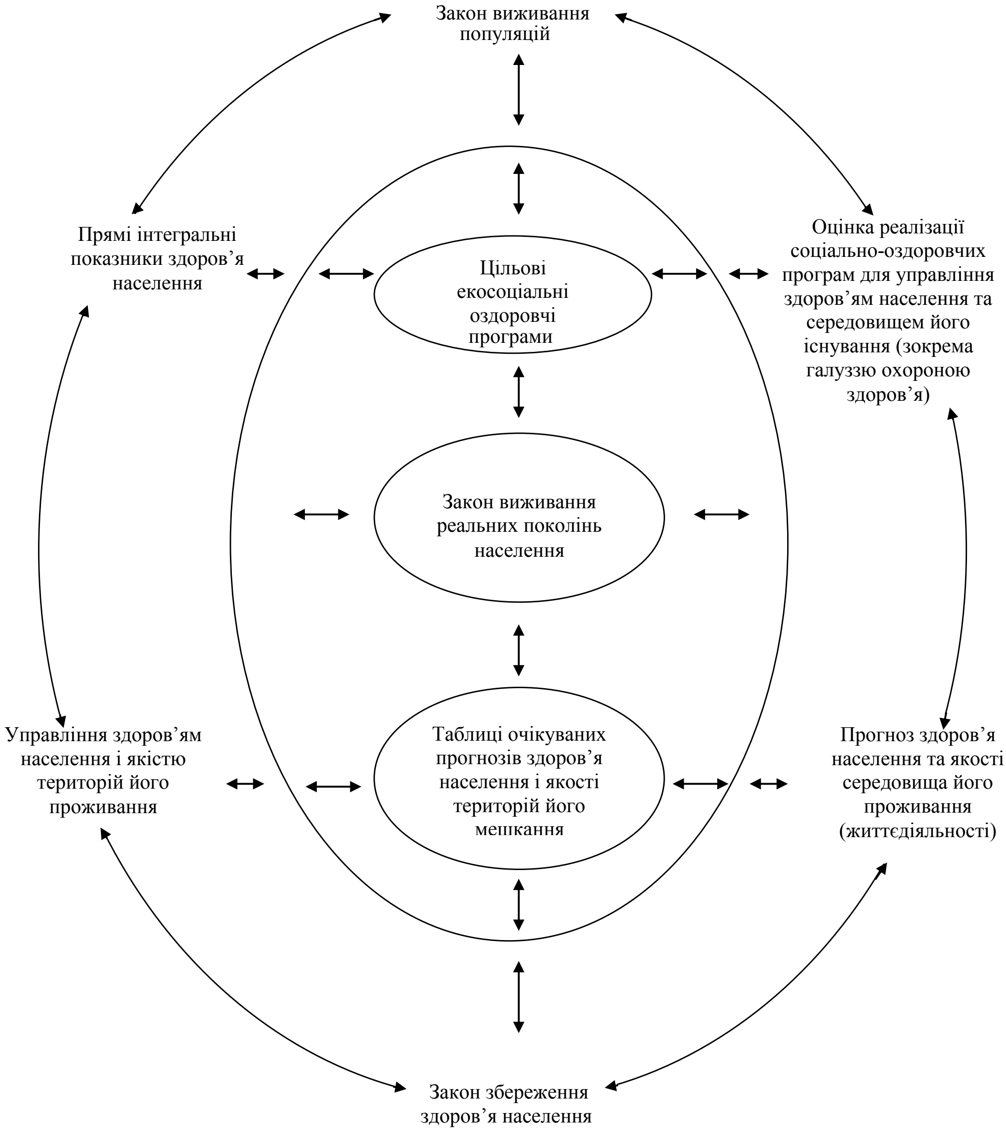

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Tarallo V.L. CLASSICS OF POPULATION HEALTH / Tarallo V.L. – Chernovtsy: BSMU, 2015. – 736 p.

The monograph deals with a new information technology of interconnected system control of population health and its living environment, based on the law of survival of populations and the law of preservation of health, enabling to use the direct (innate and developed) integral parameters of the population health as a code of structuring and development of social health improvement systems, health care system, forming national and territorial general social and purpose-oriented medical and ecological programs aimed at improving of population health and its living environment. For the first time, reference tables of expected forecasts of population health necessary for planning and monitoring of such health improvement programs implementing are presented. They will help all countries and isolated territories to strive into the region of safe existence to preserve people's health and life by means of restricting and stimulating the human activity within the limits marked by three critical, system-interconnected integral indices, reflecting the quality of the living environment and a derivative from it and genetic factors - external and internal viability and disease resistance of populations (population); their control is carried out on-line. The materials of the monograph are intended for medical men of all specialties, ecologists, economists, demographers and other specialists engaged in solving social problems of their countries and regions.

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В монографии представлена новая информационная технология взаимосвязанного интегрального контроля здоровья населения и среды его проживания, базирующаяся на законе выживания популяций и законе сохранения здоровья, позволяющая использовать интегральные параметры здоровья населения в качестве кода построения и развития социальных оздоровительных систем, здравоохранения, формирования национальных и территориальных общесоциальных и целевых медицинских и экологических программ, направленных на улучшение здоровья людей и среды их проживания. Впервые представлены справочные таблицы ожидаемых прогнозов здоровья населения, необходимые для планирования и контроля реализации таких оздоровительных программ на территориях его обитания. С их помощью предлагается всем странам и отдельным территориям стремиться в область безопасного существования для сохранения здоровья и жизни людей путем ограничения или стимуляции человеческой деятельности в границах, обозначенных тремя критическими, системно связанными интегральными показателями, отражающих качество среды существования и производную от нее и генетических факторов внешнюю и внутреннюю жизне- и болезнестойкость популяций (населения); контроль их осуществляется в режиме on-line. Материалы монографии предназначены для медиков всех специальностей, экологов, экономистов, демографов и других специалистов, занятых в решении социальных проблем своих стран и регионов.

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У монографії представлена нова інформаційна технологія взаємопов’язаного інтегрального контролю здоров’я населення і середовища його проживання, що базується на законі виживання популяцій і законі збереження здоров’я, що дозволяє використовувати інтегральні параметри здоров’я населення в якості коду побудови і розвитку соціальних оздоровчих систем, охорони здоров’я, формування національних і територіальних загальносоціальних і цільових медичних та екологічних програм, спрямованих на поліпшення здоров’я людей та середовища їх проживання. Вперше представлені довідкові таблиці очікуваних прогнозів здоров’я населення, необхідні для планування та контролю реалізації таких оздоровчих програм на територіях його проживання. З їх допомогою пропонується всім країнам і окремим територіям прагнути в область безпечного існування для збереження здоров’я і життя людей шляхом обмеження або стимуляції людської діяльності в межах, що позначені трьома критичними, системно пов'язаними інтегральними показниками, що відображають якість середовища існування і похідну від неї і генетичних факторів зовнішню і внутрішню життє- і хворобостійкість популяцій (населення); контроль їх здійснюється в режимі on-line. Матеріали монографії призначені для медиків усіх спеціальностей, екологів, економістів, демографів та інших фахівців, зайнятих у вирішенні соціальних проблем своїх країн і регіонів.

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С О Д Е Р Ж А Н И Е

ЗМІСТ

Glossary of Abbreviations

MT “TAGOR” – Mortality Table “TAGOR”

MT_t “TAGOR” – Trend Mortality Table “TAGOR”

M_bT “TAGOR” – Morbidity Table “TAGOR”

M_bT_t “TAGOR” – Trend Morbidity Table “TAGOR”

MT_s “TAGOR” – Mortality Tables for small population groups “TAGOR”

IM “TAGOR” – Infant Mortality Table “TAGOR”

M/M_bT “TAGOR” – Mortality-Morbidity Table “TAGOR”

M_pT “TAGOR” – Prognosticating Mortality Table “TAGOR”

RT “TAGOR” – Reference Table “TAGOR”

List of original elaborations
presented in the monograph

Перечень

оригинальных разработок, приведенных в монографии

Перелік

оригінальних розробок, які наведені в монографії

Introduction

Population health. What is it? Where are its roots? How can one measure or evaluate it? How to prognosticate it? What means are needed for its preservation and development at present, in the future, in Ukraine, in any other country? There is only one answer to these questions the modern scientific methods are either inexact or do not correspond to the realities of population health, since this block of knowledge contains nothing, but questions and problems.

Throughout the whole period of history mankind has been unable to know how much time has been meted out to them by fate, who rules it and how “to touch up” this fate. The population diagnostics of the conditions and dynamics of the health of communities has always been a sealed book and it remains a white spot and the subject of “social medicine”. They have been using traditionally for more than 100 years in the latter for these purposes artificial “population” indices based on the “manifestations” of individual health index – linked per 100, 1000, 10 000, 100 000 of the population. But it turned out that to approach generalized, integral, population indices is impossible. Attempts only led to a complication of statistical approaches, but even they didn’t solve the problem.

The solution of this question is directly connected with the revealing of the aging processes, managing of life expectancy. Old age is, of course, a natural process, characteristic for all organisms, only those could avoid it who did not survive till it. But it is also known that there are some biological species whose rate of aging is statistically very difficult to differ from immortality. And this fact is one of the most serious arguments for the concentration of efforts to fight for the life prolonging.

Currently, medicine progress allowed increasing average life expectancy considerably. Basically it took place due to substantial decreasing of infant and child mortality. At the same time it did not practically influence maximal life expectancy. And is it possible to affect this index? What is it in Ukraine and separate regions of the country and the world today? How could it be measured?

In a situation of uncertainty that has arisen, in the absence of direct controllable indices of the health of the population in the information system of the branch of the health care system no good will come of this to the latter in the system of administration. Hence (taking into account that the health of the population, including, individual persons are very closely interconnected into flows of all manner of chances) a lot of decisions taken in the health care of different countries are wrong, despite their highest responsibility.

A false interpretation of the data (what is more, with their internal methodological and methodical non-coordination) results in numerous negative consequences, both major and minor. There is a great number of examples of this in the domestic health service. This is a sharp decrease of the indices of the population's average life span in Ukraine after the disintegration of the USSR and disrupting the continuity in the activity of the prophylactic and medical services, in the activity of the outpatient and inpatient facilities, the interdepartmental activity connected with community health protection etc. Such a situation is observed on the entire post-Soviet space, irrespective of the systems of financing of health care, the level of democratic reforms in them and the level of their economic development that arose in the seceded republics.

The expansion of publicity to the health indices and the functioning of the health care system concealed earlier has improved the correctness of perception of odd statistical data neither by persons, taking decisions in the health care system nor directly by physicians, nor by patients and by elected office holders. Therefore errors, while choosing the priorities of the ways of the development of the health care service are so wide-spread as well as, when evaluating changes in people's health.

Nowadays not a single chief of the national (regional) health care system is able to answer a question of a need of all sorts of resources for normal functioning of the system of its protection, adequate to the health of the population and relevant to its internal (structural) characteristics. Besides neither ecologist, nor sanitary doctor can give evaluation of the quality of population living environment (including the system of its health care) in the units of population health and accordingly by quality of health of population living on these territories, determine integral risks and accordingly adequate directions of preventive measures for different sex-age groups of population from the point of view of their health and life preservation, effects on the life duration and quality.

There is a great necessity in powerful intellectual breakthrough in the system of decision-taking in health care reorganization, in the system of information support of these decisions, in the technology of their taking.

Domineering ideology of reorganization in the national health care in recent years which takes into account future market conditions in the branch which bases on the sentence “money goes after the patient” does not solve leading issues both in evaluation of population health and in the system of its protection.

Such approach solves only part of the problem in the branch itself, solving nothing essential in the issue of increasing people’s life expectancy.

Why is such ideology totally incorrect?

Firstly, it is generally inherent in private medicine, which due to the concept “private” cannot solve the problem of the population of the country or separate regions; it initially contains the concept of “diseases profitability”.

Secondly, due to different reasons a quarter of population of Ukraine having initial signs of disease does not consult doctors, that is even complete registration of all visits cannot give right basis for taking management decisions in the branch (but for a number of epidemic diseases and serious injuries).

Thirdly, the motto “money goes after the patient” ruins the principle of preventive medicine.

Finally, it must be underlined that resources into the branch of health care must “move” not after the object (patient), but after the phenomenon.

We will explain this statement. It is known that:

the reason for existing of the branch of health care (ministry, its institutions, departments, doctors, health improving programs etc.) is population health;

the mission of health care, both basis and content of its activity is also population health.

finally, **the ultimate goal** of all kinds of activities, programs, events etc. in the branch is also population health.

Taking the above into consideration we can paraphrase the above ideology in the reorganization of health care system as follows: resources (including money) must "go to the branch after health"!

Moreover, the nation (population) health as a main part of the national security must be cared for by the state, country. On this basis the state must and is obliged to coordinate and control all other (not only budget) forms of resource support of population health, in particular insurance, private, clerical and other forms.

It must be also emphasized that a frequent change of heads within the system of health care based on the party membership or an intuitive evaluation of the higher ranking superiors of their knowledge and experience (according to the indicators of their short duration activity!) will never be able to solve problems in the field of public health care and population health.

There is a widely spread opinion in the world of sport which is often applied to health care. It is based on the intuitive experience of comparing: a victory or a defeat of a team depends on the professional qualities of the coach for the most part. In one of the aspects of consideration such an approach is correct, but on the other hand, another aspect of considering victories and defeats is ignored in it from the point of view of the team-work (a collective of players). A disregard of this and many other aspects of the problem consideration gives rise to dozens of unforeseen failures (according to the theory of chances) in the functioning of a number of social institutions. The wide-spread approach in sport is faulty for public health care, it is vicious for sport too, but the forms and the degree of consequences there are different.

The law of survival of populations [40] discovered by us has made it possible to see population health for the first time "from above", its sources, associations, factors influencing on it. It includes the parameters of survival (the preservation of the health resource) of the population, risks to health, the stages of adaptation on the territories of habitation and a derivative from them – the life span. A look "from above" and the postfactum on the life gone by (after death) and knowledge of how health is preserved or lost during the lifetime, depending on congenital viability, accumulating diseases and under the influence of the factors of the communal habitat has presented a completely different spectrum of knowledge about health, life, community habitat and many others things, associated with these phenomena and objects, not having precedents.

Until recently medical men did not possess knowledge what is going on during the period from birth to death, they did not scan “the invisible side” of the interval, “life” from the medical and social, ecological, physiological, economic, geographical and other positions – there was no corresponding knowledge about this span in specialized literature. V.P.Voitenko [9] was the first to cast a serious look into this interval. However, the absence in his research works of an appropriate systemic analysis of the central concept of medicine – “health” and an adequate methodical research of approaches to its study, orientating towards the forming of organizational-technological aspects of administering the health of the population determined a narrow interest in the findings of his investigations.

As it is generally known, one of the leading roles in the theory of administering public health care belongs to the quality of the informative and methodological base for taking decisions and organizing their implementation, both normal functioning and in the presence of the spectrum of contradictions in the activity. There are more than enough of them in the system of health care.

First of all, it is a growth of the socio-economic significance of measures on health protection against a background of consequences adopted in the previous decisions insufficiently coordinated with the unity of the functioning of the political, administrative, technological and scientific-research systems in the questions of elaborating and implementing measures pertaining to the health of the population, a family and every individual.

Secondly, it is an increase of the volume of the functioning of the system of health care connected with preventing, treating and health-improving, requiring an updated industrial technology of protecting and building up health coupled with the necessity of an individual approach to each personality. In other words, a systemic character of the tasks, facing the public health care system and, on the other hand, non-systemic methods of their solution are observed.

Thirdly, it is an excess of the rates of growth of the complexity of tasks in the health care system as compared with the rates of the development of methods and ways of their solution, as well as prognosticating the after-effects of the decisions taken along with the ways of their realization.

Finally, fourthly, it is an avalanche-like expansion of the volumes of information in the absence of ways of their integration into a single system. WHO proposed a comprehensive concept of health care – “Health for all” [63] as well as a concept of a “modern organization of the health care system” [62, 66, 71] on the basis of an analysis of the effect of the environment on the health of people and the modern status of the national systems of public health care.

The first one of them aims the system of the public health service at integrating into a social, ecological and organizational structure, focusing attention on prophylaxis, and enlisting the whole population in the realization of programs of protecting and building up health coupled with controlling the efficiency of these programs. Such an approach calls for an elaboration of special methodology and methods of registering interrelations within the complex of the physicochemical, biological, social, psychological and economic factors of the communal habitat of the population (in the broad sense of the word) with an analysis of integral (population) and individual consequences of the effect of these factors on the health of communities.

The efficacy of implementing the said concept, in the opinion of WHO is stipulated, to a considerable extent, by the level of the development of information technologies and their application, when planning and implementing measures aimed at health protection. Hereat, attention is paid not only to a quantitative aspect of the information, and its completeness but, first and foremost, to its integration into a unified system of knowledge of specialized data obtained by medical men, statisticians, sociologists, demographers and other specialists, i.e. accentuating the necessity of constructing a systemic model of health as a subsystem of the protection and administration of health as a whole.

The conception of an interdisciplinary approach actualizes the necessity of modifications, first and foremost, of health care services themselves with their broad transformation to preventive medicine and a social solution of the problems of health protection [62].

A systemic nature of goals and tasks of health protection in the concepts considered and dealt with in the project of a New European policy of health protection "Health 2020" stipulates a necessity of using corresponding approaches in case of their realization [66], a search of integral characteristics of population health connected with the environment of its habitation which, when taken together with the genetic characteristics, standardize the condition of people's health.

It is common knowledge that the contours of our lives and health are constantly changing, experiencing the effect of very different events [20, 26] that along with our reaction to them determine our destinies. Hence, a conclusion is made to the effect that the course of life and the dynamics of health are hard to predict and explain. Advocates of this point of view regard that nothing should be drastically changed in the field of health protection – all you have to do is simply to increase the number of good specialists, reliable laboratory – instrumental investigations and means for these purposes. However, to our way of thinking, it is not a systemic-organizational, but a narrowly technological approach.

And is it really so improvident in our life and health? Is it really not known to anybody how much means it is needed to allocate for health care this year, in a year, two and more, as well as how the available means should be distributed rationally (and where is the criterion of this "rationality")? Such questions are always on the agenda.

It appears, the problem may be solved and such elaborations in our country, Ukraine, have been known for a long time and they were submitted by the author of this research to the Ministry of Health Protection as far back as in 1996 [37, 38].

The present monograph is devoted to a profound description of this knowledge, possibilities of their extensive development down to computations of accurate forecasts in realizing health – improving programs on any territories of population habitation.

As a matter of fact, for the first time, new methods for an investigation of population health had to be elaborated and a completely new informational–methodological basis of mastering earlier hypothetical branch in medicine had to be created.

Part I

The theoretical and methodical aspects of a systemic analysis of population health

§1.1. The concept of “population health”

The modern information system about population health is fraught with a number of essential faults, from the point of view of controlling health, namely:

- direct indicators of population health are absent – only the indicators of its manifestations are available: the birth rate, the morbidity rate, the mortality rate etc.;
- the integral indices are absent – only the mean values of the above – mentioned manifestations of health index-linked for different numerical bases are available;
- the population characteristics of health themselves are absent; only the average life expectancy (for newborns) may be attributed conventionally to an exception;
- a link with the lifestyle, the existence environment with the system of the health care system and, finally, with the parameters of population survival is not reflected manifestly in the health indices;
- control indicators of the population health are absent, a selection of control figures is implemented either to the mean territorial (national) ones or to the best world rates;
- a systemic-methodological and methodical coordination of the traditional indicators used is absent – there is no systemic study of the connections of the birth rate with the incidence rate, the latter with the mortality rate and the like. Furthermore, each of the cited indices has sources and carriers information uncoordinated among themselves and, correspondingly, the procedures of processing and evaluating;
- finally, the technologies of using the traditional indicators are either absent or incorrect (artificial), while taking administrative decisions on the protection, preservation and building up the health of the population.

Despite the fact that said shortcomings “lie on the surface”, the system of administering the health care system has been using the said indicators, when evaluating the quality of the functioning of the system for almost a century already, although in the system of health care itself the health indices are not used, only the indicators of resources of its own activity circulate in it.

In order to approach direct population indices of health, we have carried out a systemic consideration of the principal components of forming and developing the health of the population by means of coordinating the ideas of Teiar de Chardin [73], Jean Piaget [75], S.B.Krymskyi [18], T.Kotarbinskyi [17], M.A.Rozov [33], T.JohnIekha [68], the theory of aging of B.Strehler-S.Mildvan [88], the theory of reliability of W.Weibull [89], and the distribution law of Maxwell-Boltzmann [19] which made it possible to single out a complex of system (generic and aspect) concepts of "health".

For this purpose, the algorithm of targeted system analysis of any medico-social and medico-biological objects was developed [55].

According to it to study a system object *any of them is always seen from two sides: of an external observer and internal composition*. Such bilateral consideration of the object where the "external" and the corresponding "internal" "exactly coincide with each other", leads to the fact that the notion of "mechanical interaction" can be translated into the concept of "understanding" (in [75]).

At the same time, three leading properties agreed with each other are fixed; the following ones belong to "*internal*":

• dependability - property of the system, which allows reasonably rely on the performance of services for which it is intended;

• modifying - property of the system to change in a controlled way in order to maintain a given level of dependability;

• comprehensibility - property of accumulation of knowledge about the system itself and the environment, which enable it to compare the results of their own functioning with that of the other systems and the environment for their existence, as well as to make decisions about modifying or changing their own behavior (Jean Piaget, by [75], called this property genetic parameter of the system (in the concept of "genesis" - development).

These intrinsic properties are fully in accordance with the external characteristics (properties) in any system, namely, with *stability, manageability and observability* respectively.

Taking into consideration the concept of “universe” as an expression of unity of the whole and diversity, tranquility and motion of the objects under study and knowledge about them [68], system environment acts as a reality and its fragments - as the unity of its aspects (analysis points). With such understanding, the analysis of the system object should be in the form of a triad:

<thing, communication, property>

with the singling out of its characteristics under the scheme:

<structure, function, organization>

where the brackets fix not only the unity of the system, but also the composition of this unity with singling out of specific concepts.

In these cases, the system parameterization of any medico-social (or medical and biological) object can be performed in two ways: external - in the form of a triad:

<structure, function, structure>

and internal - in the form of a triad:

<composition, chart, diagram> .

There is the following explanation of these triads: specificity of the existence of any system is fixed by the unity of its structure, functions and organization, where its state (from an external observer’s standpoint) is recognized as a specific composition and operation of the object functioning scheme implemented by an appropriate diagram of its activities displays.

On this basis, it should be realized that the world (population, health, etc.) by real diversity of its manifestations fixes certain environment of appropriate systems existence, where individual invariants of their activities manifestations concretize a specific area of knowledge about the environment (as the characterization of its diversity). And it is this area of knowledge which determines the inner world of the system and its individuality.

It should be also understood that the relationship of the world and system finds its realization in terms of “global” and “local” environment, respectively, reflecting the outside world of the system existence in the first, and in the latter its inner world.

The ratio of these environments outlines subject circle of the system, which manifests its activity and on the basis of which the universe of knowledge and concepts of the object is created (Table 1.1)

Table 1.1

Triads of consistency (matching) and similarity of fragments, objects and aspects of the system environment (based on the basic properties of the system)

Universe	**Basic properties of system**		**Aspects of system analysis**		**Characteristics of the n-th fragment of object**	
	Internal	**External**	**Internal**	**External**	**Internal**	**External**
	Dependability	Resistance	Structure	Object	Composition	Structure
	Ability of modifying	Manageability	Function	Connection	Scheme	Functioning
	Comprehensibility	Observability	Organization	Properties	Chart	State

Use of the above approach in the analysis enables to consider any observed object as a whole and in individual fragments from the system point of view: it is just necessary to find a consistent line of the semantic content of traditional terms which describe the environment.

In social medicine the search of concepts relatedness regards fixation of unity and connection of a human and population. The concept linking these objects is “health” in the sense of “state of the object” that reflects its internal “organization” [35].

The development of the system analysis ideology allowed singling out the following aspects of the consideration of medicine objects, including those of social medicine which correspond to basic properties of the classical system [35]:

<morphological, functional, genetic>

and propose the following scheme of matching ties of properties, aspects and characteristics of the medico-social (and biomedical) objects (Table 1.2).

Table 1.2

Triads of consistency (matching) and similarity of fragments, objects and aspects of the system environment in the medico-social and biomedical research

Uni-verse	**Basic properties of system**		**Aspects of system analysis**	**Characteristics of the n-th fragment of object**	
	Internal	**External**		**Internal**	**External**
	Dependability	Resistance	**Morphological**	Composition	Structure
	Ability of modifying	Manageability	**Functional**	Scheme	Functioning
	Comprehensibility	Observability	**Genetic**	Chart	State

This approach produces a full range of aspects to consider any medico-social (medical and biological) object, including a human, population, their fragments, significantly extends the approach proposed by P.K.Anokhin [3] and makes it meaningfully and spectacularly more adequate to the content of medical theory and practice, and more constructive for searching methods of system measuring of population health.

Understanding of the unity and the differences making triads:

<morphology, function, organization >

and triads:

<structure, functioning, state>

that represent a holistically system object (the first triad) and its fragment (the second triad) allow representing the consistency of concepts “organization” and “state”, where the latter reflects the observable features of the object, which include “health”.

This ideology of work with the concept of “population health” and fragments of the latter are used in this monograph to settle the burning problems of population health management, including the health care system.

So far in the world statistics the concept of "public health" or "population health" is called "statistical" and is represented by its complex of demographic variables (fertility, mortality), level of physical development (mostly children and adolescents), as well as morbidity, disability and mortality [21].

As for the relationship of this concept with the individual's health, then by I.B.Richmond's statement [87], such connection is due to "planetary community of natural and social environment factors, the level of socio-economic development, states and way of life of the population, the global nature of the epidemiological and demographic processes". At the same time, he stressed that the term "public health" is more difficult (in comparison with the "individual health") is subject to the qualitative and quantitative analysis, evaluation; and although the "unity of these concepts is used as a matter of course, in trying to clarify them great difficulty immediately manifests".

We believe that this is due to the original approach to the definition of these concepts as different ones, the relationship between them in the theory of medicine was not found. Only this can explain the inability to go out from any of the dozens of current well-known definitions of "health" to its integral dimension or, in other words, all existing definitions just "do not work".

The above scheme of the system analysis of medico-social and medico-biological objects allowed suggesting the possibility of existence and, therefore, the opportunity and necessity to go to "generic" and "aspect" concepts of "health". The latter includes "population health" required by us as well as other common ones "individual's health", "family health" and others. These definitions should have a common "core", common "base" and a general algorithm for the internal and external transcription of their elements.

Within the decryption of the system "public health - the state of the environment" and its subsystem "individual's health - the state of the environment" developing the solution was supposed to find not only a system generic and aspect concepts of "health", but also an access to the coherence between the aspect concepts of "population health", "individual's health" and "family health" (taking into account the current main direction in the formation of activity of practical public health). At the same time it was assumed to find access to the main components of the concept of “population health” with practically feasible possibility of switching to an integral dimension of the latter.

In the above deciphering there was used the triad of basic properties of a system by which we managed to enter the universe of the conceptual apparatus presented in the tables “matching of concepts” (Table 1.3, 1.4).

A person is known [21, 36] to be a biosocial system. But the analysis of “biological” and “social” in the person, their similarities as well as differences did not give the answer what is the bridge between them that unites them. In addition, calling the person a system researchers do not always clearly identify the main features of this system, which naturally led to not always true (correct) definition of health indicators of system object.

Table 1.3 presents the triads of similarity (coherence) of aspect analysis of a man and his health, and in the Table 1.4 there are the same triads, but for determining their similarity in the population study.

Table 1.3

Triads of consistency (similarity) of aspect analysis of the human and his health based on the basic properties of the system

Basic properties of the system		**Aspect analysis of system objects, fragments**				
Internal	**External**	**Basic Aspects**	**Man (object)**		**Health (fragment)**	
			Internal	**External**	**Internal**	**External**
Dependability	Resistance	Morphological	Biological	Organism	Processes composition	Processes structure
Ability of modifying	Manageability	Functional	psyche of functioning	Activity (individual behavior)	Functioning (process flow)	Functions, made by processes
Comprehensibility	Observability	Genetic	Bio-social	Individuality	Organization	Registered state

Table 1.4

Triads of consistency (similarity) of aspect analysis of a man and population, their health based on the basic properties of the system

Basic properties of the system		**Aspect analysis of system objects, fragments**						
Internal	**External**	**Basic Aspects**	**Man (object)**		**Population (object)**		**Health (fragment)**	
			Internal	**External**	**Internal**	**Internal**	**Internal**	**External**
Dependability	Resistance	**Morphological**	Biological	Organism	Social	Group of people	Processes composition	Processes structure
Ability of modifying	Manageability	**Functional**	Psyche of functioning	Activity (individual behavior)	Psyche of functioning	Way of life (collective behavior)	Functioning (process flow)	Functions, made by processes
Comprehensibility	Observability	**Genetic**	Bio-social	Individuality	Social organization	Social-medical status	Organization	Registered state

Without touching upon the question of searching for details that make the concept of “public health”, let us consider the main aspects of a man considering and access to aspects of the population studying agreed with them by the Tables 1.3 and 1.4.

As indicated above (see Table 1.1 and 1.2) the triad of any basic properties of any system is: from the viewpoint of the internal composition:

<dependability, manageability, observability> .

They form the universe of the conceptual apparatus of any system object and based on the results of research by many scientists [3, 35, 73, 75], allow singling out the above basic triad of aspects of the analysis of a human and a group of people (family, generation, population, populations, etc.):

<morphological, functional, genetic >,

where the brackets fix indivisibility, integrity of the complex of concepts included therein.

Within these aspects a person as a system (as integrity) is represented by the following triad of internal symptoms, their manifestations, etc.:

<biological, psychic functioning in society, bio- social >,

which are implemented externally (considered by an external observer) as a triad:

<organism, activity, person > .

Here fragments of a person acting as individual system objects (phenomena) agree on internal composition:

<structure, functioning, organization >

from the viewpoint of an external observer:

<structure, function, state>,

reflecting the similarity and the indivisible unity of the basic aspects of the analysis of the object as a whole.

In a similar analysis *population* as a system social and medical object, will be *presented* in the table of agreements (Table 1.4) *while the external examining* by the triad:

<a group of people, lifestyle, social and medical status>

reflecting its *internal composition* by triad:

<social, psychic of functioning, social organization >.

Presented structuring of a human (and/or a group of people) allows to conclude that any observed state of these objects (including "health" as one of the fragments of his state) in a consistent unity of all aspects is a derivative, resulting reflection of a certain modification of activity of the object with a specific "morphology" in a particular the anthropogenic environment.

Morphological traits are different in humans and population (Table 1.4). The man is a biologically created body with all its specific structures (nervous, muscle, vascular and other subsystems), and morphological parameters of the population as a system are based on gender, age, production, territorial or other (bio-social) and purely social, collective principles under which "biological" is deep inside, hidden. That is population, populations, generation or any other group of people is not just the sum of individuals or personalities (socio-biological objects). It is socially derived organism organized in a certain way in the society where "morphological" is always represented exclusively by social features.

Functional aspect of human and population is reflected in their lifestyle completely dependent and associated with the morphology of these objects, and has, according to this, different functional characteristics (by behavior).

Genetic aspect is a resulting (genesis=development) integral characteristics of indivisible unity of morphology and functions derived from it, this pattern is generated by their unity. This very aspect allows seeing and identifying individual in each object (person, group of people) at all stages of existence while using general formalistic approach, and according to “invariant of organizations state” of the observed object.

Considering human and population in the genetic aspect it should be emphasized that the “health” of these objects is reflected in the “state” of their “organization”. It is the latter that differs significantly in the individual and the population, firstly, on the basis of differences in their morphological “structure” as shown above; secondly, on the basis of differences in the laws and the content of functioning (“psyche”) of these objects (due to differences in the “morphology”, “structure”). Finally, the “state” (genetic aspect) of the individual’s identity as a set of its qualitative characteristics (character, temperament, lifestyle, etc.) is also different from the qualitative characteristics of the “state” of the population: by sex, age, national, manufacturing and many other statuses. On this basis both “health” as one of the leading integrated qualitative characteristics of these objects and many different manifestations of their states in the dynamics - as vital processes throughout life, differ in content. If for a person it is a physical development, diseases, employability, legal capacity etc., then for the population it is a vital resource, health resource, the average life expectancy (total, healthy, unhealthy), resistance to extinction factors, morbidity, mortality, survival and others. Although, a medical concept of “health” is just one of many genetically derived states of these objects.

Given transcription of the concept of “health” shows that “the health of the individual” is a pattern (genetic integral characteristic) generated by the operation of a complex, from bio-social point of view, object, its morphological structures in particular, its own socio-economic system. In its turn, the “population health” is a pattern (genetic integral characteristic) generated by the operation of complex social organism (group of people) in artificially created socio-ecological environment; here even such formal biological characteristics as distribution of the population by sex and / or age are presented from the standpoint of social cohesion of the group, quality indicators of this connection in social communication throughout the life course.

At the same time, considering the structure of the complex multi-level (of socio-natural origin) of the world system where population, population group, person, organism, organ, cell, etc. are its elements, it should be noted and emphasized that the relation of “social” and “biological” in any living object depends on the level in which it is situated, where its life passes. Moving from the top down to a single cell, the effect of biological traits increases and of social ones gradually reduces and, conversely, increasing perfection of a living system increases the amount of social features in it. It should also be understood and taken into account that “biological” and “social” complement each other, penetrate into each other and absorb each other, affecting genetic characteristics of any living object in integrative way and at the same time build harmony of its organization.

However, taking into account that the medical aspect of health is just one of the integral properties of the object, its status there is the need to provide consideration of human and / or population in the interface.

Thus, considering the medical aspect of health we can identify the pathological and non-pathological states (e.g., healthy - sick, the disabled - not disabled, etc.) both in the domestic and in the medical plan. The disease also represents one of the qualitative characteristics of the object health. It is, like disability and death can only be considered as a separate, private version of the evolution of integral characteristics of object functioning in some designated environment throughout its life cycle.

Then, if the researcher precisely indicates the environment in which the object (an individual or group of people) operates, it is possible to designate the peculiarities of origin and development certain health states in it, as well as a certain state of its carriers - individual and / or population corresponding to the health.

When considering a person from the above point of view in the system of "a man - his environment (including health care)" the definition of "health" can be given the following wording:

"Human (individual's) health is an invariant of organization of the state of purposefully acting (functioning) personality that expresses the unity of its morphological, functional and genetic aspects, as well as the ability to solve the problems appearing throughout the life."

Then the definition of "health" in medical transcription will be as follows:

"Health of population (populations) is an invariant of organization of the state (social-medical status) of a group of people with clearly defined way of life that expresses the unity of the structural and morphological, functional, social and genetic aspects, as well as the ability to regulate their (group's) problems of social communication throughout the period of collective coexistence".

The consistent unity of the basic properties of "health" both in person and in the population, where "health" acts as a generic concept with a general (in any subject) structure of its organization is a common thing in these terms.

What differs them is morphology (composition, structure) of a human and population. In this case, morphological differences are realized in different spectra of these objects operation in an environment where "psyche" (as a way of life) of a particular individual transforms into population's "collective psyche" (social communication).

On this basis, we obtain the conclusion that *the formal structure of the concepts "individual health" and "population health" is overall, the same and their main difference is build and structure of objects.*

Fixing specific components of health in the terminology and from the point of view of the different branches of knowledge allows to take into account the multidimensional nature of this concept, develop the universe of the concept "health" and while studying the interface approach to determine necessary individual highly specialized modifications of this concept for any objects.

For example, taking into account the widespread development of family medicine the definition of the concept “family health” can be given based on a system similar to the construction of the above definitions “health” (to emphasize the structural unity of concepts):

“Family health is an invariant of organization state of purposefully functioning resistant reproductive group of people (family), reflecting the unity of its morphological, functional and genetic aspects, as well as the ability to solve problems of offspring bringing up, family preservation, maintaining parents’ health and other problems of social communication that arise at all stages of joint, collective life”.

It should be noted that special determining of the concept of “invariant” in the interface environment emphasizes its stability, the immutability of its structure at all levels of an object existing and aspect dependence of the content of the “invariant” on the basic properties of the system.

The above definitions provide a new consideration and analysis of integrative characteristics of the main system objects of the health care effects which allow singling out public integral indicators of their state by using the basic properties and aspects of health and social care systems. At the same time, they allow isolating and identifying the generic concept of “health”.

“Health is an invariant of organization of state of purposefully functioning system object that expresses the unity of its morphological, functional and genetic aspects, as well as the ability to solve problems arising throughout the cycle of its existence”.

Definition of this concept structure put it next to the concept of “code”. This allowed to come to determining of the levels of its functioning with singling out of specific solutions and desired recreational activities aimed at the protection, preservation and development of human health, with the creation of appropriate and, at the same time, adequate to its quality, as well as relevant internal structure of the population, system of its health control (and the health care system, in particular).

In the life cycle, population health should be seen as a dynamic process where the state invariant is just one of many options (shown at a particular time in a particular environment for a particular group of people, etc.).

It should also be borne in mind that people in the course of its existence, realizes the whole gamut of functions, each of which is responsible for a particular activity. Due to this activity population change itself and its environment existence. (In another aspect of the analysis a set of the environment conditions is a domain of the focus and quality of people's activities on the protection of their environment in terms of maintaining their own health and life).

At the same time, the health should allow population to reconstruct the surrounding physical and social environment so that it is less hostile to a man and his health.

From this point of view, health serves as an essential state for a normal life. Based on this, a person (or people) is understood as an active fragment of the environment, which owns the appropriate **status of the object** of this environment (*morphological aspect*), as well as **its function** (engine of reconstruction and revival - therapy - *functional aspect*) and, simultaneously, the embodiment of the **reconstruction laws** that a person or people implement in the process of its vital functions (*genetic aspect*).

The above allows us to consider "health" not as a "state" but as an "assessment of the state" (*qualitative determination of existence*), which is expressed by different names - depending on the point (level) of view (consideration) and the language of certain groups of the human community, reflecting their view (requirements) to the human (population)state. Invariant core of all these modifications of considering is the **"quality of health"** as a qualitative certainty of population (person) lifestyle.

From this perspective, the definition of a particular state of a person (group of people) in the specific environment provides an opportunity to consider, examine and evaluate "health" only in the appropriate context.

A person (population) throughout the life cycle changes its environment with the time being (years of life) and being in dynamic interaction with it, gradually changes its social status (status of child - in the family, preschooler, pupil, student - in the respective institutions: in kindergarten, school, college, university, an employee –at a company, institution; unemployed, pensioner, etc.). For the population status groups can be structured by gender, age, education, occupation, place of residence, resources, etc. Clearly fixing social status of the object under study there can be assessed its health in the related aspect: a child - full-term, premature; adult - or labor- and legally capable, not labor or not legally capable; disabled, not disabled, a student, an employee, a military, etc.

Such aspect considers health from the standpoint of the functional characteristics of an object, using its state estimate. Although systematic analysis gives many other possibilities of considering the object of observation and, thus, each of them represents different object facets, its properties.

Of physicians' specific interest is a ratio and harmonization of the concepts "health" and "disease". It is known that medicine has long "strongly deepened" in the concept of disease, "that we have neither terminology nor classification of health. This particularly applies to the social and psychological aspects of health, where only rough terminology is used and there is no necessary classification" [85]. This point of view is supported by E.L.Erde [78], V.P.Petlenko [28] and others - it is "on the surface". At the same time, most researchers in their works oppose "disease", "health" [22]. This fact is explained by the lack of a systematic analysis of these concepts in general and their actions, in particular.

Above, "health" was regarded as a "state" and as a "process" and considering these and other characteristics of the system object genetic parameter of its organization. In the same aspect, but for other purposes of analyzing the objects of "health", the latter can also be seen as a "marker of quality of existence of these objects"– population, individuals, families, etc. In this approach "health" is no longer a property, but a property characteristic - from the standpoint of protection of population (a person) life, its existence. And then presence or absence of disease can be also attributed to the characteristics of the properties of "health".

We emphasize that most of the existing definitions characterize disease as a "state". But this concept can be regarded as a *characteristic of quality of state*. In addition, the "disease" itself can be regarded as a "process" taking into account its temporal characteristics imposed on the concept of "existence". J.F.Nys [75] noted that the "concept of "disease" is not static, it changes and requires treating health as a combination, integrity, responsive to the external environment; on this basis, the concept of "disease" serves **as a process** that reflects changes in a particular state".

Thus, **"disease" appears as a set of actions related to risk factors, as an aspect of the operation and modifying of an object's state**.

In addition, "disease" can act as a "name" reflecting the specific morphological changes. The latter is recorded by certain symptoms, syndromes (with quality "-").

At the same time, in the systemic understanding of the body integrity "disease" appears as a characteristic of the state of the object as a whole, where its particular recorded signs (symptoms) reflect the characteristics of the flow of local processes in the object (person) that appear integrated in the "holistic" object, particularly in dynamics. At the same time, the concept of "local processes" reflects meaningful spatial and structural characteristics of the flow of certain types of pathological processes, such as cardiovascular, pulmonary and others.

In addition the disease is always acts as a kind of **temporal characteristics** of pathological processes reflecting **the intensity of their course** (acute, sub-acute, chronic). From this point of view, the concept of **"disease exacerbation"** and corresponding clinical symptoms that have been observed should be regarded as characteristics of **altered states**, realizing at the same time, that they represent changes (disturbances) in the frequency, rhythm of **processes** flow. Then exacerbation can be defined as **not frequency of processes flow, as a characteristic of processes flow (!), but not a disease, as a state of the organism**. *In this examination, exacerbation is a violation of the ratio of processes flow in the body* (which is especially important to note!), *this is a change in the level of processes flow, their stability and, at the same time*, **a manifestation of a new periodic process, which leads to a new state.**

For example: the patient could have the temperature marking state of the body (taking into account its integral characteristics). The rhythm of other fast processes in all subsystems of the body adjusts to this new state. It may just be a new (temporary or long-term) mode of operation of the object (body). Although temporary parameter of ongoing process is relative: it is associated with both internal protective abilities of the organism, and external influences (treatment).

The researcher should be aware that changing rhythm of fast processes, reconstructing the mode of operation of one of the systems (subsystems) of the body, requires a certain energy support of this transformation, and at the level of the whole organism (exchange change, its frequency, etc.). And it can initiate various degrees restructuring of morphological structures of the body that happens very often. At the same time, energy restructuring of operation of any of the body systems (subsystems) is "fueled" by reducing and even total falling of its other energy subsystems. The foregoing shows that the recorded signs of altered states of the body are not always markers of functioning of only one observable subsystem (cardiovascular, pulmonary, excretory, etc.). While measuring and evaluating any changes in the body a researcher usually keeps records (reading) of not "clean" features inherent in the specific subsystem operation, but recording of *index, integral characteristics (parameters) derived from the total course of many interrelated processes - in their composition (which reflects an indivisible integrity of an organism)*.

A similar conclusion can also be used for the object "population" while evaluating specific indicators of its life and, in particular, its health.

That is, *if there is a clear fixing up of observation aspect (population) one can define the integral parameters of different levels of functioning of this complex system according to the above triadic schemes* (Table 1.3-1.4).

This conclusion aims at finding and creating other, in contrast to existing, informational, methodological and technological organizational models to provide population health and health care management.

The following should also be noted. Using the above tables of comparability concepts in the system environment (Table 1.3, 1.4) both concepts –"health" and “disease”, act as genetic, resulting parameters of the object status (population, family, person, etc.) showing inseparability of morphology from functions generated by it. Consequently, there is a conclusion of constructive generality of these two concepts, previously considered as opposing.

There can be made a generalized conclusion: **“Health is the most important characteristic of the dynamics of human (or population) states, where illness, injury, disability or death are only particular signs of quality of this state”**.

Thus, having fixed that disease is one of qualitative characteristics of human (population) health associated with the concept of “morphology” and “function”, the latter can be read (diagnosed) “back” (inverse system analysis) on the basis of classifying (“genetic”) name of the disease”.

In this case, the term “ill health” in its meaning acts as a genetic “state” or ”process”, which reduces (or makes it disappear) the ability to perform some “functions”. For example, if there is bio-morphological illness it’s a function of reproduction (or fertility function), if there is a bio-social illness it is performing of certain types of work, responsibilities, etc. Although, as noted above, in any “medical” state “biological” and “social” are inseparable and we can only speak of their share in the implementation of various health processes - both in person and in the population.

Thus, we can emphasize “ill health” in the form of disease, temporary or permanent disability is not opposed to “health”. “Ill health” does not deny “health” having many shades; “ill health” is the lack (reduction or increase) of certain functions or, in other words, the functional aspect of the concept in a single system, which has the name “health”.

Presented grounding of relation, general and differences in the concepts of “health” and “disease” gives you opportunity to consider them from a common methodological, methodical, organizational and technological points of view, provides a basis for understanding the similarities and common database of information about these processes and challenges the existing “norms” and “standards” in medicine today.

Understanding community of concepts “health” and “disease” where **“disease” is only qualitative characteristics of “health” in the life cycle of the latter** (which can be judged only in the temporal cycle of the existence of the object under study) *allows creating common methods of observation, measurement, analysis as well as prognosticating and correction of these processes (their management)*.

The above aims not only to make corrections in the "norm", "standards" of the controlled characteristics today, at a given time it is also necessary to clarify and correct planned and acting health improvement national and regional programs, which do not take this into account.

§ 1.2 The system environment of population and its health, approaches to its measurement and evaluation

It is generally recognized that the environment in general, includes physical and social components. But proclaiming the so-called “anthropogenic” effects on the environment the “population” itself as an object (as an element of “morphology” and environment), as well as “population” as a leading "function” in this environment realizing a certain “lifestyle” in it should be included in the environment. Besides, the submitted list of the components of the environment should include one more component – “state of health” of the population. (Table 1.5 presents all of the above components of the system environment of the population in medical and social aspects).

The morphological characteristics of the object “population” traditionally, primarily, are represented by the structure (distribution) of people by gender, age, education, occupation, etc. These characteristics in the system medical and social analysis of the population are basic in the “morphology” of forming its health.

Similar (morphological) characteristics for the “lifestyle” of the population are represented by a spectrum of specific knowledge, defining public awareness of its own health conservation (by means of education, training, information communications, etc.).

Morphological characteristics of the object “social environment” (social surrounding) are reflected in the laws of life created by the people themselves, in the historically accumulated and existing traditions, in the social infrastructure of people’s settlements, including the development and accessibility of health care, etc.

The morphology of “physical environment” is determined by its fragments in a spatially confined place of residence (where labor and household life activity of the population passes), namely water availability and debit, soils structure, air quality, climate and other fragments that define the life and health of people.

Table 1.5

System environment from the point of view of reflecting integral states (statuses) of population health

Aspects of system environment	Environment components				
	Population	**Lifestyle**	**Social environment**	**Physical environment**	**States (statuses) of population health**
Morphological	Structure according to sex, age, education, occupation, etc.	Knowledge of preservation of human health and life	The laws of life and the traditions associated with preservation of health and life of the population	The structure of the physical characteristics of place of residence: water, soil, air, climate conditions of life, etc.	Status of the population by biomedical and medical and social characteristics of its structure
Functional	Lifestyle (observance of written and not written laws on preservation of health and life in the settlements)	Behavior (decision, actions, events, traditions on preservation of health and life of the population)	Action-execution of laws, traditions observance, etc.	Interference of human and physical environmental factors	Status of the population by on the signs-markers of its behavior
Genetic	Qualitative distribution of socio-environmental statuses of residents of settlements with regard to their health parameters	Quality of life (in terms of population health and quality of living environment from the standpoint of preserving the health and life	Quality of the social environment from the standpoint of preserving the health and life of the population	Quality of the physical environment of territory of residence of the population from the standpoint of preserving health and life	Population status by medical and social signs of its life quality

Leading functional characteristic of the object “population” is “lifestyle” of the latter oriented at specific behavior in a particular situation and leading to the preservation of human life and health.

Functional parameters of the object “social environment” are derived from the executable laws adopted in the community, its commitment to the traditions, limiting action of the factors negatively affecting the life and health of people, etc.

Functional characteristics of the object “physical environment” are displayed by laws of relationship and mutual influence of anthropic dependable and physical factors that change each other at long mutual existence (in this case the nature of the interaction is determined by “preserving of the life and health of people”).

Genetic traits of environment components as integrity diversity of the object “population” are qualitative characteristics of the latter depending on the composition-structural distribution of people by their status: “young” and “old” generation (by age), its distribution by life expectancy etc.

Genetic characteristic manifestation “lifestyle” of the population supports the quality of its collective behavior from the standpoint of preserving the health and life in the community.

“Social environment” quality manifested in the form of the living conditions of people from the standpoint of supporting their health and life, with a choice of these areas with the best conditions of health parameters as “norms” and “standards” corresponds to the same aspect of the object sign “social environment”. The same applies to genetic parameters of the object “physical environment” (“physical surrounding”), where urban places of residence, the nature of the safety of industrial activity, recreation, etc. are included.

Thus, all the characteristics of the components of living conditions of the population composition are associated with its health: morphological aspect of “health” is presented by social status based on biomedical and medical-social characteristics of its structure; functional – by status, representing the behavioral characteristics of the population from the standpoint of preserving health and life; genetic aspect – by status, reflecting the qualitative result (information product) of systemic coherence and indivisibility (inalienability) of the first two aspects in medical-social area.

It should be noted that the qualitative characteristics of the system environment of the population are summarized in Table 1.5. This is a frame, which must be filled in at the planning stage of recreational activities during the in-depth analysis of the health of a particular “population” in a particular environment at a particular time. At the same time, each researcher introduces in the concept of the studying environment only certain characteristics determined by him for his study, rejecting others not studied by him, so that in such studies there is a tendency to exclude the possibility of the correct determination of the studied object relations - only the so-called “not live markers” of the latter are studied. However, taking into account the structural unity of the object, the obtained results still partly reflect a holistic knowledge of the object - you only need to correctly identify their place in the studied system environment. This is a fundamental requirement and peculiarity of the use of the system analysis ideology, which give an opportunity to significantly limit the scope of research, if the connection of the whole and its components is accurately determined. At the same time, having knowledge about the invariants of the state of any of the objects of the system environment it is possible to deductively evaluate other objects in this environment taking into account its indivisible integrity.

The above approach captures and emphasizes the composite connection of all components of the system environment. When using it, a measurement of correlation of one component with the other is not necessary to gain knowledge about the state of the object under study and, as will be shown below, does not make much sense, eliminates the need for such calculations [+)].

Submitted knowledge of the system environment of the population in medico-social terms contribute to the solution of many problems in the study of health in the living environment, enabling you to see all the links of the objects environment and reasonably use some approaches to measuring their condition, including the study of public health with using the logic of the universe of bonds (Figure 1.4) on the “longevity scale” of the population (Figure 1.5)

The methodology of analysis of the concept “health” and the subsequent development of methodological aspects of its measurement and evaluation using the latter for making management solutions for the population health and health care will require a more systematic consideration of the concepts “risk factors”, “lifestyle”, and their links with the “health” including use of systematic approach for the measurement.

Today, there are infinitely many studies on measuring the effects of various factors (risks) on human health, but there are no methodological and / or technological grounding of schemes of performing related analysis - with access to

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+) Study of correlative relationships between objects and processes is advisable only when regular connection between the studied objects and / or processes is not found.

constructive methodology of classification of these factors and calculations of their significance. Therefore, let us initially define specific areas of system analysis of human health and public health.

To consider the state of the population (person) can only be based on the living environment and, as a rule, in three main areas [36]:

1. as an object on which the environment impacts;

2. as an object that implements the function to rebuild living area (materialized action);

3. as (dynamic) object that implements its own laws of life, as an active system, which (as an integral system) sends the totality of its properties to the own selected specific condition.

Of course, given structuring deepens possibility of health **observability** and enhances the possibilities of its assessment when using system properties of the object and phenomena derived from it in the analysis.

Logical development of this analysis (from the standpoint of the clinic) was the need to provide a link of **set of observed changes in the population (person)**

health condition with **exposure activities** for them: prevention, treatment. The goal is to make these changes **manageable**.

It is known that medical characteristics of the observed states of objects (people, person) led to the concepts of “symptom”, “syndrome”, and finally “name” (diagnosis). The latter ensured the possibility of **classifying the states** of the body and, at the same time, made it possible to analyze the links of observed **situations** (state of object health) with the **response** (actions) of medical services and institutions.

But, both the population’s and the person’s changes of states are associated not with one, but with all the properties of a group of people or an organism. Moreover, these conditions represent the entire spectrum of changes in the whole system (person, population): in the morphological composition, in the nature and functioning of the organization (genetic characteristics).

Relationship of the population with living environment can be represented as follows.

1. Population is *an object exposed to the environment* (socially – it is characteristic of settlements and the laws by which people live, work and relax, the number and composition of the latter, their image, standards and way of life; physically – it is a landscape, geochemical composition of soil, air, water sources, wind rose and other microclimatic conditions).

2. Population is *an object that itself affects its living environment*:

- on its physical characteristics (pollution, land reclamation, creation of artificial lakes, embankments, landscaping etc.);

- on its social characteristics (laws, forms of work, work organization, trade, transport, family life, including health care etc.);

3. Population is *an object that* is as a totality (active social object) *implements its own rights and duties in its own system forming its state (lifestyle and its corresponding mentality behavior)*:

- in ownership issues (implementation of economic laws);

- in medical-social services (implementation of relevant laws, regulations, traditions);

- in the reproduction (implementation of aspects of demographic behavior);

- in public interaction (implementation of the right to work, organization of domestic collective existence favorable for health and life, information security, i.e., as an implementation of the laws of social communication);

- in faith – as in the psychology of implementing your own "soul".

In this case, you should consider the historical aspect of these laws - their relationship with the history, traditions and ethnic composition of the population (in the region), etc.

Informally, they are reduced to the implementation of the aggregate morphological properties in the group (population) - sex-age composition as one of the leading community coexistence parameters - as a marker of survival of the species in the psychosocial environment.

Functionally, they are supported by written and not written traditions, officially adopted "statutes of collective existence" (Constitution, legal laws, regulations, holy scripture, etc.).

Genetically they are implemented by settlements improvement (in its social characteristics), environmental pollution (in its physical characteristics), qualitative aspects of the population behavior (in the mode of life in the settlement), which together - along with indicators of "population (settlement!) health" form the concept of "settlement health" (where "population health" is only one component of the latter).

In such description of settlement life "population health" is defined as an invariant reflecting the result of the manifestation of the combination of observed properties of the collective behavior (in the above broad, three aspects sense). The consequence of this property (observability) is the possibility of measurement (measurability) and control (manageability) of genetic parameters of "settlements" (of controlled area).

Hence “population health” as one of the qualitative characteristics of “settlement health” in the form of indicators of morbidity, disability and mortality (survival) of the people is not only population health, in fact, but also an indicator of one of the many qualities of “settlement health”, in which an individual or population is only one of the components (objects, fragments) of settlement system environment. And this object, as outlined above, not only impacts the environment, but also becomes the object of the impact of this environment.

It should be noted that, historically, the development of medical practice and health care (individual services and facilities network) has long focused on serving the individual and, consequently, in general the entire health care system was vertically (by stages of giving help) built. It linked a set of observed changes in the population state (morbidity, mortality, etc.) with the characteristics of the individuals’ status, taking their sum, excluding changes in the quality of this new system object - the “population” (!!!), and, consequently, has developed activities to influence it (prevention, treatment).

This was aimed at ensuring controllability of changes of observed state of population. However, due to such actions management led to establishing a department - health care sector with quite narrow possibilities to influence the parameters of the collective (public) health (!). **Population health**, as shown above, has absolutely different qualitative - mainly socially derived- characteristics and parameters unlike the individual’s ones and, therefore, **requires other** (by system content and structure) **measures of the impact in social, communal and territorial system of rehabilitation, care and restoration of human health**.

In addition, it should also be emphasized that changes in health state at the individual level (which gave rise to the concept of symptom, syndrome and diagnosis), at the population level have contributed to the emergence of a large and complex “International Classification of Diseases”, followed by adjustment thereto health sector (cardiac, pulmonary, oncology and other centers) with separate form of reporting (documents, indicators) and ascension of individual state indicators to “average” indicators of the individual state, but, for some reason, giving the latter name of “public health indicators”. The levels of reporting and assessment of information importance of parameters of “public health” were adjusted to these indicators, and, respectively, according to the latter - the impact activities on them, which should be assessed at this time as the methodological and information inadequate and certainly not adequate realities of practice.

Absence of direct integral health indicators, i.e. long-term lack of possibility to measure its actual state (as opposed to traditional measurements of its individual manifestations of fertility, morbidity, mortality, etc.) and, accordingly, the uncertainty in the assessment of a real connection of population health with the quality of their territories (settlements) of living - their morphological composition, characteristics of functioning and organization architecture - led to errors in determining the reasons for the prevalence of major diseases and primarily chronic ones, leading to death [53], as well as in kinds of effect on these pathologies spreading day by day.

The above justifies the content of this monograph - targeting health care and those responsible for the health of the nation and people of certain territories at the use of new system technologies in its organizational activities leaving the best of the established models of health.

Let us consider the number of methodological and methodic techniques to assess the health of the population and the factors affecting it (positively or negatively).

Mathematically, if all factors affecting health were considered in terms of causal relations (relationships) when evaluating the states of population (human) (which is denoted by Z, the morphological characteristics of the object –by the symbol x and their performance characteristics –by the symbol f) we would obtain the formula: $Z = f(x)$. It formally indicates that the state of the object (Z) which we get at the output is always a genetic derivative of the biosocial composition (structure) in the object (x) and a consequence of its interaction (f) with the living environment. In other words, **the state of the object** is always a *regular derivative* of the specific (by morphological characteristics) activity of an object - *it is a law*.

This formula has been successfully included in the assessment of human health by J.-F.Nys [86], although meaningful components of this author's model are completely different, not adequate to the methodology presented above.

The formula research shows that similar patterns can be found everywhere, even in any of the health care subsystems: for example, in the work of clinic, where Z is a derivative of its structure (x) and qualitative characteristics of its components (f) activities (operation). Or, in other words, the production capacity (product, clinic services at the "output") always derive from its composition, units structure, staffing, employees' qualifications, material and technical provision of execution of the intended mission and the qualitative characteristics of all departments functioning: quality of services, their availability, reliability of produced technology and others in total unity.

Adapting the above formula to the system ideology of health and social research provided in this monograph we can deduce that any genetic characteristic of the object (Z) directly dependent on its morphological components (conditions of object operation) - x, and the immediate implementation of the intended functions (activities of morphological structures) - f.

Factor dependence of public (human)health requires systemic treatment of such concepts as "factor", "risk factor", "anti-risk factor", "lifestyle" taking into consideration their subsequent use in the below methodological developments in the study of "population health".

The term "factor" in the dictionary of S.I.Ozhegov [27] is designated as "a moment, important circumstance in any process, phenomenon". On this basis, the systemic definition of "factor" may be as follows:

"Factor is an invariant of qualitative characteristics of the processes defined in the object of the specific system environment, reflecting coherent integrity of its morphological, functional and genetic aspects of this object and determining the quality characteristics of its interaction direction (and, accordingly, its existence conditions) together with other objects of the environment and the environment itself".

Represented definition shows the relationship of factor with a particular object causing it as well as with specific objects of interaction in a fixed system environment. It shows that its characteristics are determined by the composition and structure of the object itself, where the qualitative characteristics of its interaction with other objects of the environment (as indivisible integrity) determine the conditions for the existence of the latter and condition of the environment itself.

S.I.Ozhegov [27, p.555] designates the term “risk” as “a possible danger”. On this basis, the systemic definition of “risk factor” may be as follows:

“Risk factor is an invariant of qualitative characteristics of the processes in the object of the certain system environment reflecting its morphological, functional and genetic aspects as coherent integrity with the possibility of negative orientation of its functioning (while interaction) and the corresponding change in the state of the environment objects, it faces, and the environment itself”.

Then the opposite notion –“**anti-risk factor”** based on the above definition should be considered as **“another invariant of the state of the object that implements the ability to support the desired (reference or standard) characteristics of the processes in other objects that interact in the environment and the environment itself”**.

In the presented definitions factor *morphology* (its composition and structure) are reflected in the rules of the object functioning, *functional aspect*–in the parameters of their fluctuations (processes modifications), and *genetic* - ideally, that is in defined and desired, its scientific or historical “regulations” (numeric markers of “norm”) of the processes in a specific object while its being (existence and interaction) in a particular environment[+)].

These definitions are of generic nature. Only function of the object and the environment gives them quality certainty. For example, access to health care as a risk factor for the health of people living in a rural area distant from the regional center, often determines its higher morbidity of chronic diseases, disability and mortality reflecting the flow direction of pathological processes not only in the "health" of people, but also in the "health" of a particular system environment, etc.

Understanding of health depending on those or other risk factors of population (person's) living environment and determining their lifestyle by the latter requires the presentation of the system concept "lifestyle":

"Lifestyle of the population (populations) is an invariant of life traditions of certain group of people, which was formed in their living environment and represents a qualitative result of coherent unity of morphological, functional and genetic aspects of this life."

In this definition the term "invariant" should be understood as an established or formed (in a particular environment at a particular time) the only option in the

+) More deep system analysis of the concept "risk factor" is given in a separate paragraph (§ 1.3)

spectrum of their many modifications. The notion of "tradition" is treated as a prevailing or stable order in people's behavior aimed at preserving and support or breaking their abilities to improve health (duration of the biological and working life, the function of reproduction, etc.). Its *morphological* aspect is represented by certain **norms** of behavior, *functional* – by **schemes of their changes** (modification of the norms) and *genetic* – historically established (and generated by the first two aspects) ideals, including the quality or "comfort" of living environment, a leading indicator for assessing potential for conservation of health and life.

Then, from socio-medical point of view the wording of "lifestyle" should be as follows:

"Lifestyle of the population (populations) is an invariant of behavioral traditions of certain group of people, which has evolved historically in a particular environment of its residence, which is a quality result of a coherent unity of its standards, change of their patterns and ideals of life generated by them in terms of their focus on the preservation and support (or breaking) of certain modifications of actions to strengthen their health and improve the quality of the living environment (habitat)".

At the same time, *in the first case*, the result is a “healthy way of life”, *in the other* – its opposite – “*unhealthy*”, in which the flow of the object functioning *deviates from the ideal, and in the case of achieving deviations peak leads to the formation of a new invariant of object state* – “**indisposition**” (illness, disability, death), which contributes to wasting of “vital resource” by the object (population, generation, a person) reducing its life expectancy - both biological and labor and / or viable.

The presented definition reveals that life activity (lifestyle) *regulates the traditions, and the latter*, in their turn, based on the “feedback” in the cybernetic object, *lifestyle*. Proceeding from this, it is obvious that the **real impact on the people’s health should be directed to the “education” of certain behavior, preservation and support of the traditions of “healthy lifestyle”, on the effectiveness of social influence on the formation of healthy norms of behavior in relation to the physical and social environment and own health that includes the corresponding training of collective behavior and their own systems**.

The latter actually defines the *main tasks of health system management* in general, as well as public and medical prevention in particular.

Let us consider one of the approaches to measuring parameters of certain “health” states used in the monograph. The above method of measuring the state of the object - [Z = f (x)] reflects a cause-and-effect relations of system environment fragments, but this model does not always correspond to the model of objects relations in it taking into account their full and coordinated interdependence.

It is already noted that the interactions of any object to be viewed from three sides: from the point of view of its impact on the surrounding objects and the environment in general, from the point of view of the influence of other objects on it, as well as the point of view of the impact of an object as an element of the environment on itself.

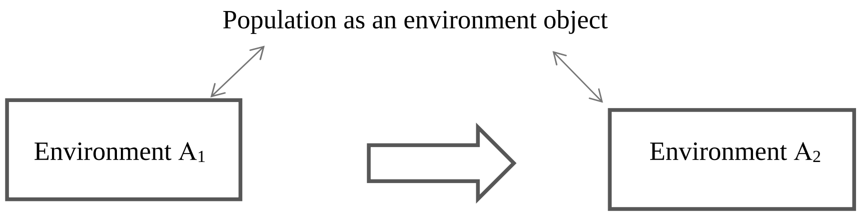

Fig. 1.1 Population as a function in the system environment

Imagine that the environment in the state A_1 (Figure 1.1) under the influence of the activities of the population - L, which changes its state, also changes itself, goes into state A_2. The difference between these states (A_1 - A_2), with their measurability, provides an opportunity to make the calculations of parameters change of environment A in units and measurement scale of the object “population” - L, determine the direction of these changes, their speed and the consequences for the environment as a whole. At the same time, to measure the subsequent impact of modified environment (A_2) on the population (L) a similar scheme (Figure 1.2) should be used.

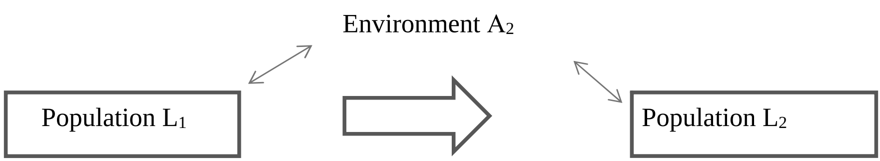

Fig. 1.2 Environment, as a function, in the interaction with the population

In this case (A_2 - A_1) is equal to (L_2 - L_1). But A is measured in scale units of environment measurement and L - in the scale units of the population measurement, which leads to the conclusion that there is a *necessity to find common parameters for measurement both the environment and the population*. Determination of such technique would allow assessing the health of the population and the “health” of its living environment, to predict the direction, scope and possible correction of their states, to determine appropriate resources for the implementation of control actions in single scale parameters, as well as to monitor the effectiveness of their implementation (realization).

The represented diagrams fix the fact: the population (in the first case) and the environment (in the second case) are, for any changes, risk factors of changing state (“health”) of each other.

At the same time, interacting both objects can influence not only its own (and others) final state, but also on the quality of the operation itself and, ultimately, on the morphological structure of each other. That is, having a measurement of one object you can always measure changes occurring in the objects interacting with it (in units and the scale of measurement of the first!).

Taking this into account and meaningfully (in systematic analysis) combining two approaches to measuring objects - modified approach of J.F.Nys (Figure 1.3) and the foregoing are proposed for general use in research and practice in the measurement of systemic linkages of the model of the universe of knowledge on the objects state of the system environment, it itself, as well as events taking place in it and its objects (Figure 1.4)

State ⟨ Integral set of genetic signs-markers Z, Laws of population functioning in the system environment F, List of processes (fragments) of population on which environment influences $x_1, x_2, \ldots x_n$ ⟩

Fig.1.3 Contents of constituent elements in the formula of J.F. Nys [82]

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⟨ State of environment A^1_1	Laws of environment changes f_1	State of environment A^1_2 ⟩
↕	⟷	↕
⟨ State of population health A^2_1	Laws of state changes: internal – composition and structure of population by sex, age etc, and external lifestyle f_2	State of population health A^2_1 ⟩
↕	⟷	↕
⟨ State of individual's health A^3_1	Laws of state changes: internal (functioning) and external (behavior) f_3	State of individual's health A^3_2 ⟩

Figure 1.4 The universe of knowledge on the state of the system environment and the environment itself, where "< >"presents system indivisibility of the considered object (phenomenon) and knowledge about it, a ⟷ and ✥ a compositional unity of the considered environment and knowledge about it.

Such scheme to measure and analyze the state of the system environment and its objects takes into account the basic properties and aspects of the study of the classical system. It allows fully and deeply analyzing the main factors and relations of formation of public (individual) health and their system environment. The scheme establishes a harmonious relationship in the system “population (person) – place of its habitat (life activity)” in all aspects (ecological balance, lifestyle in a particular socio-ecological environment, morbidity, mortality, survival, etc.).

Presented theoretical analysis always allows identifying a unique determining of “health” for the observed object. For example, for the “population health” (of one or another group) in the n-th, a clearly defined system environment: in the village, district or regional center, in the region etc., taking into account certain (in a particular settlement) laws of its functioning, as well as the diversity of life style forms of a group of people under study.

In addition, the precise fixing of the object functions and its environment allows taking into account the above analysis to enter the classification of the states of the object functions and, ultimately, its habitat areas.

Finally, the presented scheme of the analysis of the relationships of the system environment objects allows making direct and indirect measurement of their states and the environment in different aspects of relationships in general.

The foregoing technological schemes of disclosure and analysis of the relationships of public health with leading (presented above) concepts of theoretical and practical medicine, as well as in social ecology were used in this monograph while the development of medical and social techniques for studying the incidence, mortality, survival, resilience and life expectancy, working out strategy of development of public health care, health care management, dealing with the related resource and economic problems.

§ 1.3. The risk factors and health

The law of survival of populations is based on demographics. There are no mechanisms of health formation in it under external examination. At the same time, the basis of the mechanisms of the majority of medical and health programs is desire to ensure the transition from sickness to health. We have made this transition via risk factors. However, the weak point in this transition is the interpretation of the concepts to enter the mechanism of health formation, because health itself cannot be observed.

Let’s try using the risk concept and its effects (factors) to enter the mechanism of health formation and at the same time show that health is a necessary and sufficient condition for the population existence.

Where is the risk factor, if it is known that the health (its safety) is connected with the way of life?

The systemic components of lifestyle [36] are:

<conditions, way, style > [of life].

All of these elements are measurable. Conditions are objects and effects, way is relationships and actions. And It is the latter, a way of life, that hides a health risk, risk of its resource preservation.

If health is a balance, adaptability of the population (person) to the local environment, then the state of maladjustment leads to “feeling” of failures (shifts) in health. In this case, the event that led to this had already happened; and we monitor only its consequence - the phenomenon.

Adaptation means removing of the negative impact of the environment, reduction (or increase) of efforts to “go with the flow”. In this case, any of these options of adapting population (person) “drives” themselves in a stressful situation: both in the field of social activity, and in his own psyche.

In both cases, this situation creates a “factor of relations”, where the factor is an indicator of departures from health, a signal. Taking into consideration that health is the result of the relationship with the environment, health itself becomes the “knowledge” about the state of relations between objects (people, person) with the environment, where knowledge of the socio-ecological environment, such as the “welfare”, “well-being” (as the security elements of health resources) are used for the diagnosis [54]. These resources are not for health, but for the knowledge of it, the components of which are:

-perception (sensation of the signal);

-understanding (based on experience);

-ability (skills-based);

-expression or implementation of the taken decision (which requires desires and conditions).

But how do you get necessary knowledge by means of the factors?

Fact is a result of empirical research; it becomes true if it is expressed in theory. A combination of factors is a texture, an empirical regularity, morphology of knowledge or environment (research field) “relief”. So in fact we go from empiricism to knowledge and theory. Taking into account that fact is related to the object, its morphology and functioning, it may be considered a “genetic derivative” (genetics-development). Consequently, “reading” it “back” (to the object), we come to practice, practical activity and, conversely, reading “forward” we move to the theory (remembering that theory is the knowledge generated by the practice). Accordingly, any fact received from studying person’s or population’s state can be read and used as the basis of theory and practice connection in the analysis.

Fact as a result is a derivative or resulting characteristics of some process, some interaction, that is a fact is something already “produced”. The source of the fact, and it is always the result of the produced interaction, is the reason. The latter is inseparable from the environment objects with which the selected object contacts. Typically, while interacting environment and object are in a mobile equilibrium, characterized by a certain set of facts (in the range of variation of their relationship).

Change of the interacting object functioning may result in a change of habitual observed facts. This change in operation of any object (in a system environment) which interacts with the controlled object is called a factor.

Under the influence of factors, new facts, referred to as the information, carrying requirements of any “actions” making, taking “new decisions”. So a transition “factor - fact - information - decision – action” takes place.

In this case, the factor can be considered in many aspects:

a) as a fact - “de jure” characteristics of object;

b) as information – relief code of environment, object;

c) as a decision ideologist (having the restrictions and requiring the use of marketing);

d) as an action founder (for leveling reasons, requiring the use of management).

From this perspective, factor is objectively an uncertainty of the environment, and subjectively, this uncertainty is a risk, danger. Based on that, the risk factor is a qualitative aspect of consideration, look at the fact. That is, the risk is in our estimation, but not in the factor itself.

Then, a **risk factor** is:

- *characteristics* of the fact and the object associated with it, “de jure”;

- *quality* of the fact (in a given context);

- *information* about the limitations of existence (survival, preserving of life and health resource) of the object - population, person;

- *ideological* (methodological) *basis for decision-making*;

- *methodic basis of forecasting* changes in the characteristics of functioning and state of the object (direction, speed, power);

- information - methodic basis for actions on management and organization of object, its state and its functions management.

Thus, the factor is a methodological, methodical and informational basis of the fact genesis. But, again, every fact opens an *event*. In this case, any event which occurs becomes defined (definiteness) in the system triad:

<event - its measurement in math - it changes to the language>

(value, fluctuation) (name, classification) that is, before getting the name the event is in the category of indefiniteness.

This is similar to the concept of fact definiteness:

$$\left\langle \text{fact},\ \text{mathematical measurement},\ \text{designation in the language of researcher} \right\rangle.$$

But it is the latter that fixes the multiplicity of the fact “reading”: from the standpoint of different disciplines, level of knowledge, researcher’s position and others. That is, the traditional assessment of the risk factor is always carried out in terms of the environment determined by a researcher. Simultaneously, the “risk factor” is a way to demonstrate the fact which together with the conditions of its appearance and on the background of these conditions reveals the ways of existing controlled by the subject of the environment (a person, a group of people), and medical knowledge about their condition.

The above description of the fact as a scientific and practical result of “knowledge”, which indicates that every fact may be related to a specific object (s) and the specific environment, allows deducing that each fact contains:

<condition, way, form> [of an object existing]

and this knowledge is correct.

That is, the factors clearly trace the organization of conditions and way of the fact life. Then the risk factor in the fact life can be considered as a *system variable*, which gives definiteness to the fact itself, a *condition* of its survival (here, ecology and environment formation) and a way of its manifestation forming a way of life of object (here – a medical definition of this concept).

On this basis, when considering the health of the object (of the population, person), as the observed set of facts, a risk factor acts as an *operator of the health formation* [54], including its qualitative characteristics: ill health and disease. That is, *health* and *illness*, as the characteristics of the interaction of the object in the environment are *not opposing concepts*; *it is the resulting state of the unipolar process*. I.V.Davydovskii [13] contrasted the norm and pathology, calling the first as a natural process, the latter as a deviation from it. In the systematic analysis of health and disease they are both natural processes. Such a view gives us quite new possibilities of the observed phenomena and their performance interpretation.

The fact registered in the nosologic units (diseases diagnoses) presents us with both the etiology (conditions) and *pathogenesis* (the way of development) of the observed state, as well as the *risk factors* themselves in the conditions, forms and organization (way) of the life of the object - population or a person. This enables the formation of a point (in a particular system environment) *external* (by tenor of life) and *internal* (by way of life) *prevention*.

Before the range of norm (extreme fluctuations) was searched in the fact deviation, in which the *diseases were not included*. The exclusion those from the norm led to the wrong orientation in the health management. Without diseases health turned out to be a kind of “dead”, not developing. Development and disease were considered opposite poles. Overcoming the disease was not considered development. It was only noted that the development “retarded” during the illness. On this basis, the formation of norm without disease (exclusion of it from “passport” rules) led to the ambiguity: the object exists, but does not develop. Our approach enables a new view of the “norm” as a natural process of the object development.

It should also be borne in mind that the risk factor in its definiteness (i.e. immersed in the environment) is a system variable associated with the insurance risk. Its features when used in health insurance are as follows:

- a *scientific* fact (the factor becomes a fact);
- a fact *linked to health*;
- a fact, *expressed in a monetary form or another one* associated with the use of “human resources”, gives a traditional concept (understanding) of health where a risk factor is a deviation from health.

This analysis enables to include a risk factor in the formation of methodological and information-methodological foundations of the *health insurance system*.

The risk factor in the interpretation: “risk factor - a fact” allows you to explore the history of fact. Its measurement gives us the *reconstruction* of the observed and if to use the reliability theory [89] for interpretation of “the fact as a risk factor → a new fact, *predicts* the future.

Considering the disease as a derivative of risk factors, as a high-quality type of deviation in health, knowing the factor metric and measure of its deviations (modifications) we always come to getting the “norm”. That is:

<metric, measure, the rate >

give us access to the true rate of fixed states in which disease has its own place. In this case, the disease as a characteristic of health derives its right to a place in the “norm” and methodological nonsense “disease is not a development” is excluded.

Considering the risk factor as a signal at the level of interaction of the object in the environment we come to an agreement of the concepts “risk factor = stress”. That is, harmonizing with the theory of H.Selye [72] we can consider the risk factors to human (individual) health from the standpoint of *biophysics*.

Considering the risk factor with the object point of view (environmental field) as a signal of the interaction of objects (molecules of the body, organs, people in the group, etc.) [45] we can use the knowledge about the risk factors in the study of health at the level of *biochemistry*.

Taking into account the above mentioned conclusion that signal treatment of diseases can be obtained on the basis of risk factors, *health advocates as an ability to detect the signal*. Then the art of signal recognition technology acts as a *technology of medical practice* (diagnosis, healing) and the art of vision as a technology of knowledge representation in the system of medical practice, as a doctor and at the same time as an art of creative work, as an instruction, an individual approach, as an *art*.

On this basis, the following *conclusion* can be taken: **health is a necessary and sufficient condition for functioning of the health care industry itself**.

Above, we discussed the health not as a state, but as a quality of an object existing in an environment where the disease is only an aspect of functioning or a modification characteristic of health related to risk factors. The latter was considered as a set of (an integral characteristic of) the action of the object (population, person) itself. From these positions formed viability (by deviations level from the parameters of "survival" and these parameters themselves) is adaptation and the degree of adaptability.

That is, from this point of view, adaptation is a degree of options to "fill in" the range of variation in the morphology and functions of the observed object while its interaction in the system space while preserving its specific characteristics of stability (resilience).

Thus, the adaptation may not be total. This is a functions consistency with a particular spectrum (set) of signals in accordance with the DNA code. The signals should be divided into:

- internal (by the way of life as a connection of the internal parameters with environment);

- external - ecology of existence (=environmental).

It should also be emphasized that the risk factors, in contrast to the fact have a solution that allows coming to the *design of public health*, where the "scale of survival" shows deviations from health in a dimensionless form.

Hence, indicators of "ill health" are equivalent to errors of a person (a group of people) in the choice of the way and form of functioning, that is, poor health indicators agreed with the kinds of activities show *errors in the decision-making system*. And these errors lead to diseases (i.e., *at the internal level of the disease it is a violation of rhythm, where stresses are connecting link*).

If errors occur in the function in conjunction with morphology we talk about *restructuring of the system* (organism, organization). If the errors are without a link of function and morphology, self-contained, individual - we talk about *pathology*.

At the same time watching the object, in the observed metabolic processes of the functions we ourselves "assign" (an object, a person, the population is considered as a center of metabolism). Then the concept of "health" and "disease" act as the characteristics of the process of existence. It is in the "existence", in its manifestations there are “condition” for them. And there is a risk factor in these “conditions”. That is, a risk factor acts as a reconstruction of the observed fact in the measurement from 0 to 1 and its estimate ($\pm$) can only be in terms of the whole: the benefit - (+), damage - (-). A real measurement is carried out in the units in which the transcription (explanation) of factor takes place.

It was noted above that the risk factor is a quality characteristic of an object (person, people) security in a particular environment.

The environment itself is filled with many objects:

- physical - air, water, soil, etc.;
- social - traditions, laws, health care, transportation and utilities, etc.;
- biological - animals, birds and other microorganisms;
- flora - trees, shrubs, grasses, etc.;
- population (person)

Any of these objects can be in the risky conditions of existence *itself* or to create risky conditions for the existence *of other objects in the environment* interacting with them. Then, if these other objects running into them lack the internal (genetic) or external (social, including the activity of health care) protection system there may also appear risky conditions for their existence.

No activation of protection systems leads first to a deviation in the functions and then these deviations may become such ones which are given the name of “illness”, “disability”, “death” (and there are classification of these abnormalities: ICD - for people, MAC - for physical environment et al.) in the society.

In the system view:

- *morphology* of the risk factor is determined by the rules of composition and structure of the object;

- *functional* aspect is determined by the parameters of the norms fluctuation (modifications of processes, where the *boundaries of action* are own space of risk factors activities);

- *genetic* is determined by an *ideal* that is by specified or desired “standards” of the processes in a specific object while it is (exists) in the environment.

As already noted the risk factor is the knowledge (information) that removes indefiniteness and warns of danger. On the model of the survival curve of the population the risk factor (shown in distortions, deviations of the curve):

- indicates the *location and magnitude* of deviations from health;

- acts as a *threat to the population's adaptation* (affects the duration of the period);

- is a *mobile* (controlled) characteristics - you can "escape" from a risk factor, "move" it;

- determines the *direction of action* while regulating;

- defines the *"point" of the application of social impact*, which is unique for a particular area, a particular group, time;

- is a *condition and place of resources direction*, determination of their volume (the degree of deviation);

- is the most essential *element* in the *system of decision-making* in the management of conditions, processes.

Thus, **a risk factor appears as a health indicator from the system point of view** and carries both negative and positive information: negative - as a characteristic of the health dynamics, positive - as a clear basis for the management system.

In the work of researchers we can often find the concept of *anti-risk* factor. We consider it as another, opposite invariant of object status (population, person) or as a *health factor*. One that implements the ability to support the *desired* characteristics of the processes for objects associated with it in the environment and the desired state of the environment itself.

We emphasize that watching the object the observer always sees a particularity (in the curve of survival – individuals' survival up to a certain age x). Just watching the environment the researcher sees the integrity (survival) in a particular environment, where the environment is a self-organized field that is unique for the area, groups of people and time of observation.

Risk factors can be singled out only while considering integrity as factors emerge on the relationship of environmental objects [54].

They are unique, as indicated, for a particular environment, and the point marked by the number on the survival curve is a unique characteristic of a risk factor: its power, place of actions and others where different negative quality processes in the society are indicated as one or another disease.

Based on the account of objects in an integrated and indivisible system of "population – environment" there are *three main groups of risk factors* as it is mentioned in (§ 1.2):

- coming from a person (population);
- coming from the environment;
- derived from their interaction.

It should be noted that factors emanating from a person or influencing the environment, have the opposite effect - person (population) from their effects on the environment always gets a "boomerang" having the quality with the signs (±). The grouping of risk factors allows choosing more correct direction of prevention programs (measures). On the other hand, any risk factors can determine the quality of physical, social, lifestyle-related and other factors in health units (by the direction of power and "boomerang").

The prevalence of diseases in the population should be considered as one of the elements of the socio-ecological environment in which there is a population and great number of factors (air, water, soils, geomagnetic areas, landscape features, etc.) affects its health. Diseases are associated with these factors together with the history, traditions of existence, forms of production and others. Getting of the object (person, group of people) in these conditions in the absence of the "internal" system of protection (innate qualities and behavioral characteristics of the way of life) or in the absence of "external" protection system (working conditions, rest and recovery, the inadequacy of other social and medical measures, availability of medical services) can lead to deviations in functioning - diseases that is a risk factor for their occurrence and spreading.

At the same time we should pay attention to the fact that *health care itself does not actually eliminate risk factors* (danger) - it did not eliminate any disease. It only suppresses them. Public health cannot be achieved until everyone sees its value. Health care will be able to ensure public health if it includes the man himself in its system (controlling him, managing him). From this position health care can ensure resources providing of health, acting as a system of coordination and synchronization of the resources providing of the society life and providing a natural rhythm of the *"health dictatorship"* [54], where the risk factor is a unit of the health dictatorship. This requires the development of "operations of health development" [54] - formal models of the processes of formation, reconstruction and development of health processes, in which the program of correct interaction between subject and natural processes is fixed. It was described in detail in the monograph "Health for all: a general context of the formation of the resource strategy of health care" [54]. However, practical implementation of the principle of "health dictatorship" is possible only when a person is regarded as an absolute humanitarian value, regardless of the specific financial, economic or other results of its activities and on this basis the relations of solidarity and partnership are established in the community, the ultimate aim of which is a health of the person defined as not "an absence of disease or infirmity, but a state of complete physical, mental and social well-being" and the health of society as a whole, not a mechanical aggregate of individuals' health.

To summarize the theoretical analysis we note:

• factor allows *multidimensional assessment* while analyzing it from the point of view: "factor - information - fact - decision – action";

• risk factor - not natural, but only social evaluation of the quality factor from the standpoint of safety of human existence and/or population in specific environmental conditions;

• systematic analysis of health factors suggests that *health and illness are not opposites*, they are different "dimensions" of one and the same natural process of life, and both are included in the phenomenon of “pathology” and “norm”; and only the introduction of special classifications can divide these concepts;

• knowledge of risk factors for health and life allows *health care management*.

The presented multi-aspect system of interrelation of health, risk factors, population, its living environment and controlling them in different forms is used in all parts of the monograph, shown in the examples on analysis of the morbidity, mortality and survival of population.

§ 1.4. The ideology of integral measurement of population health

While system research of population health there was considered and searched matching of two main components of population health: biological and social.

The first component reflects the quality of the innate (biological, genetically laid) health, the second one shows acquired resistance to preserve this health (and therefore life) in the whole cycle of existence taking into account changes in the quality of the living environment.

In this case the integral evaluation of the observed population health (external evaluation) is carried out using the methods of mathematical statistics. And to assess the “internal” health the simple transfer of the dimensionless characteristics of the “external” is conducted. Thus, when “external” is measured in specific units the “internal” is measured in the same units, and vice versa, when measuring the “internal” in its own units a transfer allows measuring the “external” in the same units.

In order to coordinate the “external” and “internal” parameters of the health of the population the following postulates (axioms) have been used:

1. There exists a maximum resource of life (or viability) of populations. It has a temporal equivalent termed by us the age-limit or the maximum specific (biological) life span.
2. In time (with age) this resource of viability (the social aspect of this concept – life stableness) is used, exhausted, according to a linear law, at that, described in the theory of aging of Strehler – S.Mildvan. Its expenditure is determined by the quality of the habitation environment.
3. An interaction of populations with the environment, in which their life proceeds (life activity, existence), cannot be realized without losses, ruining health that are determined (characterized and described) by a unique power function of their age for each group of people (as the parameters of the inner program of activity and the speed of using the congenital health resources).

We fixed an agreement of many characteristics under the concept “the resource of health”:

- specific (biological) characteristics of the life span;
- congenital (biological) specific steadfastness for the preservation of life;
- congenital (biological) viability of generations acquired from the parents;
- congenital resistance of generations to negative environmental (socio-ecological) factors of their historical and geographical motherland.

Thus, “the resource of health” is an internal parameter of the existence of an object (population). The demographic processes (the birth rate, mortality rate) traditionally appear in the role as its external manifestation. Health and its resource are found inside; these are the internal parameters of the population. A coordination of the two concepts – “health” and its “resource” is expressed in the concept – “vital capacity” – as a biological characteristic (“internal”), on the one hand, and, on the other hand, in the concept – synonym “life steadfastness” – as a sociologic characteristic of manifestations of the “internal” upon an external consideration.

A dual quality of the concept “viability/life fortitude” made it possible to reflect the conformity of the biological and social in an object in the best possible way. At the same time, it enabled to span (like a foot bridge) and show a complete interdependence of the concepts “health” and “survival”. Their interconnection is the following.

A generation of newborns lives a life until death coming. Life appears as a temporal interval between the dates of birth and death. Functionally, the definiteness of this internal is registered by the concept “existence”. The latter has one or another quality which is fixed externally by the notion “survival”.

In other words the concept “existence” via its qualitative characteristics designates practically its own spatial – temporal characteristics in the concept “survival” and from this point of view both these concepts are conformably equivalent.

Outside the “existence” of an object (a human, population, generation) the concept “the health of an object” cannot exist. Health, as a concept becomes definable, when it is “bound” to an object, in the presence, appearance of the latter. And it may be defined, observed, fixed, evaluated and measured only in the process of the “existence” of an object: it is absent until the “birth”, the appearance of an object, it is also absent after “death”, the disappearance of an object.

Taking this into account an interpretation that the concept of “health” is closely associated with the presence of an object becomes an axiom. This object is observed and characterized by the duration (a period of time) of its existence the, duration of their lives – for the population (a human).

“Health” depends on the quality of life, hereat, (the quality of the habitation environment) and its derivatives of qualitative (temporary and others) survival parameters.

Hence, fixing the interval from the date of birth till the date of death of the last deceased member of a concrete generation, one can register the length of his life (the age of death) as a temporal index used by this generation of the “life reserve” (intended for it “the life resource of health”).

From this point of view the “generation health” becomes a spatial – temporal parameter in the light of which the traditional, well-known for a long time index of the average life span for newborns obtained on the basis of processing mortality tables reflects and represents in a measured form a real already used average characteristic of the total “generation health” throughout the entire spell of its life. That is, the index of the life span reflects the situation of an “interaction” (the level of “harmony” or “conflict”) of prescribed biosocial characteristics of the population itself and the environment of its existence.

On this basis one can arrive at a conclusion that the basic characteristics of the population include the **limit, specific age of life** intrinsic to it, as a specific, biological “resource of health” as well as congenital **viability/life endurance**, as an internal steadfastness to survival, preservation of species acquired from parents. This is one aspect of an interaction. Another aspect is **living environment, its**

quality with regard to external conditions for the preservation of a species, its health, its survival, as a condition of its “benevolence” or the ability of the environment to preserve health and life of its members.

The said parameters at all the stages of life, being in coordination or in a state of a “conflict” determine the state of population health at any period of time of its existence, the integral dynamics of health and the time of its preservation (the survival rate). They have only to be measured.

A morphological aspect of the survival rate of population is fixed in the pattern of the population of proportions and the number of individual groups based on the gender and age. A functional aspect – the mortality rate in these groups and a genetic one (derived from genesis – the development and its logical outcome) is characterized by the parameters of survival and the average life span. The concept “survival” as a term of the preservation of health is a reverse index in relation to mortality. In the meantime, mortality was taken for an evaluation of health due to the fact – that the rate of mortality is one of the most accurate and known “manifestations of population health” and, apart from this, the registration of death is obligatory at the state level on any territory.

The age of death, as a date, was used by us for a mathematical indication (determination) of the duration of life – the duration or the time of existence of health. It is known that death, as a phenomenon, manifesting inner processes in man; is a result of some causes, a consequence of disturbances of health or, otherwise, the result of some causes – the sequel a of health derangements, or, otherwise speaking, the consequence of injuries, diseases, which were conferred corresponding names by the society (ICD - 10) – as causes on which health and its complete lass – death depend.

In addition, the age of death, both as a date and as a demographic statistical factor has enabled to coordinate the scales of the time of the existence of the biological and social, id est, it has made it possible to regard these or other genetic (congenital, internal) and environmental (external) characteristics of existence, both natural (the first) unamenable to changes after birth and as artificial ones (the second) amenable to changes, control and correction, the limiters of the terms of preserving the health and lives of people.

In other words, "the mortality rate" was chosen by us because of a connection, including a methodical one, with the "survival" of the population in a concrete environment (both indices are evaluated according to the mortality tables), whereas the concept "survival" directly depends on the concept "health". From these positions a choice of "survival" as a gauge of "health" is fully substantiated.

The curve or the scale of "survival"+) (Fig. 1.5) at the temporal cycle of "life" of generations take into account in an integral form all the events, influencing the health of the population. It is the most informative, represents a spatiotemporal characteristic of health which provides (when using topology) an approach to a measurement of physical time (natural and social phenomena) and biological time (the existence of populations, generations, the population).

That is, the scale of survival takes into account everything in a systemic and inalienable unity. It is a unique socio-geographical and, simultaneously, a large – scale – temporal "map" of the dynamics of the population health during all the years of life under definite political, socioeconomic, sanitary-ecological, historical and administrative – territorial conditions.

It reflects national, age-gender, industrial (urban-rural), medical-organizational and many other factors, influencing on the people's health from the positions of their mode of life and the psychology of existence.

Undoubtedly, it does not mean that in order to measure the dynamics of health one couldn't use the scales of other phenomena (for example, diseases) ++). It is possible, but the scale of survival is exclusively the only one, which takes into consideration EVERYTHING (including the dynamics of diseases). The

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+) Graphic-analytical models to which the scale of survival belongs (see Fig.1.5) are graphic models, reflecting, the principal features of objects under study, processes and enabling to present different variants of solving tasks, achieving the ultimate goal on a real time basis on a diagram, evaluate the degree of a conformity between individual components of objects under study [56].

author investigated the “systemic” environment of the population on its basis, in all its integrity whose inseparable components are the population and the environment of its habitation. Each of them has many items, correspondingly – the aspects of consideration and on each of the latter – its own criteria of their evaluation.

The principal active component of the “systemic” environment is the population (a human). Its presence and vital activity in it are always directed at its own existence and the provision of the latter (by adjusting the environment to its own needs), in other words, oriented at actions of changing (a correction in a desired direction) its environment – the habitation milieu.

[++)] Examples of measuring and evaluating the dynamics of the population health based on the findings of the disease incidence have also been elaborated and are carried out by us in this paper.

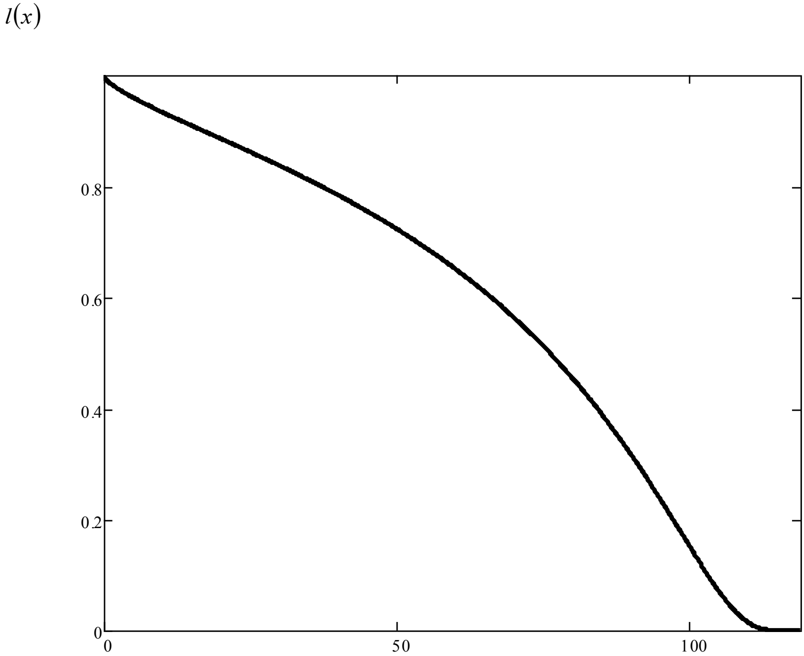

Figure 1.5 The scale of survival (longevity) typical of individual generations of Ukraine's population at the end of the XXth century (the number of newborns is recognized as 1), x – years of life.

Taking into account the "conditions" of this environment, a person (population) forms his (her) "lifestyle" as an "order", "organization" of the life and life creative work in it. Hereat, "the level of life" on the bases of the style that arose (traditions, laws) as its quality is determined by the "limits of existence" and, correspondingly "the limits of potentialities to satisfy one's needs". This level determines the "lifestyle" as a way intrinsic both to a unique object (an individual, a personality) and a group of people. It is formed on the basis of "likeness" – based on "life patterns" determined by the quality of the "lifestyle" in groups of people and there is a host of them. A person makes a "choice", joining some group (the choice is always general for a certain status group – according to the gender, age, social standing etc.).

But, at the same time, a "choice" always has a unique character – it may be only according to one parameter of the "lifestyle" of the group, the most attractive one for an individual. This "choice" motivates the behavior of a person (and his group) in the environment and moulds their "lifestyle".

Moreover, scientists have been concerned for a long time with the following questions: does man possess the freedom of the will, does he choose decisions consciously or the freedom of choice is an illusion?

To our way of thinking, a person cannot change his (her) character, neither can he (she) change the events of the process of development destined for him (her), as well as desires thrust on him. He (she) can change only his (her) milieu – only here man is granted the freedom of the will. Only changing his (her) surroundings which, in its turn will change him (her), man can walk with vigorous strides in the direction of qualitatively higher world perception.

What becomes primary after all, while executing appropriate actions? Health is primary. Health provides a choice of "healthy social connections", and, in the long run, ascertains the quality of our life in the concept "health" and makes us healthy in a broad aspect of concepts [54]. Exactly health is a "starting guiding impact", reflecting the "degree of conformity" of the "internal" parameters of viability in a concrete situation (the biological aspect for an individual, the social one – for a group of people, the population) and the possibilities of the environment to satisfy certain needs according to their orientation (quality) and nature (volumes) in conformity with actions based, on the behavior, (demands) of a person (people), this determining the parameter of their "external" life endurance.

The principal object of theoretical studies, while investigating the integrity considered, became regularities of changes of the states of public health associated with the consistent patterns of the processes of survival (mortality) in the habitation environment for the purpose of evaluating the extent of knowledge and indicators necessary for the information support of administering the population health both in the practice of the department of the public health service and the practice of other social institutions on the territory of its habitation.

A series of new approaches and methods was worked out by the authors within the framework of a systemic study of health on the basis of detecting regularities of an association of health with the parameters of survival for the purpose of processing traditional materials of the birth rate, the rates of morbidity and mortality with further obtaining on their basis a range of measured links for an evaluation and prognosis of the population health, the functioning of the system of health care. A conception of an integral vision of the processes, taking place in the systemic environment, concepts based on the "population health" and non-contradictory factors singled out inwardly, influencing on the dynamics of health and the survival of the population has been elaborated. Furthermore, an entire spectrum of those of them which formally were singled out traditionally only within the framework of specialized sciences, having little in common with medicine and, as a rule, were not coordinated with one another, the latter being an obstacle for their use in the public health care system.

Regarding health as an event – a change of the conditions, its spatial-temporal characteristics – as processes and in their light other processes, also being characterized by temporal characteristics, correlations were discovered in this integrity. *Health harmonized EVERYTHING in a systemic environment, all the processes proceeding in it, on the basis of which there appeared a possibility to determine the integral indices of the whole measured in terms of health indices*. In particular, demographic, biological, social, economic, genetic, geographical and other aspects of a vision of this integrity [36], the numerical values of their integral parameters were coordinated and for the first time there was determined a LAW, expressing an integral interrelation of EVERYTHING in this integrity – the **law of survival of populations** [40].

The law reflected changes of the human resource (the dynamics of health) during a complete cycle of life existence and, in the long run, – in variations of the life span. The last index, both observed and measured on the basis of using the parameters of the law, became controllable.

At the same time it was considered that health itself is not observed at the biological level. Only its manifestations, outcomes = diseases (or their absence) are observed there. Health is observed only at the level of the social dynamics of processes: survival, mortality, morbidity. Health and disease occur (conform) both in individuals and in groups of people only at the level the psychomotor system – behavior motivations, when choosing the mode of life according to the "patterns" of lifestyle of some individuals (groups of people).

The use of the law of survival of populations enabled to mould a form (quality) of population health and a healthy society. Hereat, everybody discovers "his own" in it. For example, the population chooses an "image to suit itself" in the scales of health dynamics and this "image" becomes a guiding impact for it (it is "inside").

With such an approach the regulation and order (organization) of "images" become the basis of social "taming" of a mode of production of health and a healthy man (society) where a right as a realized will is a system of rules, "images" which the society "sets" and regulates. Thus, proceeding from this, prognosticating health is a prognosis of the fundamentals of building a healthy (desired) society, the foundations of building a system of its protection and the fundamentals of the qualitative characteristics of the environment in which the population should live – an environment for the preservation and reproduction of health, suitable for its gradual improvement and an increase of the life span. In other words, health appears in the role of a regulator of needs on the basis of natural understanding "negatives", risks. Simultaneously appearing in the role of the function of internal knowledge, it shows and realizes the ability and possibility of using this knowledge and a potential laid in it according to the triad [54]:

<knowledge, health, a healthy person>.

It should be noted that the law of the survival of populations exists without us – a stable interaction of all its components in nature is observed. We only express it in one or other models (models are our conceptions), which may be specified. Having found these components, having determined a form of their associations and its prognosis, one can form purposefully an orientation of actions of the society aimed at achieving “models” of population health and the its living environment in conformity with them.

Proceeding from the afore-cited forming of a new future (its prognosis) is carried out according to the following scheme. A “real situation” is taken into account: acting in the environment “circumstances” and “situations” formed on their basis. “Risk factors” stand out in the latter as “events”, changing “the condition” of health and the systemic environment on the whole. While evaluating this condition as “normal” harmonious, equilibrium = favorable, its stability is achieved. According to another evaluation of the condition – acknowledgement of its “unfavorableness” on getting a signal of a “danger” of the condition and a threat to the latter (a threat = realized danger) a task is set = to eliminate this threat. In other words “risk” as an uncertainty, a threat to danger and an undesirable orientation of “events”, changing “the condition” (the health of population society, environment) and a possibility of a “catastrophe” must automatically include “decision taking” and adequate actions towards “risk” (measures programs), concerning its elimination.

Health care, exerting effects (their external aspect appears to be “diagnoses”) attempts to “extinguish” them itself handing them over into a “governing impact” of its own activity: it is incapable (acting alone!) to achieve a desired result on such a basis. Hence it should revise its lines of activity, the internal set-up and leading functions in conformity with the systemic character of the concept “the population health”, the sources and principles of its preservation presented in the law of survival at the life cycle of each generation, taking into account an infinite majority of its status characteristics, “selections” of standards and the motivation of behavior aimed at preserving one’s own health.

§1.5. The law of survival of populations

Stage I. Collecting and arranging data by means of the traditional statistical processing of the materials of the population mortality, using the tables of mortality and survival. At the same time, the authenticity and validity (consistency) of the results which corresponded to the demands of scientific rigidity. A check-up has shown that the known methods of constructing the mortality tables [8] do not exactly realize demographic reality. Therefore, for the purpose of arranging the data a new method was worked out and used by the authors especially for this purpose aimed at compiling mortality tables [43], the shortcomings of the former methods have been eliminated in it.

Stage II. Modeling the process of survival was carried out by means of testing the models of survival by B.Gompertz-W.Makeham, P.Weibull, P.M.Ogibalov, V.P.Voitenko and others. The results of the approbation have demonstrated that each of the models has its own shortcomings and a number of drawbacks, common to all models, namely:

- M.Puason – according to [10] the strength of mortality in it does not depend on age, there isn't an age limit in generations, as it were, in principle and, correspondingly the life span does not depend on the demographic reality.

- P.Weibull's model [89], transferred from the theory of the fatigue of metals and alloys (not living objects) into the field of demography does not give a clear description of the dynamics of survival of older ages (after 70 years), has no restrictions of the age limit of generations i.e. does not approach a zero (0), where 0 is a condition that all those born will die on the expiry of the finite interval of time.

- B.Gompertz-W.Makeham's model [81, 84]. B.Gompertz stated that mortality grows with time (age) in geometric progression. W.Makeham introduced a permanent correction – for leveling the mortality curve, but arbitrary without any substantial sense. Moreover, the strength of mortality is monotonously increasing according to their model in other words, the corresponding curve may be (in letters) only J-shaped. At the same time, their model does not envisage the presence of the age limit in generations in principle and is unable to describe exactly the parameters of survival in the youngest age groups. These shortcomings in total do not permit a model to present accurately the demographic realities of the process of survival:

- V.P.Voitenko's model (a combination of two models: P.Weibull and B.Gompertz-W.Makeham) [9] preserved non-coordination of the internal and external parameters of survival, peculiar to former models and was based on the assumption that the causes of the children's and senile mortalities are interdependent (the first contradiction of the model): the formula of the model is derived on the basis of an ordinary multiplication of the survival functions of Weibull and Gompertz-Makeham) and on this particular basis it turned out with a calculated analysis of the formula that the model age of death – the internal (biological) characteristic of the population, does not depend on the environmental conditions under which it exists (the second contradiction of the model). The following contradiction of the formula of the model was the fact that the function of survival in the null age does not equal the unit $(l(0) \neq 1)$, as if it precludes a possibility of the survival of all newborns. Finally, the fourth contradiction of the model lies in the fact that its formula does not permit to approach a zero (0) at the end of survival curve, i.e. the model is bereft of a demographic axiom that all the born persons must die. On this basis the model rules out a possibility to measure the limiting age and that, in its turn, excludes also a possibility of approaching calculations of the duration of separate stages of life of a generation and, in the long run, does not permit to calculate the real parameters of survival and collective health.

- P.M.Ogibalov's model ([10]) is applicable only for an analysis of large populations, it is capable of describing (in letters) only U – shaped curves of mortality (in other words, the index of congenital vital capacity of a generation of newborns in it is, the index always less than one). Moreover, this particular model is not able to describe correctly (for the same reason) mortality at the age over 70 years. Finally, a calculation of the limiting age of life based on the model formula is not feasible.

Other models of survival exist, as a rule, derivatives from the above-mentioned. The principal shortcomings of all the indicated models are:

- mortality in all the models is presented and determined as a contingency;
- none of the models permits to determine (and measure) separate stages of the life cycle of generations;
- a possibility of calculations in all the models of integral population indices of health is absent;
- their application is not supposed in the practice of public health care from an evaluation of the dynamics of the population health and the efficacy of programs (functioning) of the system of health care.

Taking this into account, we have elaborated a completely different, new model of the law of survival [40] in which all the drawbacks intrinsic to the former models have been eliminated, for the first time direct integral indices of the health of the population have been discovered, the semantics of their values has been specified and a possibility as well as conditions of integrating the elaborated model into the system of administering public health have been created.

The formula of the law of survival of populations is the following+):

$$l(x) = \exp\left\{ - \frac{(x/x_0)^{\alpha}}{\gamma[1-(x/x_0)]} \right\}, \qquad (1.1)$$

where $l(x)$ is the function of survival for a generation of a certain age x or a relative share of persons who have been living from birth to the present age (x),whereas in a systemic analysis it is an integral functional characteristics of the dynamics of changes of the condition of health and the quality of the quality of life of the population in a specific environment and, simultaneously, the index of the preservation (loss) of the resource of the population health;

+) Here and below mathematical developments were carried out together with P.V.Gorsky, Senior Research Associate of the Center of the System Research of Public Health, Doctor of Physical and Mathematical Sciences

x_0-the maximum span of the population health, the maximum and, at the same time, the specific (biological) resource of health and life;

α - the internal, inborn vital capacity (a biological aspect) or the internal life endurance (a social aspect) of a generation, a congenital ability for preservation (to preserve health, not to die, to survive) primarily in childhood and puberty age;

- congenital health resource;

- the index of the ability to adapt to the habitation environment throughout the entire life cycle of an individual and the population or the quality of the gene pool of the population;

γ - external life durability of the population;

- the degree of its generations towards the preservation of the specific, natural parameters of survival to arbitrary age x under the conditions of a changing environment;

- the index (speed) of losses of the specific (biological) resource of health and life;

- the index of a possibility of the population to adapt the environment of habitation to internal requirements (as the intensity of interaction);

- the index of "benevolence" (quality) of the environment from the point of view of preserving health and life (of unborn resource) in mature age – middle and older age groups.

(–) - the "minus" sign signifies that the function survival (the preservation of the resource of health and life) is always less than one (1.0) and its values diminish in the course of time – with an increase of age, the years of life.

The socio-medical content of the law is the following:

the dynamics of the quality (the resource value) of health and life of population throughout the duration of the entire life cycle of an arbitrary and real generation (x_0–in accordance with the duration of the age limit),integrally expressed in the parameters of survival (l) of all ages (x) groups –$l(x)$, directly dependent on irreversible $(\exp)$*losses*$(-)$*at all the stages of existence*(x/x_0)*, the* *congenital resource of health* (α) *due to an interaction with the environment*(γ)*, which together (in accordance with a chosen mode of life) determine the rate of losses of this resource towards adjusting to a specific surroundings and a compensation of the impact of acting negative factors in it throughout the lifetime –* $\gamma(1 - x/x_0)$.

Thus, the law of survival of a population in its essence:

- demonstrates consistent patterns (ability) of generations to be preserved (and preserve their health) for a period of the specific cycle of life and changing environmental conditions;
- is a general law of preserving the “resource of health and life”, a mathematical expression of the stability of a connection of the basic factors, determining the preservation of health and life of any generations of the population (populations);
- is law of an association of survival *l(x)* with the leading factors of health – α, γ, x_0, by drawing them together in time and space where time is the age of separate groups of people (at a concrete moment), and space is the life cycle;
- is a law of conformity (link) of the “biological” and the “social” on the life cycle of the existence of populations;
- is a law of a change of values (magnitudes) of survival - *l(x)*, or, in other words, a law of a transition of survival values *l(x)* from one level to another on a complete life cycle.

Stage III. A check of the model on real statistical data (with a changing structure). Exactly at this stage the characteristics of the law bulged out: *unique* for districts, *standard* for regions, provinces and *natural* for any territories.

It has been established that the discovered model represents a stable link of singled out factors (parameters) of health and this connection is almost functional. This conclusion was obtained, when testing the model for sensitivity of the association <<age - survival>> with due regard for an interrelation of the principal parameters of the law (α, γ, x_0), the result which turned out to be a constant, as well as, while checking postulates (hypotheses) used, when constructing a model: all of them were corroborated.

The interpretation of the said postulates is the following:

1. Every generation is allotted by some resource of life endurance stipulated by the evolutional – historical development of the ancestors' health that is used evenly in the process of the vital activity (based on the linear law of W.A.Weibull [89]. All born people must die upon the expiry (exhaustion) of their biological specific resource (a demographic reality).

2. The number of persons, living up to the age of x, takes into account the dependence of an interaction of a population and the environment of its habitation, as well as the presence of the function of life endurance to the disintegrating effect of the environmental conditions (and is described by the fundamental law of distribution of Maxwell-Boltzmann's distribution law (according to [1]).

3. The function of an interaction of a population with the environment increases (and is exhausted) with age according to the degree law.

The data of the mortality tables processed (with due regard for these postulates enabled to approach, first, an evaluation of consistent patterns in the dynamics of health and survival, constructing an appropriate model and after checking it on real statistical data (with a variable structure) – a law.

It has been determined that the model expresses a stable link of singled out factors and this link bears a functional character (upon testing for sensitivity of the ratio "age – survival").

A correlation of the parameters of the internal and external life endurance was also checked with a relationship "the age of life – the limiting age of life; the result of the interrelation turned out to be a constant (invariable)".

Afterwards we checked the above – mentioned postulates on which a model was constructed and so was the role of the parameters of internal and external life endurance, as well as the age limit i.e. their significance in the processes of the survival (and health preservation) of the population.

Stage IV. The determination of the connection of the parameters of the law formula with these or other events.

The graphic model of the survival of populations was superimposed by events in consequence of which a topology of their connection with survivability was obtained (according to critical points of a transition from one state to another). There were confirmed geographical, landscape-geochemical, social, territorial specific characteristics of the curves (a connection of the latter with the Chernobyl events, a resource support of the public health etc. [36]. On this basis internal co-ordination of all qualitative parameters of the population health is determined (morphological – structures according to the gender and age with functional – mortality and morbidity due to the causes, and genetic – living till a concrete age), as well as their "external" conformity – with the factors of the environment of habitation, in particular, with the availability of the services of the system of public health.

Stage V. The connection of the medico-demographic characteristics (the birth rate, death rate, the structures based on the gender and age) used in the model was determined with the medical characteristics (morbidity rate, mortality rate, recovery rate), the depth of this connection. As a result, the following findings were obtained:

- the demographic indices – the only accurate and most fully taken into consideration in domestic and world statistics, in other words, the material used in the model *can be relied upon with certainty*;
- the demographic indices are the principal (denominators) in calculations of all the medical indices associated with health. That is, their characteristics (the internal structure) determine the quantities of the values of these indices and *this association is reliable*;
- the demographic determinants are the only population characteristics, contributing to a coordinated approach towards any other health indices and they coordinate in themselves the temporal and spatial characteristics, of phenomena, at that, that is, the use of them is *correct* from the scientific positions;

- the demographic determinants are the only population characteristics in which a complete conformity of the “biological” and the “social” in the existence (life) of a human, the population is observed. On this basis the discovered parameters of the model of the law - α, γ, x_0 enable to *correctly coordinate the biomedical and socio-ecological characteristics of health and vital activity of people*.

The characteristics of the law model submitted appeared to be the basis of its use in medicine and public health.

It should be underlined that the demographic parameter – “survivability” in the law of survival reflects and manifests a link of the biological and social in a human and the population, where “health” is to be found inside, between them, that is, inside this connection.

The density of the population distribution according to ages stipulated by survivability (mortality), in its essence, represents a connection of the parameters of the distribution of the population according to age with health (as the resource of existence) where the density of the people (according to age groups) expresses *“health potential”* of a generation (population, deme, population) in a demographic aspect in a definite territorial zone (district, region, area, country) during the time under study.

The following phenomena are observed in the curve of survival during the life cycle (Fig. 1.6):

- an even distribution: here we come across the so-called a habitual (natural) course of events in the prism of the territorial traditions of the population's existence (A);
- nonlinear dependences: those or other rhythmic fluctuations of health manifestations (the rhythmic of processes) on the cycle of the population existence (groups of people) – (B);
- regimens with “exacerbations” (when information shrinks to a dot) – they reflect “splashes” - malfunctions in the population health, its existence and its relationships with the environment (surroundings) – social, ecologic, technogenic,

a real physical environment (its elements – floods, earthquakes, tornadoes and others) or an environment changed by man (anthropogenic) – (C) [36].

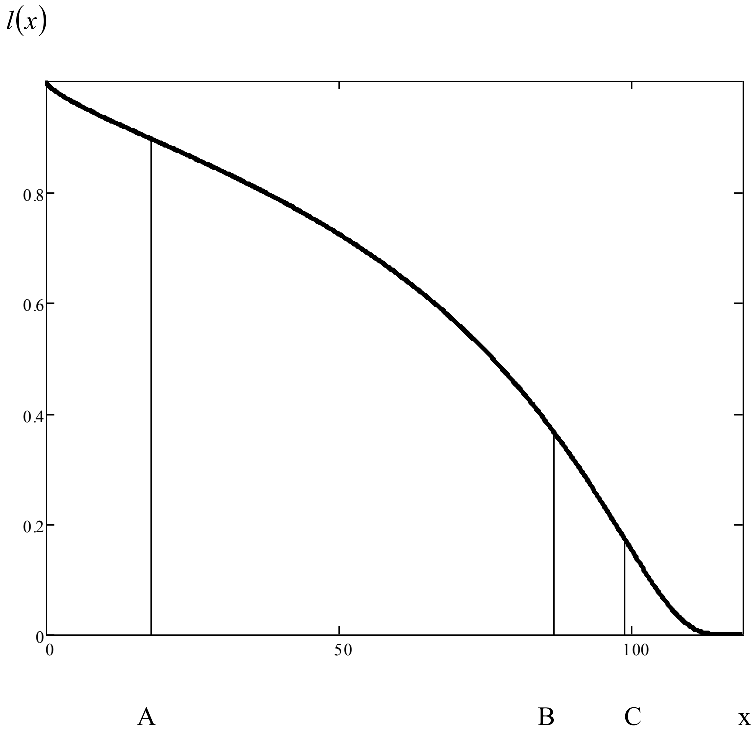

Fig. 1.6 A typical curve of population survival

These characteristics of the distribution of the population density (based on ages and gender) on the territories of its habitation integrally represent the “degree of health” as the “quality resource” of health survival, existence.

Therefore, we can single out an integral, ecologic, economic, medical-social and other connections in the “resource of health”, determine their place, significance and the role in the processes of the organization, development and the loss of health.

The reasons set forth evidence: the parameters of the law are basic in the calculations of viability and life endurance of the population (a population, nations), when evaluating risks to the existence of the latter (their conditions), while determining directions and ways of their elimination, a calculation of the volume of the necessary funds for these ends in view and, finally, the basis for determining prognoses of population health and the content of administrative decisions in order to achieve their desired parameters.

Thus, for the first time, a **systemic association of the survival** of groups of people till age x with the following **three direct** (from the positions of biological statistics) **health indicators** (x_0, α and γ) is **singled out**;

where:

x_0 – **"power"** – "the power of health" – a specific resource of health and life – the age limit as a stable geno-geographical invariant of people's maximum life endurance which developed historically under concrete territorial – geographical conditions of their habitation with certain national – cultural, regional – ecological, economical and other characteristics of their way of life and activity.

α – **"energy"** - the "resource of health" - internal, congenital life endurance (viability) as a congenital ability to preserve health, to survive, not to die;

- the index of the ability of adapting to the environment at arbitrary age x;
- relative frequency (index) of survival till age x;

γ – **"time"** - the "speed" (time) of using, ruining the resource of health, life;

- external life endurance or the degree of endurance to the preservation of the specific (biological) the parameters of survival (till any age x) under the conditions of a changing environment;

- the index (the speed) of expending the life resource, depending on the quality of the environment;

- the index of the ability to adapt the environment for the preservation of health (as the intensity of an inter action of the environment and the population);

- the index of deflections in the environmental condition for the sake of ensuring natural (normal, specific) characteristics of survival;

-the index of adaptability, benevolence (qualities) of the environment to preserve health, primarily in mature and older age.

Health, as a profoundly internal index, exists without us. Its components and manifestations (one of them - the population health) and their interaction exist in nature. The population (a human) itself (himself) makes its choice according to its own selected model of the mode of life in the environment of those or other (in accordance with qualitative parameters) its elements and interacts with them. The result of its interaction is the preservation or a loss of the resource of health (the years of life).

The law registered by us as the "law of survival of populations" [40], represent consistent *patterns* (conditions and abilities) of *generations to be preserved* (to preserve their own health) *throughout the specific cycle of life* (in all the age – gender groups) and *changing conditions of the outdoor environment – the environment of existence*.

In terms of physics the constructed model of the law of survival of a population may be called *bio-thermodynamically-reliable*.

The following serves as a reason for giving such a characteristic:

1. The function of survival is based on the assumption that there exists an evolutionally formed resource of health (viability) – this provision underlies the theory of aging by B.Strehler - S.Mildvan and agrees with the principal provisions of thermodynamics;

2. The function of the distribution of this resource is described by the law of Maxwell-Boltzman from thermodynamics;

3. Finally, the function of survival coincides with the law of W.Weibull derived from the theory of the fatigue of metals and alloys and, in the main, reflects the demographic situation observed.

The model of the law of the survival of populations in its expounded form does not contain shortcomings (contradictions) of the previous models of the law and was used by us for the first time as a theoretical and methodical basis to solve medico-social tasks-problems of the population health and the system of public health.

The basic properties of the law of survival

of populations are the following:

1. The function of survival satisfies such a differential equation which does not contain environmental parameter (γ)

$$\frac{dl}{dx} = \left(\frac{\alpha}{x} + \frac{1}{x_0 - x} \right) l \ln l . \ (1.2)$$

The latter (γ) must be, from the mathematical point of view, a "constant of integrating", that is, it must be determined by the characteristics of the habitation environment and population life endurance, where γ characterizes the environment itself and those changes which are introduced into it by the activity of the population.

On the other hand, value $|l \ln l|$ may be interpreted as a measure of information which is obtained by a population from the environment and, at the same time as a measure of a disintegrating effect on a population on the part of the environment. Thus, the speed of extinction is proportional to this measure of information.

2. The law must contain the parameter of a restriction of the maximum life span of the generation, i.e. fulfill condition $l\ (x_0) = 0$

Then the function of the force of mortality possesses the following properties:

- with any value of life endurance (α) of the function of the force of mortality μ (x) must tend to infinity at the age limit (x_0);
- with the parameter of life endurance less than 1 ($\alpha < 1$) the function of the force of mortality μ (x) tends to infinity in null age (x=0), i.e. the index of viability (α) must be sensitive to the levels of the infant mortality.
- with the parameter of life endurance equaling 1 (α = 1) the function of the mortality force μ (x) in null age has a finite value different from zero (equaling $1/xx_0$) and increases monotonously from this value to infinity within the interval from birth till death [$0, x_0$];

- with life endurance more than 1(α> 1) the function of the mortality force μ (x) within the interval [$0, x_0$] monotonously increases from 0 to infinity (∞);
- in case of α< 1 the function of the force of mortality μ (x) has the minimum at the point:

$$x_{\min} = x_0 \frac{\alpha^2 - 2\alpha + \sqrt{2\alpha - \alpha^2}}{\alpha^2 - 3\alpha + 2},$$

from which it follows, according to the obtained results [53] that value $x_{\min}$ with

x_0 = 119 years, cannot exceed 20.47years and this value $x_{\min}$ is attained with a=0.293.

Hereat, the period from birth to $x_{\min}$ should be considered a period of an adaptation of a population during this period, as a matter of fact, not only biologically, but a socially determined value, as well as Probably, in particular, this circumstance can explain the fact that the age of majority is considered to equal 21 years in the developed countries.

3. With a, tending to infinity (with a restricted value of γ), as well as with γ tending to infinity (with a restricted value of a), the function of survival l (x) always equals 1, with the exception of point x=x_0, that is in any case the maximum average life span cannot exceed the value of age limit x_0. Hence, if x_0 is the age limit, then the following inequality is always performed = $l_0^{(0)}$<x_0.

Case a = ∞ corresponds to an ideally stable population, whereas case γ = ∞ - to an ideally favorable environment for health and survival. In both these cases a population and all its generations can use their resource of life endurance and health to the full and transform it into a life resource.

In case $x_0 \rightarrow \infty$ and finite α and γ, $l\ (x)$ = 1 with any finite x, that is, the age limit does not really exist and the life of a generation is eternal. This circumstance radically distinguishes this particular law from all others which, as V.P.Voitenko put it [9], “are open to the right, because the humanity hopes for eternal life”.

Proceeding from the above – mentioned properties the following fundamental theorems of the theory of survival coordinated with the fundamental elements of thermodynamics follow:

Table 1.6

Comparative analysis of theorems of the theory of survival coordinated with the fundamental elements of thermodynamics

Elements of thermodynamics	Theorems of the theory of survival
It is impossible to create a machine which would perform useful work without heat (energy) consumption in a closed cycle.	There are no populations which would function in the environment of existence without the expenditure of the resource of life endurance health)
It is impossible to transform consumed heat (energy) into mechanical work completely.	It is impossible to transform (realize) the resource of life endurance (health) into the life resource.
It is impossible to achieve an absolute zero of temperature	No function of an interaction exists for the population with the environment of habitation, identically equal to zero.

Theorem 3 establishes the fact that a population always interacts with the environment, expending the resource of life endurance (health).

The age limit is a time equivalent of the resource of life endurance and is determined (according to V.P.Voitenko and L.P.Poliukhov [10]) mainly by intracellular processes.

The law of survival makes it possible to introduce the following function:

$$F(\alpha,\gamma)=\int_0^1 \exp\left[-\frac{y^{\alpha}}{\gamma(1-y)}\right]dy, \qquad (1.3)$$

which, being multiplied by age limit x_0, *determines the average-expectancy life at birth*.

The function from α and γ – F (α,γ), that is, a realization of an interaction of internal and external life endurance characterizes the degree of a conversion (realization) of the resource of life endurance health) of an arbitrary generation into its life resource. It is not complicated to understand inequality F $(\alpha, \gamma) < 1$ from the aforesaid. In addition, it meets reality, since after the death of an organism as an entity its separate tissues and organs remain viable during a certain space of time; the latter phenomenon is used and makes a transplantation of organs feasible.

The degree of converting the resource of life endurance into the life resource is the larger the higher the values of parameters α and γ. Hence, they may be considered the basic parameters of the process of survival.

Hereat, α is the "internal" (to be more exact, internal-external) parameter, while γ – the "external" (to be more exact external-internal) parameter.

For human populations it denotes the following:

α–characterizes the gene pool of the population and its ability to adapt to the environment, whereas

γ – characterizes, on the one hand, the "benevolence" of the environment to survival in it, on the other hand, the ability of a population to adapt the environment to the requirements of its own existence and survival.

§ 1.6 Ranking data for calculation of the integral indicators of population health

Arranging data for a subsequent evaluation of the integral indices of population health in our studies is connected with the specific characteristics of compiling tables and determining infant mortality in conformity with the law of survival of populations.

Thus, the analysis of the traditional methods of compiling mortality tables has shown [30] that the empirical coefficients enabling to make simplified calculations of the probability of death, the number of those surviving to every age and the number of those living in every age group are currently used in their calculations. The reason for such coefficients using in simplified calculations is the presence of only the year of birth and death of deceased persons in the used initial database. There are no data about the day and month of the birth in them.

A check of such tables has shown that the use of artificial coefficients in them gives distorted indices of the likelihood of death and a number of living persons in the age groups up to 5 and after 70 years old and, consequently, distorted indices of the number of man-years lived by every age group. In conformity with this the age-related indices of the average - expectancy life are not exact.

In order to eliminate the said errors we used **full dates** (year, month, date) of the birth and death of deceased persons in our calculations. Owing to this approach a strictly mathematical agreement of the probability of death and the number of living people is obtained by means of the average life span of deceased individuals in every age group inside the tables.

However, as we have expected, differences in the finite values of the indices of the average life span turned out to be slight. The reason is revealed in the fact that in reality a number of age-related intervals in which the traditionally used empirical values of the average life span of the deceased are close to real ones, is considerably larger than intervals in which essential deviations from them are observed.

But, the main thing is that the indices obtained by means of an improved procedure are more exact and the statistics of the process of mortality do not need the empirical indices now. This became the first specific characteristic in the calculations of the tables of mortality (MT “TAGOR”)[+)], the first (initial) stage in obtaining accurate knowledge of the dynamics of mortality.

The second stage was a conversion of the data of these tables into **trend** ones (smoothed over) by constructing the corresponding tables of mortality (MT_t “TAGOR”) [48]. The goal is eliminating random fluctuations connected with a complete absence of mortality in isolated age groups on isolated territories (with a small number of the population), yielding deviations in a calculation of the finite values of the tables.

The trend tables were compiled with the use of the parameters of the law of the survival of a population determined by means of data processing from the obtained tables of mortality, using the method of the least squares (MLS) [1][++)].

This particular approach ruled out sharp random fluctuations of mortality or (in isolated age groups) its complete absence, peculiar to the tables of mortality obtained on minor samplings, resulting in a presentation (and singling out) in the trend tables an exclusively natural process of extinction from the general process of extinction of an arbitrary (and equally real) generations.

As it is generally known, there is the absence of mortality in separate age groups in populations of small territories (demes). While using the traditional methods of compiling tables of mortality in similar cases (with a minor sample) we observed essential deviations of “sample” average data from the “generalized”

+) Here and afterwards the copyright is used in the name of original elaborations (based on abbreviated surnames) MT “TAGOR” or M_tT “TAGOR” - tables of mortality and trend tables of mortality of Tarallo-Gorsky.

++) The essence of the MLS – the method of the least squares, in selecting parameters of the theoretical curve of survival (mortality) $l(x)$ in such a way, so that the sum of the squares of deviations of its point from the corresponding points of a real curve (based on the numbers, surviving to age x in the tables of mortality) might be the least, the number of all the newborns is assumed to be 1, thus $l(0) = 1$.

ones (up to 25 %) for example, when switching over from the regional sample to the district ones or from the general indices to the group ones (based on the gender and other strata).

It is well-known that if sampling (when compiling tables) is diminished the registration of a real average life span in the middle of every age interval is necessary. It turned out that this could be achieved exclusively, while using full dates of birth of the deceased, when constructing the tables of mortality, in other words, now a division of a region into smaller "clusters" (several villages, municipal, rural health care areas etc.) is methodologically and methodically justified and feasible.

Furthermore, it turned out that the approach in question enables to obtain accurate **tables of mortality for small territories** (MT_s"TAGOR") – with the number of the population up to 1500-2000 persons (15-20 persons in separate age groups) [36], in particular, in some health care areas. (It was formally regarded that the tables of mortality are adequate for presenting mortality only for the territories with a population of over one million people).

As a result of the presented approach, the trend life span is calculated – the index, being determined by calculating the square area under the curve of survival constructed on the basis of the trend tables whose parameters for each territory (population samples) are obtained, as it was noted above by means of processing real tables of mortality with the help of an elaborated modification of the method of the least squares.

Since the presence of age intervals in which nobody dies in the tables of mortality, constructed on small samplings, is a fortuity and the probability of death different from zero in any age interval is a consistent pattern, then the law of survival of populations, modeling monotonously a diminishing function, gives more accurate values and, correspondingly, enables to obtain a more correct evaluation of the average life span of people.

Moreover, it should be noted, that the "trend" span of life appears to be, as a rule, shorter than the traditional tabular one, although, in a number of cases, there may occur a reverse situation owing to the manifestation of the “paradox of the curvature” of the line of survival.

So, for example, the “trend span of life may be both longer and shorter than the corresponding tabular value in individual districts of any region” [36]. It is stipulated by the fact that the mentioned “paradox of curvature” of the line of survival leads to a situation when the “regional” index of the average life span is not average at all in relation to the “district” indices in the usual sense of the term “average”. The same may be noted in case of calculations of the index of the trend life span for individual groups based on the gender – for men and women.

It is paradoxical at first sight that correlations between the parameters of the law of survival (α and γ) are stipulated by the fact that they, including the average life span ($l_0^{(0)}$), are the consequence of their **non-additivity**, namely, – a manifestation of their intensive character. The more so it concerns the temporal parameters of the survival curve.

The findings of a comparative analysis of the trend and real life span fixed the following fact:

- an excess of the *trend* index over the tabular one fixes significant infant mortality on the territory under study;
- an excess of the *tabular* index over the trend one is indicative of high mortality in older age groups (more than 7 years).

All the indicated features of the used methodological approach were called forth by a necessity of obtaining more accurate characteristics, when evaluating the processes of the mortality and survival of the population and, in the long run – while evaluating the use of its resource of health and life during the life cycle of the population in order to take adequate decisions in the regions as to its preservation and creating a safety system for it.

One should also note the peculiar features of calculating infant mortality, when compiling the tables of mortality described for a subsequent determination of the parameters of the dynamics of health and population survival.

The infant age of a person's life differs by many peculiar features. The transition from the intrauterine to the extrauterine life, adapting to it, the peculiarities of feeding, complete helplessness of an infant and the dependence of its life upon the organization of supervision over it – this is, but a short list of the distinctive features of the life of a tiny human creature. An essential peculiar feature is enhanced vulnerability of infants which is expressed in a relatively high level of their mortality.

The preservation of newborns' life is an important humanitarian task of the human society. And on condition of a low birth rate it becomes important from the practical point of view as well.

The statistical indicators, in which the level of the infant mortality is measured, have been used for a long time for an evaluation of the social welfare of the society (a comprehensive study of infant mortality began in the XXth century). It is known, that calculations of the intensity if infant mortality have certain specific characteristics associated with a calculation of a denominator, since part of infants deceased under one year in the calendar year of supervision were born in the previous year. In order to reflect this in the calculation of the coefficients of intensity the method of V.Buniakovsky (1880) or K.Rats is used. The latter is more precise, but even it, as well as a still more perfect method used at the level of the WHO [79] do not enable to obtain true results.

Let us dwell on the analysis of the existing approaches for a search of a more accurate procedure of calculating infant mortality.

Nowadays, the probability of death within the age interval [0-1], as a rule, is calculated in accordance with the WHO recommendations with due regard for the true average life span of the deceased in the year of death, by the formula:

$$q_0 = \frac{m_0}{1 + m_0 \left(1 - k_0\right)} \ , \qquad (1.4)$$

where q_0 - target likelihood of death during the first year of life, m_0 – the corresponding age coefficient of mortality, k_0 – the average life span of the deceased in the year of death. The coefficient of mortality, hereat, is simplest to calculate by formula:

$$m_0 = \frac{D_0}{B_0}, \tag{1.5}$$

where m_0 – target coefficient of mortality, B_0 – the number of infants in the year under study, D_0 - the number of those of them who died in the first year of life. But yet A.M.Merkov, I.S.Sluchanko (1959) and K.Beck (1963) (according to [8]) noted that formula (1.5) is not sufficiently enough precise, for the age – related coefficient of mortality, since not only those born in a concrete year do their bit in the forming of infant mortality, but also those who were born last year.

In his time K.Rats suggested calculating q_0 by the formula:

$$q_0 = \frac{D_0}{0.33B_{-1} + 0.67B_0}, \tag{1.6}$$

although in later sources, in particular, in the paper by M.H.Vakhitov and V.Ya.Albitsky (1971) (in accordance with [10]) it was proposed to use, a somewhat different variant of this formula according to the structure:

$$q_0 = \frac{D_0}{0.20B_{-1} + 0.80B_0}, \tag{1.7}$$

where B_{-1}, D_0, B_0 in formulae (1.6) and (1.7) signify respectively, the number of newborns last year, the total number of the deceased in the year under study and the number of newborns in the year under study. But it follows from the meaning of formula (1.4) that coefficient of mortality m_0 is determined and not the probability of death - q_0.

Then, in a general case, the coefficient of mortality m_0, being part of formula (1.4), must be calculated in the following way:

$$m_0 = \frac{D_0}{\alpha B_{-1} + \beta B_0}, \tag{1.8}$$

where “weight coefficients” α and β must satisfy the relationship:

$$\alpha + \beta = 1 \tag{1.9}$$

But this relationship does not yet determine α and β uniquely. In order to determine them uniquely, it should be taken into account that the coefficients α and β are proportional to spaces of time during which newborns of the corresponding groups live on the average in the current year. If the average time for those born last year from January 1 till the date of birth equals T_0, then this year they will live on the average 1-T_0 years. If for those who were born in the current year the average time from the 1st of January till the date of birth equals T_0 then in the year under study they will live on the average 1-T_0 years. Thus:

$$\frac{\alpha}{\beta} = \frac{T_{-1}}{1 - T_0}, \tag{1.10}$$

from which it follows:

$$\alpha = \frac{T_{-1}}{1 - T_0 + T_{-1}}, \tag{1.11}$$

$$\beta = \frac{1 - T_0}{1 - T_0 + T_{-1}}. \tag{1.12}$$

Then:

$$m_0 = \frac{D_0 \left(1 - T_0 + T_{-1}\right)}{T_{-1} B_{-1} + \left(1 - T_0\right) B_0}. \tag{1.13}$$

K.Rats' formula follows from (1.13) with $T_0 = T_{-1} = 0.33$, and the formula of M.H.Vakhitov and V.Yu.Albitsky (1.7) – with $T_0 = T_{-1} = 0.20$. On the other hand, if the growth of the number of newborns in the course of time would be ideally even, then one would regard $T_0 = T_{-1} = 0.5$ and the following relation would take place:

$$m_0 = \frac{D_0}{0.5\left(B_{-1} + B_0\right)}. \tag{1.14}$$

But (1.14) is the formula of K.Rats for intervals [1, 2 years], [2-3 years], [3-4 years] and [4-5 years].

Hence, we come to a conclusion that formulae (1.6), (1.7) and (1.14) are fit for calculations of infant mortality only on large territories with a population over 1 mln. people. The general formula (1.13) takes into account the specific territorial features (in the dynamics as well), because in a general case not only, $B_0 \neq B_{-1}$, but also $T_0 \neq T_{-1}$.

However, even formula (1.14), allowing for (1.13), is not precise [40], from the point of view of the law of survival of populations, as two generations of newborns take part in the forming of q_0: the newborns of this and last years. But from the point view of the contents of the law of survival only one generation of newborns should be considered while calculating q_0. Thus, if we assume that B_0 children were born in the current year and, hereat, from the 1st of January (the year of birth) till the date of birth the average time T_0 passed, then in the given year these children have lived average time $1-T_0$ and the corresponding coefficient of mortality will equal:

$$m_{01} = \frac{D_{01}}{B_0(1-T_0)}. \tag{1.15}$$

Then in conformity with formula (1.4) the probability of death in the first year of life in the year of birth will be equal to:

$$q_{01} = \frac{m_{01}(1-T_0)}{1+m_{01}(1-T_0-k_{01})}, \tag{1.16}$$

where in formulae (1.15) and (1.16) D_{01} - is the number of infants deceased in the first year of life, whereas k_{01} - is the average life span of their life in the year of death.

Similarly, one can determine the coefficient of mortality for those who died under 1 year in the year followed after the date of birth.

$$m_{02} = \frac{D_{02}}{(B_0 - D_{01})T_0}, \tag{1.17}$$

where D_{02} is the number of deceased infants, being under 1 year in the year followed after the date of birth (from the number of B_0). Then the corresponding probability of death will be equal to:

$$q_{02} = \frac{m_{02}T_0}{1 + m_{02}(T_0 - k_{02})}, \tag{1.18}$$

where k_{02} – as earlier, the average life span of the deceased under 1 year during the year of their death, in other words, counting off from the 1st of January of the year following the year of birth till the date of birth. Then a complete probability of death in the first year of life for this particular generation of newborns will be calculated by the formula:

$$q_0 = q_{01} + q_{02} - q_{01}q_{02} \tag{1.19}$$

The last term in this formula is stipulated by the fact that the events characterized by probabilities q_{01} and q_{02} are incompatible.

The suggested procedure (**IM "TAGOR"**) +) reduces the volume of materials for the first time which are necessary for determining infant mortality, including for each year, so long as the data about those born only during one year are made use of. At the same time, it yields the most accurate calculated results. Finally, the design procedure of infant mortality submitted by us is important from the point of view of the law of the survival of populations, because the leading integral indices are determined by the level of this mortality – the critical index of mortality in infancy or, otherwise (in a systemic analysis), the internal, congenital index of viability and life endurance of the population $-\alpha$, as well as the prognostic index of the average life span $-e_0^{(0)}$ [36].

+) A technique of Tarallo – Gorsky to determine infant mortality (IM "TAGOR")

A brief comparative analysis of listed new methodological instructions in this paragraph is adduced below.

§ 1.7 The direct systemic indicators of population health

Any integral index represents the quality of an interaction of systemically interrelated elements of some phenomenon, process. Such a leading phenomenon and process in medicine is the health of the population. Its principal components, mutually coordinated at the stages of the forming, development and loss of health, i.e. at all the stages of life, are:

- the specific (biological) resource of health and life;
- the congenital (biosocial) resource of health and life acquired from the parents;
- the acquired (socio-ecologic) resource of the preservation and support of the health obtained (from the first two sources) throughout the duration of life in the environment of existence; it is formed by the actions of the population itself (as a reflection of all the aspects of its lifestyle).

These three components have the following synonyms (aspects of their interpreting) in this work, respectively:

1. The age limit of life;
2. Internal (congenital) life endurance as the ability to adapt to the living environment;
3. External (acquired) life endurance as the ability to adapt the environment to one's own needs of existence, the preservation of health and life.

A graphic representation of a correlation of these three components in the dynamics *is a curve (a scale) of survival,* every point of which corresponds to certain age and reflects a qualitative characteristic of their interaction at all the age-related stages of life. It is exactly the characteristics of this curve (its dips, ascensions, the duration of separate intervals during a complete time cycle of life) that enable us to observe changes in an integral form in the dynamics of population processes of health and life. Let us note that the characteristics of the curvature of each curve of survival (the scale of survival) are unique for different groups, of different years and territories. The scale of survival represents a spatial-temporal characteristic of health, providing a scale-topological approach to the physical time (natural and social phenomena) and the biological time of small populations, the entire population - it takes into account EVERYTHING in a composite unity.

The law of the survival of populations, reflected in the parameters of the survival curve represents regularities (conditions and ability) of generations to be preserved (to preserve their own health, its resource) during a complete specific cycle of life (i.e. in all the age-sexual groups under changing conditions of the outdoor (socio-ecologic, surrounding a human) environment.

It turned out, incidentally, that primary (initial) life endurance or "internal" endurance to extinction (the preservation of health) is laid according to B.Strehler-S.Mildvan [88], in the aggregate of newborns in case of their conception and the period of the intrauterine development right up to birth.

It has been found out [46] that this characteristic is most fully reflected in parameter – of the law of survival. It has turned out that the degree index itself of the law – , in the main (or primarily) reflects dependences of the realization of the programs of the existence for the members of a generation in the first year of their life in a certain environment, it exerts the strongest influence on the level and character of changes of the infant mortality and the mortality of children, adolescents and youth people up to 20.47 years at the most.

It depends, as it has been ascertained experimentally:

- on congenital (internal or genetic) life endurance;
- on the conditions of existence in the first years of life (or external life endurance) stipulated by the territorial characteristics (geo-natural and social, including medico-organizational) of the place of existence (habitation) of a generation.

On this basis this index was referred by us to the basic (inherent and direct) "genetic and geographical" characteristics of the generation of newborns.

This index ( ) is formed historically and is an integral imprint of both biology of the formed population on the given territory and the traditions of the mode of life established in it historically (in other words in the past, but operating now).

In contrast to the age limit this parameter may fluctuate essentially even within the limits of one territory from subpopulation to subpopulation which, properly speaking, reflects the territorial heterogeneity of aggregates of newborns, their different structure based on the characteristics of congenital life endurance (the heterogeneity of the quality of their ancestors, the environment of conception and the conditions of their intrauterine development, where the environment is mother, her conditions and the specific characteristics of life).

Another index is the index of external life endurance (γ) is a characteristic, influencing on the intensity (rate) of using (expending) the obtained resource of life endurance in a concrete environment (in the denominator of the law formula). It reflects in itself an integral numerical characteristic, representing (laid from birth) the rate of expending the life resource (the resource of health) and simultaneously, external (manifested in the environment of existence) intensity of an interaction of a population with this environment chiefly (or principally) in the middle and older ages of the life of the members of the generation.

For the first time the parameter – of external life endurance (letter designation – is given by us) was mentioned by G.Selye [72], Teiar de Chardin [73], later by B.Strehler-S.Mildvan [88] and V.P.Voitenko [9]. The value of this index demonstrates (how the index of ability will adapt to the environment) a relative rate (index) of survival till age x.

Another parameter of external life viability (γ) has not been mentioned by anybody previously, since it has not been discovered prior to our investigations. Its meaning may be characterized in different aspects in the following way:

- the degree of steadiness towards the preservation of the specific parameters of survival under changing environmental conditions;
- the index (rate) of using the life resource, depending on the quality of the environment;
- the rate of losing the congenital resource of health and life;
- a boomerang from the actions of the population itself;

- the index of the effect on the population health of the social environment and/or the external physical environment changed by the actions of the population itself (i.e. anthropogenic);
- the index of deviations in the condition of the environment to secure a realization of the specific characteristics in the dynamics of health (survival);
- the index of the ability to adapt the environment to its own requirements of existence;
- the index of the suitability (benevolence) of the environment to the conditions of existence, primarily in mature and older ages.

The limiting age of life (   ) is the third leading parameter of the formula of the law of survival of a population. The existence of the age limit in man not based on a probability, but in principle, is the central moment of our model of the law of survival. All the other known models of the law (by M.Poisson, W.Weibull, B.Gompertz-W.M.Makeham and others) based themselves on the assumption that there doesn't exist the age limit in principle, it exists only "in a probability". But in such case its meaning depends not on the fundamental processes which define the essence of the process of mortality and survival of people who reached a venerable age, but on the fact what "level of probability" exactly a researcher will choose.

The theory of aging by B.Strehler-S.Mildvan [88] is based on the assumption that every individual is provided by nature with a certain "adaptive reserve" which is exhausted (used) in the course of time according to the linear law. This parameter has different names: "the life resource" - according to G.Selye [72], "adaptive power" - according to V.F.Shukailo [57], a "measure of life endurance", the "amount of health" - according to V.P.Voitenko [9].

The death of an individual ensues in case of a complete use of the adaptive reserve. It follows from this that the age of death of an individual is none other than a time equivalent (index) of its adaptive reserve.

It refers exactly likewise to a total number of newborns (a generation) where the age limit of existence of its last representative (according to the date of death) is a time equivalent of the adaptive reserve of health and life of this generation.

The tables of the mortality rate are the only source of evaluating the age limit by means of the methods of the demographic statistics. Incidentally one should distinguish the boundary of the life span of individual long-living persons as a biological species from the boundary of the life span of the generation, being determined under the rigid conditions of calculations of mortality tables in a specific region.

Until recently the trouble of the statistical science was that it fixed the structure of the population in the regions with the limit value of 100 years old (the last column was – “100 years old and more”). Should the limit of the registered age be decreased, for example to 130 years old, then (in the presence of the corresponding information base) the method elaborated by us based on the registration of full dates of births and death, makes it possible to evaluate the age limit considerably more accurately. In particular, the use of the materials of the population census of Ukraine for 2001, fixing for the first time the exact age of those living more than 100 years, enabled to determine a real figure of the **age limit** of the life of Ukraine’s inhabitants – it made up 119 years old [46, 53]; this quantity in the Bible was determined as 120 years old [+)].

Thus, for the first time, while elaborating the materials of the mortality tables we managed to calculate exactly the age limit using the method of the least squares [++)]. In the discovered law of survival of populations it is based, first of all, on the fundamental theory of aging by B.Strehler-S.Mildvan and secondly, it is taken into account in principle and not based on “a probability”.

[+)]And the Lord said, My spirit shall not always strive with man, for that he also is flesh: yet his days shall be one hundred and twenty years.

[++)]The values of parameters α, γ and x_0 were determined by the method of the least squares on the basis of processing the mortality tables compiled with an interval of 1 year according to the factual data about the dates of birth and death of the deceased with due regard for long-livers older than 100 years. The value for $x_0 = 119$ was deduced on the basis that with the given value of this parameter on the theoretical curve of survival the coordinates of its points approximate in the best possible way to the coordinates of the points of the curve, being obtained directly from the indices of “the number of surviving persons – age” of the tables of mortality.

And, finally, **historically, for the first time**, the **definition of the age limit in our investigations became possible** after its first mention in the Bible.

Therefore, we called it a genetic and geographic invariant as a concrete territorial-geographical realization of the biological characteristic of the species "homo sapiens".

The boundaries of indices α and γ found by us are the following: $0.644 \leq \alpha \leq 1.765$;$1.144 \leq \gamma \leq 6.306$. In conformity with these borders the average life span of people at birth may fluctuate from 43.00 to 92.40 years. The first value corresponds to the indices of the most under-developed countries, where still lower values are encountered; the second one may be regarded as an orienting point for a remote perspective.

Summing up, let us note general characteristics of the integral indices discovered by us:

1. From the socio-medical positions – these are **direct** indices of the population health (on a specific territory and at a specific historical moment).
2. From the positions of the systemic statistics – these particular data are **integral**, representing a composite interrelationship of all global factors, influencing on the life, health and existence of the population.
3. From the positions of the departmental medical statistics – they are leading, **principal in management of population health** and its living environment.
4. From the positions of the state statistics – these are the **indices of a correlation, interaction,** mutual influence, permitting to coordinate national and departmental measures (programs) aimed at improving the health and living conditions of the population.

It should be taken into account that a "random" component is always present in parameters α and γ.

The reason is in the fact that the real curves of survival in small regions are stepwise, whereas these are uniformly changing in the dynamics in the model (trend) curves compiled by us.

However, a concrete arrangement of the intervals of stability of the real function of survival on the age-related scale (likewise their extent) is, in fact, random. One or two "yearly materials" are not enough for the sake of "filtration" of this random component. It is necessary to study a dependence of these parameters in the dynamics during many years and carry out an analysis of time series obtained, that is, what was done by us, when approaching the formula of the law (from 1976 till 2001) [36, 38, 51].

It should also be underlined that all the above – mentioned elemental indices of the formula of the law of the survival of a population (α ,γ , x_0) have a **non-additive** character [40]. What does it speak about?

About the fact that with a comparative evaluation of generalized and particular (according to structured samples) indices, obtained by using the law of the survival of populations, one should bear in mind that generalized (general) indices are not average in relation to the indices of isolated sub-samplings.

The reason lies in the fact that the parameters of the function (law) of survival - α and γ have an "intensive" and not an "additive" basis. The classical statistics do not work. "Additivity" and "average" are used there, where no interaction, interdependence are found, in other words, in the absence of the phenomenon of imprinting.

It is available in the law – all the indices are interdependent. Therefore, the traditional concept "average" is not applicable to them.

Thus, on presenting "district" indices a summary one based on them – "the regional index" (or a general gender – related index in case of its subdivision subsequently into "male" and "female") are not average in the traditional sense for a totality of districts or both sexes. Let's explain it.

First, several districts and a region as a whole (or individual men and women and both sexes together) are really different integrities with their internal individual characteristics of the structure of the population (based on the gender and age) and correspondingly, their interrelations (including mortality); mortality is only one of the outcomes of these interrelations.

In the second place, probabilities of mortality do not arise due to the influence on them of the real curvature of the line of survival – through the mean time of the life of the deceased in each age interval in general (summary) indices in contrast from the function of the force of mortality (or the coefficient of mortality), which arise additively.

Thus one can average additively only summable values quantities, i.e. independent ones.

Non-additivity of particular (based on the gender or individual territories) indices of the average life span is expressed in the fact that the average life span calculated for an individual sample (men or women or for individual territories) reflects a complex connection between the age - related coefficient of the corresponding age intervals which is not, without fail, strictly direct or strictly reverse.

Let us underline once more: the parameters of the function (the law) of survival - α and γ used by us as basic anthropological and indicative characteristics, have "intensive" and not an additive basis. An interrelation of parameters α, γ, and x_0 has been discovered by us: it is presented in the formula of the law and the concept "average" is not applicable to these parameters.

The specific features of calculations are based on the following approaches.

On the basis of the formula of the law of survival, upon tending of any, at least one of its indices to infinity, the function of survival $l(x)$ tends to one in case of all the ages less than the limit age. Hence, the rule "the more, the better" holds true for all indices of the formula: the larger α, the lower the mortality in the youngest ages, the larger γ, the lower the mortality in the middle and older ages.

What concerns the ratio between the parameters of the function (the law) of survival for the region as a whole and its several districts explanations with the use of the formulae of mathematical calculations are necessary here.

Let us assume that the "large", regional sampling with age – specific coefficients of mortality $\{m_x\}$ and average age – specific periods of the deceased $\{t_x\}$ have been divided by us into "smaller" district subsamples which are characterized by their own age – specific coefficients of mortality and average periods of the life of the deceased.

The number of elements of each of the bulk of regional and district m_x and t_x is equal to the number of the age – related intervals of the tables of mortality, i.e. in our case – 119. It follows from the properties of the average values that "regional" m_x and t_x must satisfy relations in which their age – specific average values are found between the maximal and minimal corresponding "district" values.

$$\begin{cases} t_{x\min} \le t_x \le t_{x\max} \\ m_{x\min} \le m_x \le m_{x\max} \end{cases}, \tag{1.20}$$

where $t_{x\min}, t_{x\max}, m_{x\min}, m_{x\max}$ - respectively, the maximal and minimal "district" periods of the life of the deceased and age-related coefficients of mortality in the corresponding age intervals.

In this case regional probability of death q_x must satisfy the inequality in which its value must be, positioned between the maximal and minimal corresponding district probabilities of death:

$$q_{x\min} \le q_x \le q_{x\max} \tag{1.21}$$

But it is only seeming and kind of a logical conclusion. Actually, while setting up a corresponding inequality with a substitution of elemental values for a calculation of probabilities it follows that "regional" q_x is not to be found for sure between maximal and minimal district q_x since the maximal and minimal values of m_x and t_x, are not achieved simultaneously, without fail in one and the same region, that is

$$\frac{m_{x\,\min}}{1+m_{x\,\max}\left(1-t_{x\,\min}\right)} \le q_x \le \frac{m_{x\,\max}}{1+m_{x\,\min}\left(1-t_{x\,\max}\right)}\ , \qquad (1.22)$$

where a step of the mortality tables upon writing inequality (1.22) is recognized to be equal to 1 year.

For the same reason a similar phenomenon may be observed, while subdividing the “regional” or each of the “district” subsamples into a “male” and “female” ones.

We also want to draw your attention to **sexual dimorphism** of the survival of populations fixed in the results (values) of the integral indices.

Sexual dimorphism of survival was theoretically substantiated for the first time by V.A.Geodakyan [12]. This theory was partially corroborated in practice by V.P.Voitenko [9] and its conclusive evidence was obtained in our investigations [36, 51, 53].

Basing ourselves upon them, we have corroborated that greater values of the parameter of internal vital capacity (α) is observed in men. And we are inclined toward V.P.Voitenko’s conclusion [9], that “men are carriers and transmitters of favorable genetic changes in a population; in other words, a kind of the driving force”. Hereat, lower values of external life endurance (γ) in men registered stably, are, as it were, (according to V.P.Voitenko) a “pay” for it – they are less life – resistant under changing environmental conditions.

Women, having lower values of “internal” life endurance are, evidently, “less protected” at the internal genetic level. But they adapt themselves more rapidly and better to changing environmental conditions (factors) and lead on the whole, a healthier lifestyle – it is evidenced by a prevalence of female γ over the male ones.

On this basis one can accept V.P.Voitenko’s assertion [9] to the effect that women in a population “play a preserving, stabilizing role”.

These inferences are confirmed in our studies by the values of both general [46] and particular indices [44].

§1.8 The control values of the integral indices of population health

The indices of public health of population (population health), being obtained at present, reflect the impact of the past events, including those negatively influencing health. Such restrictions demand a search of the so-called “norms” and “standards” as the values of the indices that are used for current control of observed phenomena in the state administration of the health of communities. The Policy of WHO for the European region “Health – 21” referred the indices of mortality, survival and the average expectancy life to such parameters (for newborns) [62].

The existing “norms” nowadays in the form of the average statistical indices around the country – (for the first time, such an approach was suggested by Yu.Kongeym [69]), now widespread in controlling the health of communities, are not suitable as “standards” for planned and operating medico-social programs. The reason lies in the fact that they are derivatives from really observed characteristics of health manifestations (but not direct indices of health!) and, in addition, represent their average typical variants, but by no means, its ideal desired standards.

The scientific paradigm that health is a realized possibility, but not an average statistical variant proposed by I.R.Grote in 1921, has not found a practical application so far in the field of health care system, although it was supported and argued comprehensively as far back as 1960 by R.Williams [74] who suggested to regard a norm as an “optimum of the functioning and development of an object in a concrete environment”, the outstanding physiologist I.V.Davydovsky [13] also adhered to this point of view. Moreover, WHO has defined that “health is not only the absence of diseases or physical defects, but a condition of complete physical, mental and social well-being of man”.

The approach proposed by Yu.P.Lisitsyn [21] became the basis of evaluating a norm of the indices of public health in Soviet social hygiene and, in particular, the medico-demographic parameters of the population. To his way of thinking the development of the health of the population appears in the role of a process of a coordinated link with the habitation environment and the “normal” development of the population is reflected in the processes of its survival and may be achieved only in the presence of the corresponding social conditions of life.

We should underline that the concept of a “norm” must always be coordinated substantially with the environment of the population functioning, then a “norm” becomes identical to the concept “optimum” i.e. the best characteristics of functioning of the object “population” in a certain environment.

Taking into account, that we always get an “optimum” from an integrity, the best (optimal characteristics may be both medium (standard) and individual (unique).

But a “norm” is not only an index, a standard, where a standard is a measured characteristic of a norm, a number.

The concept “rule” (which means “correct” in this case) is always traced in it, for example the norm of the traditions of existence and the rules of conduct (from “the mode of life of people”). It is exactly this reverse invisible side of life that is a form-building and genetic basis of the “norm”. From which a conclusion follows: the parameters of a “norm” (standards) in a more qualitative environment will always be higher and more qualitative.

It is this approach towards an evaluation of “norms” that is used by us, when determining a connection of the congenital state of health of newborn generations (the index of “internal” life endurance – α) with an acquired one during a lifetime in a certain environment (the index of “external” life endurance – γ). Hereat, we divided the qualitative characteristics of the environment and the congenital resource of population health (their values) in our approach into two qualitative levels: a “norm” and a “standard”.

It has been proved [39, 47] that, while determining the values of indices and , one can exactly calculate the value of the indices of the average life span (for all age groups) in any territories. The identical calculations carried out on factual data enabled us to determine validly not only real, but also planned (expected) indices of the population life span [38, 50, 51]. A conclusion obtained on the basis of processing and analyzing the materials of the population mortality served as a reason for establishing the latter: a practical realization of measures aimed at achieving infinitely large values and corresponds to an ideal case of a gradual elimination of the leading causes of death, acting at the present moment, in consequence of which the value of the index of the average life span steadfastly tends to the value of the index of the age limit of life (x_0) of homo sapiens ($e_0^0 \to x_0$). It is exactly this result that created constructive conditions for the choice of reliable guides in the activity of public health, while planning national and territorial improvement programs of population health.

An example of an established stable link of the indices of internal (α) and external (γ) life endurance, as well as the indices of infant (up to 1 year) mortality (q_0) and average life span $e_0^{(0)}$ is adduced in the Table 1.7. Hereat, the probability of death was calculated according to Beck's technique recommended by WHO.

As one can see from the data of the table, the attainment of the highest values of indices α and γ always contributes to an increase of the indices of the average life span of population in which lower age-specific population mortality is reflected (taking into account the procedure of their calculation) and, correspondingly, better conditions of preserving people's health (the activity of the system of public health) during lifetime and less serious consequences of the course of their diseases in all age groups.

Table 1.7

A connection of the basic parameters of the survival of population for the entire population of separate districts of the Chernovtsy region with its average life span (based on the census data of 1989)

District	**"Internal" life endurance** α	**"External" life endurance** γ	**Probability of death at the age of up to 1 year** q_0	**Average life span (years)** $e_0^{(0)}$
Vizhnitsa	1.030	2.696	0.0027	71.20
Gertza	0.858	3.179	0.0052	72.50
Glyboka	1.018	2.966	0.0026	73.10
Zastavna	1.008	2.656	0.0031	70.57

Continuation of the Table 1.7

Kelmentsy	0.948	3.388	0.0032	75.07
Kitsman	1.079	3.354	0.0016	77.47
Novosielitsa	0.951	3.145	0.0034	73.50
Putila	0.830	2.942	0.0064	70.35
Sokiryany	1.242	2.507	0.0011	72.32
Storozhyniets	0.976	3.284	0.0029	74.75
Khotin	1.045	2.812	0.0024	72.29
The region	1.047	2.571	0.0026	70.39

However, in practice, achieving the index of the age limit of generations (in Ukraine – 119 years old) by the indices of the average life span is impossible, since a generation expends its congenital resource of health and life, as mentioned above, for the adaptation to the conditions of the environment and a struggle with negative factors of existence and besides even so-called "natural aging" of people is stipulated by the same diseases that are registered as the causes of death.

Therefore, exclusively upper limiting values of their confidential intervals with probability $P = 0{,}999$ (according to Student) were taken as "reference" values of the indices of internal (α) and external (γ) life endurance, in other words, those values, which practically in statistics determine the functional link of the phenomena under study and their indices with the population characteristics of the quality of life and survival, as well as the living environment of population. The results of the corresponding calculations carried out by us on the materials of Ukraine's population mortality (general and based on the gender in all the regions) over a period of 33 years – from 1976 till 2009 enabled to obtain the parameters of "standard" and "reference" indices of survival in all the age-gender groups. These indices are adduced in the Table 1.8

Table 1.8

“Normative” and “reference” indices of the survival of population with $x_0 = 119$ years old

Population category	Internal endurance		External endurance		Average life span, $e_0^{(0)}$ -years	
	Normative	Reference	Normative	Reference	Normative	Reference
Both genders	1.125	1.508	3.736	4.505	80.24	85.71
Men	1.447	1.765	3.060	4.075	78.38	85.82
Women	1.242	1.575	4.720	6.306	84.50	91,42

Hereat, the upper bounds of their confidential intervals with probability P = 0.95 (according to Student) were taken as “normative” values. “Normative” values are feasibly attainable already today, when implementing purposeful programs aimed at building up the health of the population and its survivability (and).

Based on the “reference” values of and the average life span makes up 85.82 years for men, for women – 91.42 years old, for both genders (general) – 85.71 years old. These indices, as it has been noted, cannot be regarded a present-day reality, they fix a solely desired condition of health and survival of population (in an integral dimension) – as control strategic guides for the activity of the national system of regulating its health. “Normative” control parameters , and average life span $e_0^{(0)}$ appear in the role of approximate to the present-day conditions of life of the population and observed index of the public health, in a number of developed countries on condition of achieving the latter the average life span will constitute 80.24 years old, including for men – 78.38 years old, for women – 84.50. (Here it should be noted that the values of the average life span gradually approximated to these values in the USSR at the end of the 80^{s} of the XXth century), whereas the “standard” parameters discovered today correspond to the best world standards (Norway, Japan).

The findings have corroborated a constructive possibility of determining the control parameters of the population health, while using the law of the survival of the population and have demonstrated the reliability of the control (both “standard” and “reference”), general and gender-differentiated age (complete) mortality tables suggested for the practice of controlling the population health based on these parameters (Tables 1.9-1.14, Fig.1.3-1.5).

At the same time, the experience of a practical introduction of the finding into the functioning of the system of public health has shown that the data of mortality and its causes with complete data about the date of birth and death of the deceased (the date, month, year) and not only the years of their birth, when compiling the tables of mortality, are not used today. The reason is in the absence of the corresponding requirements and respectively a register of the deceased in the information system of controlling public health. Moreover, nowadays, the public health service (its informational – methodological base) doesn't make use of the method of a tabular analysis of the disease incidence and the course of diseases elaborated almost 20 years ago as well as method of a complex analysis of the sickness rate, the course of diseases and mortality [37].

Table 1.9

Normative table of mortality (both genders)

Age	The number of surviving persons	Probability of living till the next age interval	Probability of dying in the given age interval	The number of dying persons in the given age interval	The number of living persons in the given age interval	The number of man-years of life at the age older than the given one	The average life span after the given age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99930	0.00070	70	99969	8024426	80.24
1	99930	0.99903	0.00097	97	99883	7924457	79.30
2	99833	0.99887	0.00113	113	99778	7824574	78.38
3	99720	0.99877	0.00123	123	99659	7724796	77.46
4	99597	0.99865	0.00135	134	99531	7625137	76.56
5	99463	0.99857	0.00143	142	99393	7525606	75.66
6	99321	0.99848	0.00152	151	99246	7426213	74.77
7	99170	0.99841	0.00159	158	99092	7326967	73.88
8	99012	0.99832	0.00168	166	98930	7227875	73.00
9	98846	0.99825	0.00175	173	98760	7128945	72.12
10	98673	0.99819	0.00181	179	98584	7030185	71.25
11	98494	0.99810	0.00190	187	98401	6931601	70.38
12	98307	0.99804	0.00196	193	98211	6833200	69.51
13	98114	0.99796	0.00204	200	98014	6734989	68.64
14	97914	0.99789	0.00211	207	97811	6636975	67.78
15	97707	0.99782	0.00218	213	97601	6539164	66.93

Continuation of the Table 1.9

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
16	97494	0.99773	0.00227	221	97384	6441563	66.07
17	97273	0.99768	0.00232	226	97161	6344179	65.22
18	97047	0.99759	0.00241	234	96930	6247018	64.37
19	96813	0.99752	0.00248	240	96693	6150088	63.53
20	96573	0.99743	0.00257	248	96450	6053395	62.68
21	96325	0.99736	0.00264	254	96199	5956945	61.84
22	96071	0.99728	0.00272	261	95941	5860746	61.00
23	95810	0.99719	0.00281	269	95676	5764805	60.17
24	95541	0.99712	0.00288	275	95404	5669129	59.34
25	95266	0.99703	0.00297	283	95125	5573725	58.51
26	94983	0.99694	0.00306	291	94838	5478600	57.68
27	94692	0.99685	0.00315	298	94543	5383762	56.86
28	94394	0.99675	0.00325	307	94241	5289219	56.03
29	94087	0.99666	0.00334	314	93931	5194978	55.21
30	93773	0.99657	0.00342	322	93613	5101047	54.40
31	93451	0.99647	0.00353	330	93287	5007434	53.58
32	93121	0.99636	0.00364	339	92952	4914147	52.77
33	92782	0.99625	0.00375	348	92609	4821195	51.96
34	92434	0.99615	0.00385	356	92257	4728586	51.16
35	92078	0.99603	0.00397	366	91896	4636329	50.35
36	91712	0.99591	0.00409	375	91525	4544433	49.55
37	91337	0.99580	0.00420	384	91146	4452908	48.75
38	90953	0.99566	0.00434	395	90756	4361762	47.96
39	90558	0.99554	0.00446	404	90357	4271006	47.16
40	90154	0.99541	0.00459	414	89948	4180649	46.37
41	89740	0.99526	0.00474	425	89528	4090701	45.58
42	89315	0.99512	0.00488	436	89098	4001173	44.80
43	88879	0.99497	0.00503	447	88656	3912075	44.02
44	88432	0.99481	0.00519	459	88203	3823419	43.24
45	87973	0.99466	0.00534	470	87739	3735216	42.46
46	87503	0.99448	0.00552	483	87262	3647477	41.68
47	87020	0.99431	0.00569	495	86774	3560215	40.91
48	86525	0.99413	0.00587	508	86272	3473441	40.14
49	86017	0.99394	0.00606	521	85757	3387169	39.38
50	85496	0.99374	0.00626	535	85229	3301412	38.61
51	84961	0.99354	0.00646	549	84688	3216183	37.85
52	84412	0.99332	0.00668	564	84131	3131495	37.10
53	83848	0.99311	0.00689	578	83650	3047364	36.34
54	83270	0.99285	0.00715	595	82974	2963804	35.59
55	82675	0.99262	0.00738	610	82372	2880830	34.85
56	82065	0.99237	0.00763	626	81753	2798458	34.10
57	81439	0.99209	0.00791	644	81118	2716705	33.36
58	80795	0.99181	0.00819	662	80465	2635587	32.62
59	80133	0.99151	0.00849	680	79795	2555122	31.89
60	79453	0.99121	0.00879	698	79106	2475327	31.15
61	78755	0.99087	0.00913	719	78397	2396221	30.43
62	78036	0.99054	0.00946	738	77669	2317824	29.70
63	77298	0.99017	0.00983	760	76919	2240155	28.98
64	76538	0.98978	0.01022	782	76149	2163236	28.26
65	75756	0.98939	0.01061	804	75356	2087087	27.55
66	74952	0.98897	0.01103	827	74540	2011731	26.84
67	74125	0.98851	0.01149	852	73701	1937191	26.13
68	73273	0.98803	0.01197	877	72836	1863490	25.43
69	72396	0.98753	0.01247	903	71946	1790654	24.73
70	71493	0.98698	0.01302	931	71030	1718708	24.04
71	70562	0.98642	0.01358	958	70085	1647678	23.35
72	69604	0.98581	0.01419	988	69112	1577593	22.67

Continuation of the Table 1.9

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
73	68616	0.98515	0.01485	1019	68109	1508481	21.98
74	67597	0.98447	0.01553	1050	67075	1440372	21.31
75	66547	0.98374	0.01626	1082	66009	1373297	20.64
76	65465	0.98294	0.01706	1117	64909	1307288	19.97
77	64348	0.98208	0.01792	1153	63774	1242379	19.31
78	63195	0.98119	0.01881	1189	62604	1178605	18.65
79	62006	0.98020	0.01980	1228	61395	1116001	18.00
80	60778	0.97915	0.02085	1267	60148	1054606	17.35
81	59511	0.97800	0.02200	1309	58860	994458	16.71
82	58202	0.97677	0.02323	1352	57530	935598	16.08
83	56850	0.97544	0.02456	1396	56156	878068	15.45
84	55454	0.97398	0.02602	1443	54736	821912	14.82
85	54011	0.97241	0.02759	1490	53270	767176	14.20
86	52521	0.97068	0.02932	1540	51755	713906	13.59
87	50981	0.96879	0.03121	1591	50190	662151	12.99
88	49390	0.96671	0.03329	1644	48572	611961	12.39
89	47746	0.96444	0.03556	1698	46902	563389	11.80
90	46048	0.96191	0.03809	1754	45176	516487	11.22
91	44294	0.95914	0.04086	1810	43394	471311	10.64
92	42484	0.95601	0.04399	1869	41554	427917	10.07
93	40615	0.95255	0.04745	1927	39656	386363	9.51
94	38688	0.94867	0.51333	1986	37700	346707	8.96
95	36702	0.94428	0.05572	2045	35685	309007	8.42
96	34657	0.93938	0.06062	2101	33611	273322	7.89
97	32556	0.93371	0.06629	2158	31482	239711	7.31
98	30398	0.92733	0.07267	2209	29298	208229	6.85
99	28189	0.91997	0.08003	2256	27065	178931	6.35
100	25933	0.91139	0.08861	2298	24787	151866	5.86
101	23635	0.90150	0.09850	2328	22473	127079	5.38
102	21307	0.88985	0.11015	2347	20134	104606	4.91
103	18960	0.87600	0.12400	2351	17784	84472	4.46
104	16609	0.85959	0.14041	2332	15441	66688	4.02
105	14277	0.83981	0.16019	2287	13129	51247	3.59
106	11990	0.81560	0.18440	2211	10876	38118	3.18
107	9779	0.78587	0.21413	2094	8721	27242	2.79
108	7685	0.74886	0.25114	1930	6705	18521	2.41
109	5755	0.70217	0.29783	1714	4878	11816	2.05
110	4041	0.64291	0.35709	1443	3295	6938	1.72
111	2598	0.56620	0.43380	1127	2007	3643	1.40
112	1471	0.46907	0.53093	781	1052	1636	1.11
113	690	0.34638	0.65362	451	438	584	0.85
114	239	0.20502	0.79498	190	126	146	0.61
115	49	0.06122	0.93878	46	19	20	0.41
116	3	0	1	3	1	1	0.33
117	0	0	1	0	0	0	0
118	0	0	1	0	0	0	0
119	0	0	1	0	0	0	0

These shortcomings must be, undoubtedly, eliminated, when switching over to the market conditions of economic managing in the public health care system for the purpose of making not only actuarial (medico-insurance) calculations, but for controlling the efficacy of general and purpose-oriented medico-social prophylactic programs.

To make a partial elimination of the above drawbacks at the present time we have proposed an **express-method** of determining and evaluating parameters and exclusively, according to the data of infant mortality and the average life expectancy (for newborns) taking into account that the last two indices are subject to obligatory calculations at statistical centers of all the territories and at the national level today[+)]

The essence of **express-method** is as follows: using the data of only the average life span and infant mortality, while determining the corresponding probabilities of the latter on the basis of calculations of the territorial indices of the maximum life span (age limit), one can restore a complete age-related dynamics (to construct the table of mortality) of the population of a specific territory for any arbitrarily chosen year, including for any reasons (diseases, injuries etc.) [48].

[+)] The death-rates of the childhood and/or adolescent age may be used in the calculations, instead of infant mortality rates with due regard for a calculated time interval of the adaptation of a newborn generation to the habitation environment (§ 1.9)

Table 1.10

Normative table of mortality (men)

Age	The number of surviving persons	Probability of living till the next age interval	Probability of dying in the given age interval	The number of dying persons in the given age interval	The number of living persons in the given age interval	The number of man-years of life at the age older than the given one	The average life span after the given age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99967	0.00033	33	99987	7838031	78.38
1	99967	0.99943	0.00057	57	99940	7738044	77.41
2	99910	0.99927	0.00073	73	99875	7638104	76.45
3	99837	0.99914	0.00086	86	99795	7538229	75.51
4	99751	0.99902	0.00098	98	99703	7438434	74.57
5	99653	0.99892	0.00108	108	99600	7338731	73.64
6	99545	0.99880	0.0120	119	99486	7239131	72.72
7	99426	0.99871	0.00129	128	99363	7139645	71.81
8	99298	0.99861	0.00139	138	99230	7040282	70.90
9	99160	0.99853	0.00147	146	99088	6941052	70.00
10	99014	0.99843	0.00157	155	98937	6841964	69.10
11	98859	0.99833	0.00167	165	98777	6743027	68.21
12	98694	0.99826	0.00174	172	98609	6644250	67.32
13	98522	0.99815	0.00185	182	98432	6545641	66.44
14	98340	0.99807	0.00193	190	98246	6447209	65.56
15	98150	0.99797	0.00203	199	98051	6348963	64.69
16	97951	0.99789	0.00211	207	97848	6250912	63.82
17	97744	0.99779	0.00221	216	97636	6153064	62.95
18	97528	0.99769	0.00231	225	97416	6055428	62.09
19	97303	0.99760	0.00240	234	97187	5958012	61.23
20	97069	0.99751	0.00249	242	96949	5860825	60.38
21	96287	0.99740	0.00260	252	96702	5763876	59.53

Continuation of the Table 1.10

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
22	96575	0.99731	0.00269	260	96446	5667174	58.68
23	96315	0.99720	0.00280	270	96180	5570728	57.84
24	96045	0.99710	0.00290	279	95906	5474548	57.00
25	95766	0.99698	0.00302	289	95622	5378642	56.16
26	95477	0.99688	0.00312	298	95329	5283020	55.33
27	95179	0.99675	0.00325	309	95025	5187691	54.50
28	94870	0.99665	0.00335	318	94712	5092666	53.68
29	94552	0.99653	0.00347	328	94389	4997954	52.86
30	94224	0.99641	0.00359	338	94056	4903565	52.64
31	93886	0.99627	0.00373	350	93712	4809509	50.42
32	93536	0.99616	0.00384	359	93357	4715797	50.42
33	93177	0.99602	0.00398	371	92992	4622440	49.61
34	92806	0.99588	0.00412	382	92616	4529448	48.81
35	92424	0.99574	0.00426	394	92228	4436832	48.01
36	92030	0.99560	0.00440	405	91829	4344604	47.21
37	91625	0.99545	0.00455	417	91417	4252575	46.42
38	91208	0.99529	0.00471	430	90944	4161358	45.62
39	90778	0.99513	0.00487	442	90588	4070364	44.84
40	90336	0.99497	0.00503	454	90110	3979806	44.06
41	89882	0.99479	0.00521	468	89649	3889696	43.28
42	89414	0.99461	0.00539	482	89174	3800047	42.50
43	88932	0.99443	0.00557	495	88686	3710873	41.73
44	88437	0.99424	0.00576	509	88183	3622187	40.96
45	87928	0.99404	0.00596	524	87667	3534004	40.19
46	87404	0.99383	0.00617	539	87135	3446337	39.43
47	86865	0.99361	0.00639	555	86589	3359202	38.67
48	86310	0.99341	0.00659	569	86027	3272613	37.92
49	85741	0.99316	0.00684	587	85449	3186586	37.17

Continuation of the Table 1.10							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
50	85154	0.99293	0.00707	602	84854	3101137	36.42
51	84552	0.99267	0.00733	620	84243	3016283	35.67
52	83932	0.99240	0.00760	638	83615	2932040	34.93
53	83294	0.99214	0.00786	655	82968	2848425	34.20
54	82639	0.99184	0.00816	674	82303	2765457	33.46
55	81965	0.99155	0.00845	693	81620	2683154	32.74
56	81272	0.99123	0.00877	713	80917	2601534	32.01
57	80559	0.99089	0.00911	734	80194	2520617	31.29
58	79825	0.99055	0.00945	754	79450	2440423	30.57
59	79071	0.99019	0.00981	776	78685	2360973	29.86
60	78295	0.98982	0.01018	797	77898	2282288	29.15
61	77498	0.98941	0.01059	821	77089	2204390	28.44
62	76677	0.98898	0.01102	845	76257	2127301	27.74
63	75832	0.98855	0.00145	868	75400	2051044	27.05
64	74964	0.98807	0.01193	894	74519	1975644	26.35
65	74070	0.98758	0.01242	920	73612	1901125	25.67
66	73150	0.98705	0.01295	947	72769	1827513	24.98
67	72203	0.98651	0.01349	974	71719	1754834	24.30
68	71229	0.98593	0.01407	1002	70731	1683115	23.63
69	70227	0.98530	0.01470	1032	69714	1612384	22.96
70	69195	0.98465	0.01535	1062	68667	1542670	22.29
71	68133	0.98396	0.01604	1093	67589	1474003	21.63
72	67040	0.98322	0.01678	1125	66480	1406414	20.98
73	65915	0.98242	0.01758	1159	65338	1339934	20.33
74	64756	0.98158	0.01842	1193	64163	1274596	19.68
75	63563	0.98068	0.01932	1228	62952	1210433	19.04
76	62335	0.97972	0.02028	1264	61706	1147481	18.41
77	61071	0.97868	0.02132	1302	60423	1085775	17.78

Continuation of the Table 1.10							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
78	59679	0.97756	0.02244	1341	59102	1025352	17.16
79	58428	0.97638	0.02362	1380	57742	966250	16.54
80	57048	0.97511	0.02489	1420	56341	908508	15.93
81	55628	0.97370	0.02630	1463	54900	852167	15.32
82	54165	0.97221	0.02779	1505	53416	797267	14.72
83	52660	0.97058	0.02942	1549	51889	743851	14.13
84	51111	0.96883	0.03117	1593	50318	691962	13.54
85	49518	0.96690	0.03310	1639	48702	641644	12.96
86	47879	0.96481	0.03519	1685	47040	592942	12.38
87	46194	0.96251	0.03749	1732	45332	545902	11.82
88	44462	0.95999	0.04001	1779	43577	500570	11.26
89	42683	0.95724	0.04276	1825	41775	456993	10.71
90	40858	0.95418	0.04582	1872	39926	415218	10.16
91	38986	0.95078	0.04922	1919	38030	375292	9.63
92	37067	0.94704	0.05296	1963	36089	337262	9.10
93	35104	0.94283	0.05717	2007	34104	301173	8.58
94	33097	0.93815	0.06185	2047	32077	267069	8.07
95	31050	0.93288	0.06712	2084	30011	234992	7.57
96	28966	0.92691	0.07309	2117	27910	204981	7.08
97	26849	0.92018	0.07982	2143	25779	177071	6.60
98	24706	0.91241	0.08759	2164	23625	151292	6.12
99	22542	0.90360	0.09640	2173	21456	127667	5.66
100	20369	0.89338	0.10664	2172	19282	106211	5.21
101	18197	0.88151	0.11848	2156	17117	86929	4.78
102	16041	0.86759	0.13241	2124	14975	69812	4.35
103	13917	0.85119	0.14882	2071	12876	54837	3.94
104	11846	0.83175	0.16824	1993	10842	41961	3.54
105	9853	0.80838	0.19162	1888	8899	31119	3.16

Continuation of the Table 1.10							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
106	7965	0.78004	0.21996	1752	7076	22220	2.79
107	6213	0.74553	0.25447	1581	5407	15144	2.44
108	4632	0.70294	0.29706	1376	3926	9737	2.10
109	3256	0.64988	0.35012	1140	2665	5811	1.78
110	2116	0.58318	0.41682	882	1653	3146	1.49
111	1234	0.50000	0.50000	617	904	1493	1.21
112	617	0.39708	0.60292	372	412	589	0.95
113	245	0.27347	0.72653	178	142	177	0.72
114	67	0.14925	0.85075	57	32	35	0.52
115	10	0	1	10	3	3	0.3
116	0	0	1	0	0	0	0
117	0	0	1	0	0	0	0
118	0	0	1	0	0	0	0
119	0	0	1	0	0	0	0

The order of determining is the following. First, the indices of internal and external life endurance (and) based on the values of the average life span and infant mortality ($e_0^{(0)}$ and q_0) are calculated. Afterwards, basing on the link of these parameters of the law of the survival of populations with the indices of the traditional tables of mortality [36], a real (trend) table of mortality is restored. It is its characteristics that become the information base (and the basis) for planning measures aimed at improving the processes of mortality (survival) of the population according to the gender and age with a gradual elimination of their causes observed on a territory under study.

The law of the survival of populations appears in the role of a methodological basis of the express-method, whereas the use of the procedure is based on making up a set of equations that bring into accord the values of the known indices of average life span ($e_0^{(0)}$) and infant mortality (q_0) with the parameters of internal and external life endurance of the population (and) and a subsequent numerical solution of this set of equations with compiling a trend table based on obtained (designed) parameters and . Let us underline that only the natural part of the course the processes of mortality are singled out in the trend tables, their characteristics providing a reliable basis for taking decisions and elaborating necessary programs (measures) [48].

Table 1.11

Normative table of mortality (women)

Age	The number of surviving persons	Probability of living till the next age interval	Probability of dying in the given age interval	The number of dying persons in the given age interval	The number of living persons in the given age interval	The number of man-years of life at the age older than the given one	The average life span after the given age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99944	0.00056	56	99975	8449971	84.50
1	99944	0.99922	0.00078	78	99906	8349996	83.55
2	99866	0.99910	0.00090	90	99821	8250090	82.61
3	99776	0.99901	0.00099	99	99727	8150269	81.69
4	99677	0.99893	0.00107	107	99624	8050542	80.77
5	99570	0.99886	0.00114	114	99513	7950918	79.85
6	99456	0.99879	0.00121	120	99396	7851405	78.94
7	99336	0.99872	0.00128	127	99273	7752009	78.04
8	99209	0.99867	0.00133	132	99144	7652736	77.14
9	99077	0.99861	0.00139	138	99008	7553592	76.24
10	98939	0.99854	0.00146	144	98868	7454584	75.35
11	98795	0.99849	0.00151	149	98721	7355716	74.45
12	98646	0.99844	0.00156	154	98570	7256995	73.57
13	98492	0.99838	0.00162	160	98412	7158425	72.68
14	98332	0.99832	0.00168	165	98520	7060013	71.80

Continuation of the Table 1.11							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
15	98167	0.99826	0.00174	171	98082	6961763	70.92
16	97996	0.99820	0.00180	176	97909	6863681	70.04
17	97820	0.99815	0.00185	181	97730	6765772	69.17
18	97639	0.99808	0.00192	187	97546	6668042	68.29
19	97452	0.99803	0.00197	192	97356	6570496	67.42
20	97260	0.99796	0.00204	198	97161	6473140	66.56
21	97062	0.99790	0.00210	204	96960	6375979	65.69
22	96858	0.99784	0.00216	209	96754	6279019	64.83
23	96649	0.99778	0.00222	215	96542	6182265	63.97
24	96434	0.99770	0.00230	222	96324	6085723	63.11
25	96212	0.99764	0.00236	227	96099	5989399	62.25
26	95985	0.99757	0.00243	233	95869	5893300	61.40
27	95752	0.99749	0.00251	240	95633	5797431	60.55
28	95512	0.99742	0.00258	246	95390	5701798	59.70
29	95266	0.99735	0.00265	252	95141	5606408	58.85
30	95014	0.99727	0.00273	259	94885	5511267	58.00
31	94755	0.99719	0.00281	266	94622	5416382	57.16
32	94489	0.99711	0.00289	273	94353	5321760	56.32
33	94216	0.99702	0.00298	281	94076	5227407	55.48
34	93935	0.99694	0.00306	287	93792	5133331	54.65
35	93648	0.99685	0.00315	295	93501	5039539	53.81
36	93353	0.99675	0.00325	303	93202	4946038	52.98
37	93050	0.99666	0.00334	311	92895	4852836	52.15
38	92739	0.99656	0.00344	319	92580	4759941	51.33
39	92420	0.99646	0.00354	327	92257	4667361	50.50
40	92093	0.99635	0.00365	336	91925	4575104	49.68
41	91757	0.99624	0.00376	345	91585	4483179	48.86
42	91412	0.99613	0.00387	354	91236	4391594	48.04

Continuation of the Table 1.11

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
43	91058	0.99600	0.00400	364	90877	4300358	47.23
44	90694	0.99589	0.00411	373	90509	4209481	46.41
45	90321	0.99576	0.00424	383	90131	4118972	45.60
46	89938	0.99563	0.00437	393	89742	4028841	44.80
47	89545	0.99549	0.00451	404	89344	3939099	43.99
48	89141	0.99534	0.00466	415	88934	3849755	43.19
49	88726	0.99519	0.00481	427	88513	3760821	42.39
50	88299	0.99504	0.00496	438	88081	3672308	41.59
51	87861	0.99488	0.00512	450	87637	3584227	40.79
52	87411	0.99470	0.00530	463	87180	3496590	40.00
53	86948	0.99453	0.00547	476	86711	3409410	39.21
54	86472	0.99433	0.00567	490	86228	3322699	38.43
55	85982	0.99415	0.00585	503	85732	3236471	37.64
56	85479	0.99395	0.00605	517	85222	3150739	36.86
57	84962	0.99373	0.00627	533	84696	3065517	36.08
58	84429	0.99351	0.00649	548	84156	2980821	35.31
59	83881	0.999326	0.00674	565	83600	2896665	34.53
60	83316	0.99303	0.00697	581	83027	2813065	33.76
61	82375	0.99277	0.00722	598	82437	2730038	33.00
62	82137	0.99249	0.00751	617	81830	2647601	32.23
63	81520	0.99221	0.00779	635	81204	2565771	31.47
64	80885	0.99190	0.00810	655	80559	2484567	30.72
65	80230	0.99157	0.00843	676	79844	2404008	29.96
66	79544	0.99125	0.00875	696	79208	2324114	29.21
67	78858	0.99088	0.00912	719	78500	2244906	28.47
68	78139	0.99050	0.00950	742	77770	2166406	27.73
69	77397	0.99010	0.00990	766	77016	2088636	26.99
70	76631	0.98968	0.01032	791	76238	2011620	26.25

Continuation of the Table 1.11

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
71	75840	0.98923	0.01077	817	75434	1935382	25.52
72	75023	0.98875	0.01125	844	74603	1859948	24.79
73	74179	0.98822	0.01178	874	73744	1785345	24.07
74	73305	0.98768	0.01232	903	72856	1711601	23.35
75	72402	0.98709	0.01291	935	71937	1638745	22.63
76	71467	0.98647	0.01353	967	70987	1566808	21.92
77	70500	0.98579	0.01421	1002	70002	1495821	21.22
78	69498	0.98506	0.01494	1038	68982	1425819	20.52
79	68460	0.98430	0.01570	1075	67926	1356837	19.82
80	67385	0.98344	0.01656	1116	66830	1288911	19.13
81	66269	0.98256	0.01744	1156	65695	1222081	18.44
82	65113	0.98156	0.01844	1201	64516	1156386	17.76
83	63912	0.98050	0.01950	1246	63293	1091870	17.08
84	62666	0.97935	0.02065	1294	62023	1028577	16.41
85	61372	0.97808	0.02192	1345	60703	966554	15.75
86	60027	0.97671	0.02329	1398	59332	905851	15.09
87	58629	0.97520	0.02480	1454	57907	846519	14.44
88	57175	0.97355	0.02645	1512	56424	787612	13.79
89	55663	0.97174	0.02826	1573	54882	732188	13.15
90	54090	0.96972	0.03028	1638	53277	677306	12.52
91	52452	0.96749	0.03498	1705	51605	624029	11.90
92	50747	0.96502	0.03498	1775	49865	572424	11.28
93	48972	0.96224	0.03776	1849	48053	522559	10.69
94	47123	0.95913	0.04087	1926	46166	474506	10.07
95	45197	0.95564	0.04436	2005	44201	428340	9.48
96	43192	0.95168	0.04832	2087	42155	384139	8.89
97	41105	0.94716	0.05284	2172	40026	341984	8.32
98	38933	0.94200	0.05800	2258	37811	301958	7.76

Continuation of the Table 1.11

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
99	36675	0.93609	0.06391	2344	35510	264147	7.20
100	34331	0.92919	0.07081	2431	33123	228637	6.66
101	31900	0.92119	0.07881	2514	30650	195514	6.13
102	29386	0.91173	0.08827	2594	28095	164864	5.61
103	26792	0.90053	0.09947	2665	25465	136769	5.10
104	24127	0.88714	0.11286	2723	22769	111304	4.61
105	21404	0.87087	0.12913	2764	20024	88535	4.14
106	18640	0.85102	0.14898	2777	17251	68511	3.68
107	15863	0.82633	0.17367	2755	14482	51260	3.23
108	13108	0.79539	0.20461	2682	11759	36778	2.81
109	10426	0.75590	0.24410	2545	9139	25019	2.40
110	7881	0.70473	0.29527	2327	6695	15880	2.01
111	5554	0.63774	0.36226	2012	4517	9185	1.65
112	3542	0.54884	0.45116	1598	2704	4668	1.32
113	1944	0.43158	0.56842	1105	1348	1964	1.01
114	839	0.28367	0.71633	601	499	616	0.73
115	238	0.12185	0.87815	209	109	117	0.49
116	29	0	1	29	8	8	0.28
117	0	0	1	0	0	0	0
118	0	0	1	0	0	0	0
119	0	0	1	0	0	0	0

Table 1.12

Reference table of mortality (both sexes)

Age	The number of surviving persons	Probability of living till the next age interval	Probability of dying in the given age interval	The number of dying persons in the given age interval	The number of living persons in the given age interval	The number of man-years of life at the age older than the given one	The average life span after the given age

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99983	0.00017	17	99993	8571322	85.71
1	99983	0.99969	0.00031	31	99969	8471329	84.73
2	99952	0.99959	0.00041	41	99933	8371360	83.75
3	99911	0.99951	0.00049	49	99888	8271427	82.79
4	99862	0.99944	0.00056	56	99834	8171539	81.83
5	99806	0.99936	0.00064	64	99774	8071705	80.87
6	99742	0.99929	0.00071	71	99707	7971931	79.93
7	99671	0.99924	0.00076	76	99634	7872224	78.98
8	99595	0.99917	0.00083	83	99554	7772590	78.04
9	99512	0.99911	0.00089	89	99468	7673036	77.11
10	99423	0.99904	0.00096	95	99376	7573568	76.18
11	99328	0.99898	0.00102	101	99278	7474192	75.25
12	99227	0.99892	0.00108	107	99174	7374914	74.32
13	99120	0.99886	0.00114	113	99064	7275740	73.40
14	99007	0.99880	0.00120	119	98948	7176676	72.49
15	98888	0.99874	0.00126	125	98826	7077728	71.57
16	98763	0.99867	0.00133	131	98698	6978902	70.66
17	98632	0.99861	0.00139	137	98564	6880204	69.76
18	98495	0.99856	0.00144	142	98425	6781640	68.85
19	98353	0.99847	0.00153	150	98279	6683215	67.95
20	98203	0.99842	0.00158	155	98126	6584936	67.05
21	98048	0.99835	0.00165	162	97968	6486810	66.16
22	97886	0.99828	0.00172	168	97803	6388842	65.27
23	97718	0.99822	0.00178	174	97632	6291039	64.38
24	97544	0.99813	0.00187	182	97454	6193407	63.49
25	97362	0.99807	0.00193	188	97269	6095953	62.61
26	97174	0.99799	0.00201	195	97078	5998684	61.73
27	96979	0.99792	0.00208	202	96879	5901606	60.85
28	96777	0.99784	0.00216	209	96674	5804727	59.98
29	96568	0.99776	0.00224	216	96461	5708053	59.11

Continuation of the Table 1.12							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
30	96352	0.99768	0.00232	224	96240	5611592	58.24
31	96128	0.99759	0.00241	232	96013	5515352	57.38
32	95896	0.99751	0.00249	239	95777	5419339	56.51
33	95657	0.99741	0.00259	248	95534	5323562	55.65
34	95409	0.99733	0.00267	255	95282	5228028	54.80
35	95154	0.99722	0.00278	265	95022	5132746	53.94
36	94889	0.99713	0.00287	272	97454	5037724	53.09
37	94617	0.99702	0.00298	282	94476	4942970	52.24
38	94335	0.99692	0.00308	291	94190	4848494	51.40
39	94044	0.99681	0.00319	300	93895	4754304	50.55
40	93744	0.99669	0.00331	310	93590	4660409	49.71
41	93434	0.99658	0.00342	320	93275	4566819	48.88
42	93114	0.99646	0.00354	330	92950	4473544	48.04
43	92784	0.99634	0.00366	340	92615	4380594	47.21
44	92444	0.99620	0.00380	351	92269	4287979	46.38
45	92093	0.99607	0.00393	362	91913	4195710	45.56
46	91731	0.99592	0.00408	374	91545	4103797	44.74
47	91357	0.99577	0.00423	386	91165	4012252	43.92
48	90971	0.99562	0.00438	398	90773	3921087	43.10
49	90573	0.99547	0.00453	410	90369	3830314	42.29
50	90163	0.99530	0.00470	424	89952	3739945	41.48
51	89739	0.99513	0.00487	437	89552	3649993	40.67
52	89302	0.99496	0.00504	450	89078	3560471	39.87
53	88852	0.99477	0.00523	465	88620	3471393	39.07
54	88387	0.99456	0.00544	481	88148	3382773	38.27
55	87906	0.99437	0.00563	495	87660	3294625	37.48
56	87411	0.99415	0.00585	511	87157	3206965	36.69
57	86900	0.99392	0.00608	528	86637	3119808	35.90

Continuation of the Table 1.12

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
58	86372	0.99369	0.00631	545	86101	3033171	35.12
59	85827	0.99344	0.00656	563	85547	2947070	34.34
60	85264	0.99317	0.00683	582	84975	2861523	33.56
61	84682	0.99291	0.00709	600	84384	2776548	32.79
62	84082	0.99263	0.00737	620	83773	2692124	32.02
63	83462	0.99231	0.00769	642	83143	2608391	31.25
64	82820	0.99201	0.00799	662	82491	2525248	30.49
65	82158	0.99166	0.00834	685	81817	2442757	29.73
66	81473	0.99131	0.00869	708	81121	2360940	28.98
67	80765	0.99094	0.00906	732	80401	2279819	28.23
68	80033	0.99053	0.00947	758	79656	2199418	27.48
69	79275	0.99011	0.00989	784	78885	2119762	26.74
70	78491	0.98967	0.01033	811	78088	2040877	26.00
71	77680	0.98919	0.01081	840	77262	1962789	25.27
72	76840	0.98868	0.01132	870	74608	1885527	24.54
73	75970	0.98814	0.01186	901	75522	1809119	23.81
74	75069	0.98757	0.01243	933	74605	1733597	23.09
75	74136	0.98694	0.01306	968	73655	1658992	22.38
76	73168	0.98629	0.01371	1003	72670	1585337	21.67
77	72165	0.98559	0.01441	1040	71648	1512667	20.96
78	71125	0.98482	0.01518	1080	70558	1441019	20.26
79	70045	0.98401	0.01599	1120	69489	1370431	19.57
80	68925	0.98313	0.01687	1163	68347	1300942	18.87
81	67762	0.98219	0.01781	1207	67162	1232595	18.19
82	66555	0.98114	0.01886	1255	65931	1165433	17.51
83	65300	0.98005	0.01995	1303	64353	1099502	16.84
84	63997	0.97883	0.02117	1355	63324	1034849	16.17
85	62642	0.97751	0.02249	1409	61942	971525	15.51

Continuation of the Table 1.12

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
86	61233	0.97606	0.02394	1466	60505	909583	14.85
87	59767	0.97450	0.02550	1524	59010	849078	14.21
88	58243	0.97277	0.02723	1586	57455	790068	13.57
89	56657	0.97084	0.02916	1652	55836	732613	12.93
90	55005	0.96875	0.03125	1719	54152	676777	12.30
91	53286	0.96643	0.03357	1789	52398	622625	11.68
92	51497	0.96382	0.03618	1863	50571	570227	11.07
93	49364	0.96091	0.03909	1940	48670	519656	10.47
94	47694	0.95767	0.04233	2019	46691	470986	9.88
95	45675	0.95400	0.04600	2101	44632	424295	9.29
96	43574	0.94988	0.05012	2184	42489	379663	8.71
97	41390	0.94516	0.05484	2270	40262	337174	8.15
98	39120	0.93975	0.06025	2357	37939	296912	7.59
99	36763	0.93357	0.06643	2442	35549	258963	7.04
100	34321	0.92637	0.07363	2527	33064	223414	6.51
101	31794	0.91797	0.08203	2608	30497	190350	5.99
102	29186	0.90814	0.09186	2681	27852	159853	5.48
103	26505	0.89647	0.10353	2744	25138	132001	4.98
104	23761	0.88245	0.11755	2793	22368	106863	4.50
105	20968	0.86556	0.13444	2819	19560	84495	4.03
106	18149	0.84490	0.15510	2815	16740	64935	3.58
107	15334	0.81923	0.18077	2772	13942	48195	3.14
108	12562	0.78714	0.21286	2674	11214	34253	2.73
109	9888	0.74626	0.25374	2509	8616	23039	2.33
110	7379	0.69332	0.30668	2263	6223	14423	1.95
111	5116	0.62451	0.37549	1921	4123	8200	1.60
112	3195	0.53365	0.46635	1490	2411	4077	1.28
113	1705	0.41466	0.58534	998	1164	1666	0.98

Continuation of the Table 1.12

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
114	707	0.26733	0.73267	518	412	502	0.71
115	189	0.11111	0.88889	168	84	90	0.48
116	21	0	1	21	6	6	0.29
117	0	0	1	0	0	0	0
118	0	0	1	0	0	0	0
119	0	0	1	0	0	0	0

Table 1.13

Reference table of mortality (men)

Age	The number of surviving persons	Probability of living till the next age interval	Probability of dying in the given age interval	The number of dying persons in the given age interval	The number of living persons in the given age interval	The number of man-years of life at the age older than the given one	The average life span after the given age
x	l_x	p_x	q_x	d_x	L_x	T_x	e_x^0
0	100000	0.99995	0.00005	5	99998	8582474	85.82
1	99995	0.99987	0.00013	13	99989	8482476	84.83
2	99982	0.99980	0.00020	20	99972	8382487	83.84
3	99962	0.99974	0.00026	26	99950	8282515	82.86
4	99936	0.99969	0.00031	31	99921	8182565	81.88
5	99905	0.99963	0.00037	37	99887	8082644	80.90
6	99868	0.99957	0.00043	43	99847	7982757	79.93
7	99825	0.99951	0.00049	49	99801	7882910	78.97
8	99776	0.99946	0.00054	54	99750	7783109	78.01
9	99722	0.99940	0.00060	60	99693	7683359	77.05
10	99662	0.99935	0.00065	65	99630	7583666	76.09
11	99597	0.99929	0.00071	71	99562	7484036	75.14
12	99526	0.99923	0.00077	77	99488	7384474	74.20
13	99449	0.99917	0.00083	83	99408	7284986	73.25

Continuation of the Table 1.13

x	l_x	p_x	q_x	d_x	L_x	T_x	e_x^0
14	99366	0.99910	0.00090	89	99322	7185578	72.31
15	99277	0.99905	0.00095	94	99230	7086256	71.38
16	99183	0.99898	0.00102	101	99133	6987026	70.45
17	99082	0.99892	0.00108	107	99029	6887893	69.52
18	98975	0.99886	0.00114	113	98919	6788864	68.59
19	98862	0.99879	0.00121	120	98802	6689945	67.67
20	98742	0.99871	0.00129	127	98679	6591143	66.75
21	98615	0.99866	0.00134	132	98550	6492464	65.84
22	98483	0.99858	0.00142	140	98413	6393914	64.92
23	98343	0.99851	0.00149	147	98270	6295501	64.02
24	98196	0.99843	0.00157	154	98120	6197231	63.11
25	98042	0.99836	0.00164	161	97962	6099111	62.21
26	97881	0.99827	0.00173	169	97797	6001149	61.31
27	97712	0.99820	0.00180	176	97625	5903322	60.42
28	97536	0.99811	0.00189	184	97444	5805727	59.52
29	97352	0.99803	0.00197	192	97256	5708283	58.64
30	97160	0.99793	0.00207	201	97060	5611027	57.75
31	96959	0.99784	0.00216	209	96856	5513967	56.87
32	96750	0.99776	0.00224	217	96642	5417111	55.99
33	96533	0.99766	0.00234	226	96421	5320469	55.12
34	96307	0.99755	0.00245	236	96190	5224048	54.24
35	96071	0.99746	0.00254	244	95950	5127858	53.38
36	95827	0.99734	0.00266	255	95700	5031908	52.51
37	95572	0.99724	0.00276	264	95441	4936208	51.65
38	95308	0.99711	0.00289	275	95171	4840767	50.79
39	95033	0.99700	0.00300	285	94892	4745596	49.94
40	94748	0.99689	0.00311	295	94601	4650704	49.08
41	94453	0.99675	0.00325	307	94300	4556103	48.24

Continuation of the Table 1.13

x	l_x	p_x	q_x	d_x	L_x	T_x	e_x^0
42	94146	0.99662	0.00338	318	93998	4461803	47.39
43	93828	0.99648	0.00352	330	93664	4367815	46.55
44	93498	0.99633	0.00367	343	93328	4274151	45.71
45	93155	0.99620	0.00380	354	92979	4180823	44.88
46	92801	0.99603	0.00397	368	92618	4087844	44.05
47	92433	0.99588	0.00412	381	92244	3995226	43.22
48	92052	0.99571	0.00429	395	91856	3902982	42.40
49	92052	0.99555	0.00445	408	91454	3811126	41.58
50	91249	0.99535	0.00465	424	91038	3719672	40.76
51	90825	0.99517	0.00483	439	90607	3628634	39.95
52	90386	0.99498	0.00502	454	90160	3538027	39.14
53	89932	0.99476	0.00524	471	89698	3447867	38.34
54	89461	0.99456	0.00544	487	89219	3358169	37.54
55	88974	0.99432	0.00568	505	88723	3268950	36.74
56	88469	0.99409	0.00591	523	88209	3180227	35.95
57	87946	0.99384	0.00616	542	87677	3092018	35.16
58	87404	0.99358	0.00642	561	87126	3004341	34.37
59	86843	0.99332	0.00668	580	86555	2917215	33.59
60	86263	0.99302	0.00698	602	85964	2830660	32.81
61	85661	0.99273	0.00727	623	85351	2744696	32.04
62	85038	0.99240	0.00760	646	84717	2659345	31.27
63	84392	0.99207	0.00793	669	84060	2574628	30.51
64	83723	0.99172	0.00828	693	83379	2490568	29.75
65	83030	0.99135	0.00865	718	82674	2407189	28.99
66	82312	0.99096	0.00904	744	81943	2324515	28.24
67	81568	0.99055	0.00945	771	81185	2242572	27.49
68	80797	0.99011	0.00989	799	80400	2161387	26.75
69	79998	0.98964	0.01036	829	79586	2080987	26.01

Continuation of the Table 1.13

x	l_x	p_x	q_x	d_x	L_x	T_x	e_x^0
70	79169	0.98915	0.01085	859	78742	2001401	25.28
71	78310	0.98862	0.01138	891	77867	1922659	24.55
72	77149	0.98806	0.01194	924	76960	1844792	23.83
73	76495	0.98746	0.01254	959	76018	1767832	23.11
74	75536	0.98683	0.01317	995	75041	1691814	22.40
75	74541	0.98616	0.01384	1032	74028	1616773	21.69
76	73509	0.98542	0.01458	1072	72976	1542745	20.99
77	72437	0.98465	0.01535	1112	71884	1469769	20.29
78	71325	0.98381	0.01619	1155	70751	1397885	19.60
79	70170	0.98290	0.01710	1200	69574	1327134	18.91
80	68970	0.98193	0.01807	1246	68351	1257560	18.23
81	67724	0.98089	0.01911	1294	67081	1189209	17.56
82	66340	0.97975	0.020250	1345	65762	1122128	16.89
83	65085	0.97852	0.02148	1398	64391	1056366	16.23
84	63687	0.99719	0.02281	1453	62695	991975	15.58
85	62234	0.97574	0.02426	1510	61484	929010	14.93
86	60724	0.97415	0.02585	1570	59944	867526	14.29
87	59154	0.97241	0.02759	1632	58343	807582	13.65
88	57522	0.97050	0.02950	1697	56679	749239	13.03
89	55825	0.96838	0.03162	1765	54948	692560	12.41
90	54060	0.96607	0.03393	1834	53149	637612	11.79
91	52226	0.96350	0.03650	1906	51279	584463	11.19
92	50320	0.96063	0.03937	1981	49336	533184	10.60
93	48339	0.95745	0.04255	2057	47317	483848	10.01
94	46282	0.95387	0.04613	2135	45221	436531	9.43
95	44147	0.94983	0.05017	2215	43046	391310	8.86
96	41932	0.94529	0.05471	2294	40792	348264	8.31
97	39638	0.94008	0.05992	2375	38457	307472	7.76

Continuation of the Table 1.13

x	l_x	p_x	q_x	d_x	L_x	T_x	e_x^0
98	37263	0.93417	0.06583	2453	36043	269015	7.22
99	34810	0.92735	0.07265	2529	33551	232972	6.69
100	32281	0.91946	0.08054	2600	30986	199421	6.18
101	29681	0.91025	0.08975	2664	28354	168435	5.67
102	27017	0.89947	0.10053	2716	25663	140081	5.18
103	24301	0.88671	0.11329	2753	22967	114418	4.71
104	21548	0.87140	0.12860	2771	20163	91491	4.25
105	18777	0.85296	0.14704	2761	17394	71328	3.80
106	16016	0.83042	0.16958	2716	14652	53934	3.37
107	13300	0.80263	0.19737	2625	11978	39282	2.95
108	10675	0.76787	0.23213	2478	9421	27304	2.56
109	8197	0.72392	0.27608	2263	7045	17883	2.18
110	5934	0.66751	0.33249	1973	4920	10838	1.83
111	3961	0.59455	0.40545	1606	3124	5918	1.49
112	2335	0.49936	0.50064	1179	1728	2794	1.19
113	1176	0.37840	0.62160	731	774	1066	0.91
114	445	0.23146	0.76854	342	247	292	0.66
115	103	0.08738	0.91262	94	43	45	0.44
116	9	0	1	9	2	2	0.22
117	0	0	1	0	0	0	0
118	0	0	1	0	0	0	0
119	0	0	1	0	0	0	0

Table 1.14

Reference table of mortality (women)

Age	The number of surviving persons	Probability of living till the next age interval	Probability of dying in the given age interval	The number of dying persons in the given age interval	The number of living persons in the given age interval	The number of man-years of life at the age older than the given one	The average life span after the given age

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99991	0.00009	9	99997	9142314	91.42
1	99991	0.99983	0.00017	17	99983	9042317	90.43
2	99974	0.99977	0.00023	23	99963	8942334	89.45
3	99951	0.99971	0.00029	29	99937	8842371	88.47
4	99922	0.99966	0.00034	34	99905	8742434	87.49
5	99888	0.99961	0.00039	39	99869	8642529	86.52
6	99849	0.99957	0.00043	43	99828	8542660	85.56
7	99806	0.99952	0.00048	48	99783	8442832	84.59
8	99758	0.99949	0.00051	51	99733	8343049	83.63
9	99707	0.99944	0.00056	56	99679	8243316	82.68
10	99651	0.99939	0.00061	61	99621	8143637	81.72
11	99590	0.99936	0.00064	64	99559	8044016	80.77
12	99526	0.99931	0.00069	69	99492	7944457	79.82
13	99457	0.99928	0.00072	72	99421	7745544	77.93
14	99385	0.99923	0.00077	77	99346	7646198	76.99
15	99308	0.99917	0.00083	82	99267	7646198	76.99
16	99226	0.99914	0.00086	85	99184	7546931	76.06
17	99141	0.99909	0.00091	90	99096	7447747	75.12
18	99051	0.99905	0.00095	94	99004	7348651	74.19
19	98957	0.99900	0.00100	99	98908	7249647	73.26
20	98858	0.99896	0.00104	103	98807	7150739	72.33
21	98755	0.99891	0.00109	108	98702	7051932	71.41
22	98647	0.99886	0.00114	112	98592	6953230	70.49
23	98535	0.99881	0.00119	117	98477	6854638	69.57
24	98418	0.99876	0.00124	122	98357	6756161	68.65
25	98296	0.99871	0.00129	127	98233	6657804	67.73
26	98169	0.99866	0.00134	132	98103	6559571	66.82
27	98037	0.99860	0.00140	137	97969	6461468	65.91
28	97900	0.99854	0.00146	143	97829	6363499	65.00

Continuation of the Table 1.14

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
29	97757	0.99850	0.00150	147	97684	6265670	64.09
30	97610	0.99842	0.00158	154	97533	6167986	63.19
31	97456	0.99837	0.00163	159	97377	6070453	62.29
32	97297	0.99830	0.00170	165	97215	5973076	61.39
33	97132	0.99825	0.00175	170	97048	5875861	60.49
34	96962	0.99817	0.00183	177	96874	5778813	59.60
35	96785	0.99811	0.00189	183	96694	5681939	58.71
36	96602	0.99803	0.00197	190	96507	5585245	57.82
37	96412	0.99797	0.00203	196	96314	5488738	56.93
38	96216	0.99789	0.00211	203	96115	5392424	56.04
39	96013	0.99780	0.00220	211	95908	5296309	55.16
40	95802	0.99773	0.00227	217	95694	520041	54.28
41	95585	0.99765	0.00235	225	95473	5104707	53.40
42	95360	0.99756	0.00244	233	95244	5009234	52.53
43	95127	0.99748	0.00252	240	95008	4913990	51.66
44	94887	0.99738	0.00263	249	94763	4818982	50.79
45	94638	0.99727	0.00273	258	94510	4724219	49.92
46	94380	0.99718	0.00282	266	94248	4629709	49.05
47	94114	0.99708	0.00292	275	93977	4535461	48.19
48	93839	0.99696	0.00304	285	93697	4441484	47.33
49	93554	0.99686	0.00314	294	93408	4347787	46.47
50	93260	0.99673	0.00327	305	93109	4254379	45.62
51	92995	0.99662	0.00338	314	92799	4161270	44.77
52	92641	0.99648	0.00352	326	92479	4068471	43.92
53	92315	0.99635	0.00365	337	92147	3975992	43.07
54	91978	0.99621	0.00379	349	91805	3883845	42.23
55	91629	0.99607	0.00393	360	91450	3792040	41.38

Continuation of the Table 1.14

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
56	91269	0.99590	0.00410	374	91083	3700590	40.55
57	90895	0.99575	0.00425	386	90703	3609507	39.71
58	90509	0.99558	0.00442	400	90310	3518804	38.88
59	90109	0.99541	0.00459	414	89903	3428494	38.05
60	89695	0.99522	0.00478	429	89482	3338591	37.22
61	89266	0.99501	0.00499	445	89045	3249109	36.40
62	88821	0.99482	0.00518	460	88593	3160064	35.58
63	88361	0.99460	0.00540	477	88124	3071471	34.76
64	87884	0.99437	0.00563	495	87638	2983347	33.95
65	87389	0.99413	0.00587	513	87134	2895709	33.14
66	86876	0.99388	0.00612	532	86612	2808575	32.33
67	86344	0.99361	0.00639	552	86070	2721963	31.52
68	85792	0.99332	0.00668	573	85508	2635893	30.72
69	85219	0.99302	0.00698	595	84924	2550385	29.93
70	84624	0.99271	0.00729	617	84317	2465461	29.13
71	84007	0.99235	0.00765	643	83688	2381144	28.34
72	83364	0.99200	0.00800	667	83033	2297456	27.56
73	82697	0.99161	0.00839	694	82352	2214423	26.78
74	82003	0.99120	0.00880	722	81644	2132071	26.00
75	81281	0.99075	0.00925	752	80907	2050427	25.23
76	80529	0.99028	0.00972	783	80140	1969520	24.46
77	79746	0.98977	0.01023	816	79341	1889380	23.69
78	78930	0.98923	0.01077	850	78508	1810039	22.93
79	78080	0.98864	0.01136	887	77640	1731531	22.18
80	77193	0.98802	0.01198	925	76374	1653891	21.43
81	76268	0.98732	0.01268	967	75778	1577157	20.68
82	75301	0.98659	0.01341	1010	74800	1501369	19.94
83	74291	0.98580	0.01420	1055	73768	1426569	19.20

Continuation of the Table 1.14							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
84	73236	0.98491	0.01509	1105	72688	1352801	18.47
85	72131	0.98397	0.01603	1156	71558	1280113	17.75
86	70975	0.98294	0.01706	1211	70743	1208555	17.03
87	69674	0.98180	0.01820	1270	69134	1138181	16.31
88	68494	0.98055	0.01945	1332	67834	1069047	15.61
89	67162	0.97918	0.02082	1398	66469	1001213	14.91
90	65674	0.97766	0.02234	1469	65036	934744	14.21
91	64295	0.97599	0.02401	1544	63530	869708	13.53
92	62751	0.97410	0.02590	1625	61945	806178	12.85
93	61126	0.97201	0.02799	1711	60278	744233	12.18
94	59415	0.96967	0.03033	1802	58522	683955	11.51
95	57613	0.96700	0.03300	1901	56671	625433	10.86
96	55712	0.96401	0.03599	2005	54719	568762	10.21
97	53707	0.96058	0.03942	2117	52658	514043	9.57
98	51590	0.95668	0.04332	2235	50483	461385	8.94
99	49355	0.95216	0.04784	2361	48185	410902	8.33
100	46994	0.94691	0.05309	2495	45758	362717	7.72
101	44499	0.94079	0.05921	2635	43194	316959	7.12
102	41864	0.93357	0.06643	2781	40486	273765	6.54
103	39083	0.92495	0.07505	2933	37629	233279	5.97
104	36150	0.91464	0.08537	3087	34620	195650	5.41
105	33064	0.90207	0.09793	3238	31457	161030	4.87
106	29826	0.88661	0.11339	3382	28146	129573	4.34
107	26444	0.86734	0.13266	3508	24699	101427	3.84
108	22936	0.84290	0.15713	3604	21140	76728	3.35
109	19332	0.81135	0.18865	3647	17509	55588	2.88
110	15685	0.76991	0.23009	3609	13873	38079	2.43

Continuation of the Table 1.14							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
111	12076	0.71431	0.28569	3450	10332	24206	2.00
112	8626	0.63853	0.36147	3118	7031	13874	1.61
113	5508	0.53341	0.46659	2570	4167	6843	1.24
114	2938	0.38938	0.61061	1794	1969	2676	0.91
115	1144	0.20804	0.79196	906	619	707	0.62
116	238	0.04202	0.95798	228	86	88	0.37
117	10	0	1	10	2	2	0.20
118	0	0	1	0	0	0	0
119	0	0	1	0	0	0	0

The efficacy and reliability of the express-method are illustrated by the data obtained, while processing the yearly tables of the mortality rate (survival) of the male population of the Chernovtsy region (Table 1.15) [36].

Table 1.15

The values of the basic integral indices of the health of the male population in the Chernovtsy region in 1990

№ o/n	District	x_{0l}	α_l	γ_l	x_{0e}	α_e	γ_e	q_0	e_0^0	R_l	R_e	τ
1	Vizhnitsa	100.01	1.189	1.653	119	2.592	1.842	0.0035	66.96	0.9683	0.9992	12.29
2	Gertsa	100.01	0.891	3.077	119	2.320	2.682	0.0084	70.31	0.9833	0.9978	7.083
3	Glyboka	100.36	0.809	4.512	119	2.205	2.485	0.0155	68.65	0.9880	0.9980	6.256
4	Zastavna	100.01	0.850	3.443	119	2.314	2.087	0.0111	66.95	0.9899	0.9989	7.736
5	Kel'mentsy	100.01	0.521	4.093	119	2.270	2.620	0.0109	69.73	0.9886	0.9976	5.441
6	Kitsman	100.01	1.127	2.426	119	2.473	1.847	0.0060	66.28	0.9907	0.9997	11.97
7	Novoselitsa	100.01	0.984	3.601	119	2.335	2.188	0.0096	67.71	0.9943	0.9993	7.311
8	Putila	100.03	0.837	3.137	119	2.315	2.540	0.0091	69.37	0.9864	0.9972	5.522
9	Sokiryany	100.76	1.376	1.325	119	2.716	1.924	0.0018	68.20	0,9453	0.9995	16.44
10	Storozhinets	100.01	1.897	3.903	119	2.312	2.039	0.0114	66.62	0.9890	0.9989	8.035
11	Khotin	100.01	0.979	3.259	119	2.240	2.241	0.0146	67.46	0.9925	0.9996	10.22
12	The region	100.43	0.976	4.914	119	2.338	2.210	0.0094	69.86	0.9860	0.9995	11.63

x_{0l}, α_l, γ_l – the parameters of the process of survival in conformity with the linearization technique [46]; x_{0l} were equal to 101 years [36] in case of the former information base;

$x_{0e}, \alpha_e, \gamma_e$ – the same parameters according to the express-method;

R_l, R_e – the coefficients of a correlation of the indices according to comparable techniques (R_e - according to the express – method) to verify hypothesis $l_x/10000 = l(x)$, where $l(x)$– the numbers whose values are calculated from the formula of the law of survival of populations+);

τ – the test of validity of a difference between R_l and R_e.

The sample was taken for the period from 1989 to 1990 for the purpose of receiving more correct information – closer to the year of the population census based on the data of the full dates of birth and death of all the deceased which were necessary for a calculation of the comparative indices of the procedure. The characteristics, showing a high accuracy and reliability of using the express – method as compared with the traditional one are adduced in the three last columns of the table. R_l and R_e – in it are the correlation coefficients between quantities $l_x/10000$ of the table of mortality (survival) and functions $l(x)$ obtained in conformity with the technique of linearization and the express – method respectively+) and τ - a statistical criterion of an evaluation of a difference between R_l and R_e. Their values permit to receive more accurate results, since R_e is essentially closer to 1 than R_l.The statistical significance of a difference between R_l and R_e is corroborated by values τ calculated by using Fisher's transformations (according to [1]). The least of the values τ, as it is evident from the table, equals 5.441 and with the level of significance no less than 99.9 % it is necessary that τ should exceed 3.09. It gives accuracy sufficient for calculations of other indices of the tables of mortality (examples are not cited due to the cumbersome character of such tables). Differences between indices and obtained in comparable techniques are explained both by a specification of the value of the age limit and by the fact that the express-method is more exact than the technique of linearization.

+) l_x in the tables of mortality (survival) denotes the number of those surviving persons till age x, calculated per 100 thousand newborns, whereas $l_{(x)}$ denotes a relative number surviving to age x calculated according to the law of the survival of populations at prescribed α, and x_0

It is true, the method of the least squares used without linearization, is more exact, but just like the method of linearization, requires a preliminary construction of the table of mortality on the basis of complete data about the gender- age structure and the mortality of the population and these, as it has been mentioned, are not always available to practitioners of the public health system.

Although and are calculated according to new data in conformity with the express-method, their values influence slightly (within a 2-3 % error) on the control characteristics of the average life span of the population cited above, so long as, first of all, a correlation between parameters and is reverse and, in the second place, the values of and established on the basis of real values of the average life span and infant mortality (e_0^0 and q_0) in all the regions of Ukraine do not reach the "normative" values so far.

By the found normative and reference values (and) specifically for the needs of practical public health care in addition to reference and normative mortality tables were constructed:

- "normative" and "reference" survival curves (Figures 1.7 - 1.9) [36, 38].

- a table of the "Criteria for assessing livability of territories for the population living" [48] and the scheme of dividing territories in high-risk areas, control and safety associated with this table (Table 1.16)

Obtained results and tables can be used for current and projected needs of the healthcare practice today. They first gave the regulatory basis for obtaining upper estimates of quality of public health and its protection system. Comparison of actual parameters with these, control ones, should be the basis of decision-making in health care.

Nature of the law of survival of populations is such that for growing, large values of and (internal and external viability of the population) survival function $l(x)$ approaches on the graph to a rectangular shape, indicating improvement in the quality of the process of survival.

At the same time and are essentially bounded above since:

- value of (on the basis of its content) is dependent on the quality and limitations of health of parents, quality of obstetrical and pediatric care $(\alpha < \infty)$;

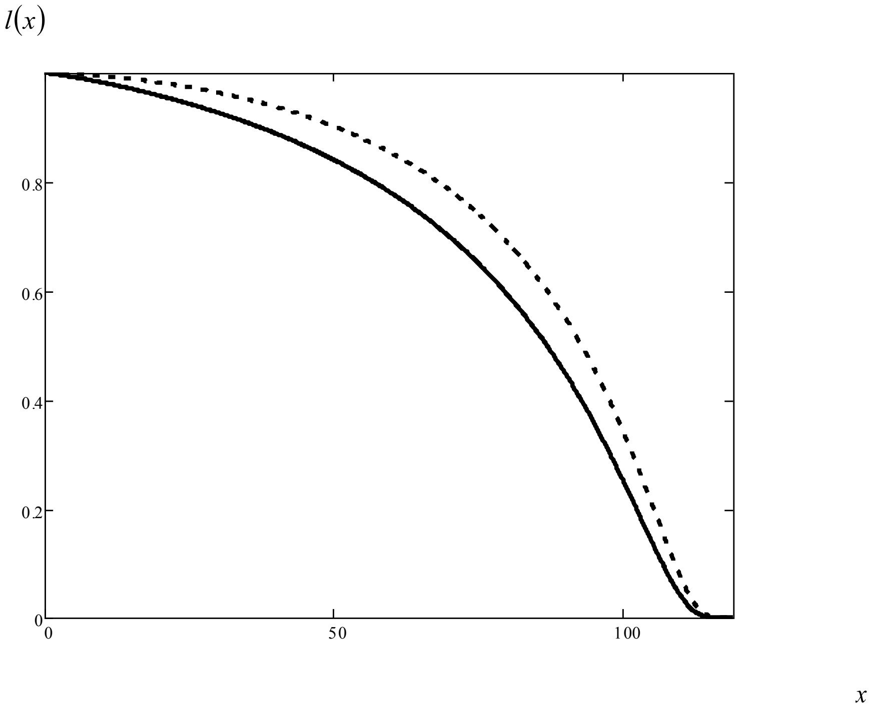

Figure 1.7. Normative (solid) and reference (dashed) curves of survival of the population as a whole

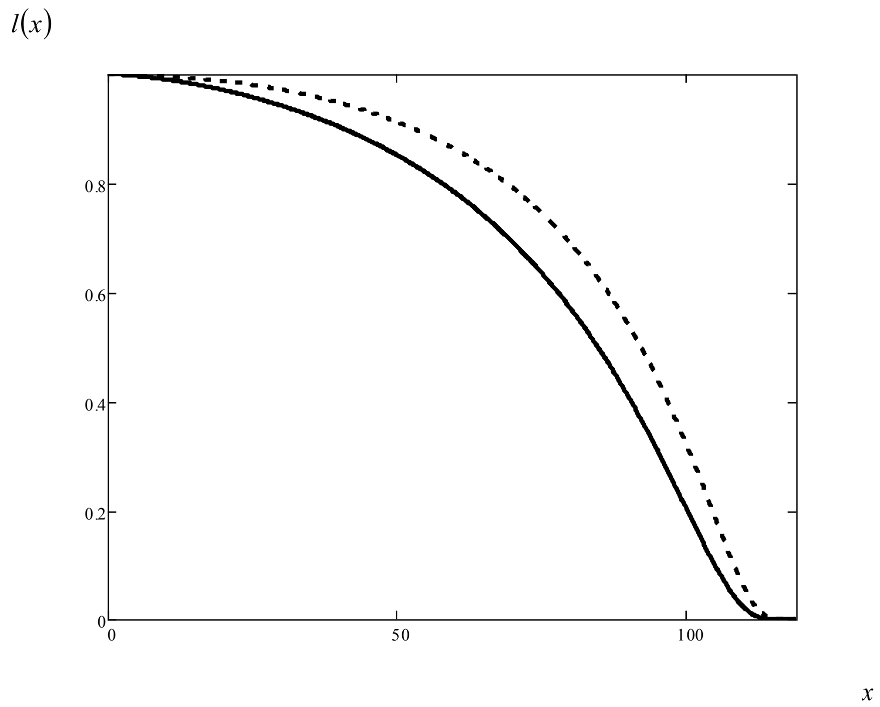

Figure 1.8. Normative (solid) and reference (dashed) curves of men's survival

- population cannot exist without interaction with the environment ($\gamma < \infty$);

- population cannot interact with the environment, not wasting (losing) its own "adaptive" resource (of life and health).

Therefore it was justified to define allowable values of α and γ by 95 % and 99.9 % limits of intervals (according to Student) in a purely statistical way based on a set of values α and γ by numerous tables of mortality.

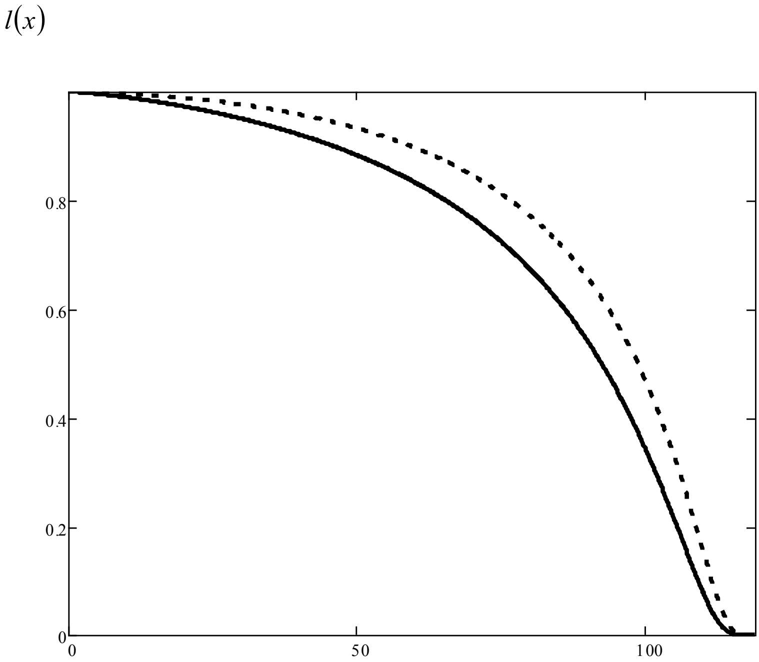

Figure 1.9. Normative (solid) and reference (dashed) curves of women's survival

Table 1.16

The evaluation criteria of the territories habitability

Population category	Zone of high risk	Zone of control	Zone of safety
Both sexes	$\alpha < 0.751$ $\gamma < 2.283$ $e_0^{(0)} < 63.02$	$0.751 \le \alpha \le 1.245$ $2.283 \le \gamma \le 3.736$ $63.02 \le e_0^{(0)} \le 80.24$	$\alpha > 1.245$ $\gamma > 3.736$ $e_0^{(0)} > 80.24$
Men	$\alpha < 0.845$ $\gamma < 1.144$ $e_0^{(0)} < 47.86$	$0.845 \le \alpha \le 1.447$ $1.144 \le \gamma \le 3.060$ $47.86 \le e_0^{(0)} \le 77.41$	$\alpha > 1.447$ $\gamma > 3.060$ $e_0^{(0)} > 77.41$
Women	$\alpha < 0.644$ $\gamma < 1.871$ $e_0^{(0)} < 55.86$	$0.644 \le \alpha \le 1.242$ $1.871 \le \gamma \le 4.719$ $55.86 \le e_0^{(0)} \le 84.50$	$\alpha > 1.242$ $\gamma > 4.719$ $e_0^{(0)} > 84.50$

Thus, the control integral parameters of public health α and based on the concept of “optimum”, i.e. the best characteristics of an object “population” in a particular environment.

Use of the given parameters on the system basis allows formulating management decisions as for protection and strengthening of the population health in some regions, control of efficiency of national and territorial general-social and targeted medical and social health improvement programs.

Here are some explanations for the Table use:

1) if the values of α are high and the values of are medium or low one should pay attention to the condition and quality of health care for the people of medium and elderly age (30-85 years old);

2) if the values of α are low and the values of are medium or high one should pay special attention to the condition and quality of health care for children, especially at the age of under 1, but at the same time it must be determined if in this case prevalence of innate pathology, accidents do not influence the parameters values as well as migration processes connected with movement of pregnant women before delivery to other regions and only taking into account the above circumstances the correction of preventive measures must be introduced;

3) in all the cases of getting low values of α or there should b paid attention to sanitary and medical conditions of the regions of people residence, conditions of people’s labor, providing with accommodation and quality of food, in other words, the conditions which form the way of life.

Control indicators of α and determine making traditional (trend) mortality tables as follows: the values of “normative” and “reference” values and are used for getting function of survival l_x in the first year of life. Further, based on it all other parameters of the table are defined.

It should be noted that no forecast built on actually observed health indicators, was supported in practice. The reason is that you can only predict trends, but only those that are based on the regular (not real!) characteristics (indicators) of predicted phenomena.

Based on this, *an accurate prediction of population health has now become feasible to determine due to the definition regular parameters of the law of survival of populations - and - and getting set of their values in the dynamics*. But for the forecast it is always necessary to use the "norms" and "standards" of these indicators.

At the same time it should be borne in mind that the *"control" values of "norm" and "standard" are floating values.* They always show the spatial and temporal fluctuations of factors (land, year, period), that is trends change under the influence of real dynamics of the phenomena. Their "blunting", by the way, is probably due to the influence of organizational, therapeutic and preventive effects, as well as other current events and phenomena, displays values of which underlie in the basis of regular trends.

We emphasize once again that the "norms" are values of indicators of this phenomenon, which are in principle achievable at this time. "Standards" are "forward-looking" values to which we should strive in the future, promising programs and strategy for action.

Accordingly, normative parameters can already be used in the development of programs of improving population health and environment of its residence. Figures close to them were laid down in the Annex 2 of the WHO policy "Health for All" for the European Region –"Health – 21" [62], in which in the landmarks for 2020 for the Europeans' health desired parameters of mortality in different groups of people (age, sex and disease) are recommended; values of these parameters coincide with the parameters determining the trend towards better health of the population - to its normative characteristics (according to our development).

§ 1.9. Population adaptation and life cycle stages

Adaptation is a process of adaptation of the system object to changing environmental conditions, these are kinds of congenital and acquired adaptive activity of organisms at the cellular, organ, system and organism levels (K.M.Sytnik et al [35]).

Population adaptation is associated with adaptation of emerging population to its environment. Its research is of greatest interest to social medicine and socio-ecology, as population adaptation characterizes the behavior of species in different conditions of existence.

The genetic structure of the population adaptation is very difficult. Until recently the development of this research part has been constrained due to lack of knowledge and measurement of these periods - periods of adaptation. The problem was first constructively disclosed when used in structuring periods of life parameters of the law of survival of populations.

The research results allowed identifying three main phases in the life cycle of generations: adaptation, adapted existence and maladjustment (see Fig. 1.10).

Symbols of such periods are: t_{ab} –“maturity” age, $0-t_a$ – an adaptation period, t_{med} – median age of survival, $t_a - t_d$ – period of adapted, stable existence, $t_d - x_0$ - the period of maladjustment of conditional generation, t_{mod} – modal age of death (t_{ab} and t_a when $\alpha > 1$ equal to 0).

The concept (and value) of the duration of these periods is associated with the magnitude of fluctuations of 2 basic parameters of the law of survival - parameter α determining the fluctuations of natural and artificial selection at an stage of life, that is, the conditions and the quality of social protection of the health of newborn generation and the parameter defining the fluctuations of natural and artificial selection in middle and older age groups, that is, the level and quality of social protection of population health in the “mature” age period of life.

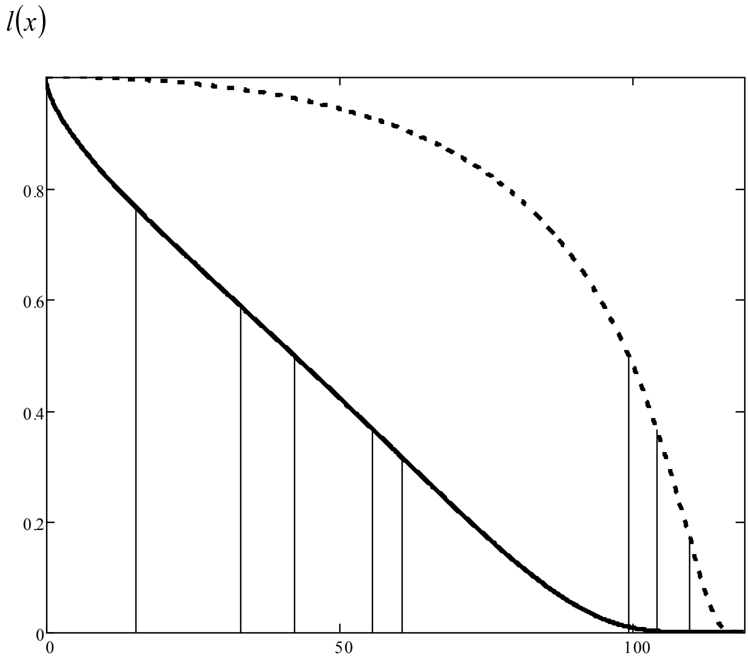

Figure 1.10. Life cycle of generation: the main periods (solid curve - when $\alpha < 1$, dashed - at $\alpha > 1$). "Hatched" parameters of the life cycle of conditional (and real) generation are dotted curve. The parameters of curves are as follows: for the solid curve – $\alpha = 0.644, \gamma = 1.144$, for the dashed curve - $\alpha = 1.765, \gamma = 6.306$

From medical-demographic point of view the I-st base period of population adaptation (adaptation period) is understood as a period during which the extinction rate of members of the generation is reduced to a minimum value (bio-social limit).

The II-d period –"stable" or "adapted" functioning (existence) - is a period in which the rate of the population extinction is preserved at a relatively low level of changing.

The period of "maladjustment" is due to start of a sharp increase of the rate of extinction and the transition to mass extinction until the last member of generation (demographic reality).

Actual duration of the individual periods of adaptation is calculated, and on the survival curve (longevity scale) they are defined at some particular points, that is different from others. They are fixed on the curve as inflection points of curve and numerically determined by the formula.

Specifically, the adaptation period (0-t_a) is defined at (α<1) as an interval from birth to the minimum rate of extinction, that is, as the first point at which the condition $d^2l/dx^2 = 0$; at $\alpha > 1$, this period equals zero.

Within this period the age of “maturity” - t_{ab} is singled out. It corresponds to the minimum mortality strength and unambiguously, as stated earlier, is determined by parameters x_0 and α, i.e. is biologically determined value, determined by age biology. This value is unique to the individual generations and areas of residence. Accordingly, the calculations showed that at the age limit (x_0) of 119 its greatest value is 20.47 years old and reached at $\alpha = 0.293$. This age is significantly dependent on the environmental conditions in which maturation takes place, and defines the concept of “maturity” of generations in different territorial conditions of Ukraine, as well as other countries. *The value* $\alpha = 0.293$ *can be regarded as the minimum required value for the conservation of homo sapiens species*, as at smaller α and not too large γ (compared with unity) mortality under the age of 1 reaches high and therefore dangerous values in the terms of survival. For example, in the practical implementation of the survival process with the parameters $x_0 = 119, \alpha = 0.1,\ \gamma = 2$ the mortality under the age of 1 would have to be 269 per 1,000 live births. And to make it not more than 10 per 1,000 live births at the same α, γ should be at least 62.22.

The period of “stable functioning” is defined as a period between the end of “adaptation” period and the beginning of the period of “maladjustment”.

Accordingly, the beginning of the period of “maladjustment” t_d is determined by the age in which “the degree of disintegration of the population” $l \ln l$ reaches its maximum, i.e. at $l(x) = 1/e$. The modal age of death t_{mod} in which the extinction rate reaches a maximum is determined by the latter at $\alpha < 1$ and the only inflection point of the curve at $\alpha \geq 1$. Maladjustment period ends as well as the entire survival curve by age limit.

From the point of view of survival *for the temporary parameters of the survival curve it is important not so much a scope, but the degree of approximation of the actual parameters of the survival curves to the "normative" or "reference" values*.

Let us note that the period of maladjustment can be determined differently - as the most distant point from 0 (a point of generation origin) in which biological age begins to outstrip calendar one.

Biological age is the environmental "own" time of population in which the function of survival becomes a function of the Poisson distribution, and the parameter of the Poisson distribution is the reciprocal of the age limit (x_0), that is, the environmental invariant value. Therefore, biological age t_b is associated with the calendar one x based on the following ratios:

$$t_b = \frac{x_0 (x/x_0)^\alpha}{\gamma (1 - x/x_0)}. \qquad (1.23)$$

Accordingly, the age of "maladjustment" beginning can be defined as the root of the equation $x_0 (x/x_0)^\alpha - x\gamma (1 - x/x_0) = 0$. This equation always has a root $x = 0$, and for particularly "bad" processes of survival for which α and γ have small values it is the only one. This is typical, for example, for process with $\alpha =$ 0.644; $\gamma =$ 1.144 - in this process of survival generation intensively "ages" from birth. On the other hand, for the process $\alpha = 1.765; \gamma = 6.306$ maladjustment starts only at the age of 102.20. And in the hypothetical process with $\alpha = 0.293; \gamma = 62.22$, when the "genetic quality" of the population is on the edge of species conservation, but the environment is "super benevolent" for its survival maladjustment begins only at the age of 117.07. Accordingly, the age of maladjustment beginning can be any value in principle - from zero to the maximum age. In the same limits the adaptation period may vary and, bearing in mind not only its "biological" part determined by α and x_0, but also the "social" part defined by all three parameters (α, γ and x_0).

The obtained opportunity of in-depth (by precise measurements) considering of the duration of individual adaptation periods and the ability to determine their duration depending on the socio-environmental conditions of the living environment, its "benevolence" from the standpoint of preserving health resource, created controlled conditions for these processes regulation by society that makes this unit of knowledge one of the basis for management of information system in health care and socio-ecology.

An essential complement to this knowledge is factorial dependence of population health indicators in different age stages of life discovered by the authors: for the first time there were singled out peak (wave) fluctuations of impacts on human health and life expectancy of congenital or environmental factors.

From a mathematical point of view singling out became possible thanks to the fact that any function defined on a finite interval can be represented by a Fourier series. Such function is a function of the form:

$$l(y) = \exp\left[-\frac{y^{\alpha}}{\gamma(1-y)}\right]. \qquad (1.24)$$

In the segment $[0,1]$ this function can be represented as:

$$l(y) = a_0 + \sum_{n=1}^{\infty}\left(a_n \cos 2\pi ny + b_n \sin 2\pi ny\right). \qquad (1.25)$$

At the same time the expansion coefficients are defined as follows:

$$a_0 = e_0^{(0)}/x_0, \qquad (1.26)$$

$$a_n = 2\int_0^1 l(y)\cos 2\pi ny\,dy, \qquad (1.27)$$

$$b_n = 2\int_0^1 l(y)\sin 2\pi ny\,dy. \qquad (1.28)$$

Since sinus at 0 equals 0, and the cosine - 1, we consider "cosine" waves to be related primarily to heredity, and "sinusoidal" to a way of life. We believe that they are conditionally associated with some yet little studied "factors" that we enumerate by their "contribution", i.e., we assume that factor 0 is associated with the contribution a_0, factors 1 and 2 - with contributions a_1 and b_1, accordingly, factors 3 and 4 - with the contributions a_2 and b_2 thus, factors 5 and 6 - with contributions a_3 and b_3 respectively and so forth.

Limited to the first seven "factors" there was made the following table of their influence at different ages (see Table 1.17).

Table 1.17

The effect of the integral biological and socio-environmental factors on the preservation (loss) of the health resource by the generations (average life expectancy) in the separate intervals of their life cycle (for both sexes combined)

No.	Factor, name	Years of maximal influence	Years of zero influence
0	Heredity and lifestyle	Equally affecting the entire life cycle	
1.	Heredity	0,60,119	30,90
2.	Lifestyle	30,90	0,60,119
3.	Heredity	0,30,60,90,119	15, 45, 75,105
4.	Lifestyle	15, 45, 75,105	0, 30,60,90,119
5.	Heredity	0, 20,40,60,80,100,119	10, 30, 50, 70,90,110
6.	Lifestyle	10, 30, 50, 70,90,110	0, 20,40,60,80,100,119

In more general terms, "odd" factors numbered $2N-1$ are associated with cosine "waves" and calendar age of their greatest impact can be defined as $x_{n\max} = nx_0/2N, n = 0..2N$, and calendar age of their zero influence as $x_{n0} = (n+0.5)x_0/2N, n = 0..2N-1$. "Even" factors numbered $2N$ (besides zero) are associated with sinusoidal "waves", and calendar ages of their greatest impact can be defined as

$x_{n\max} = (n+0.5)x_0/2N, n = 0...2N-1$, and calendar age of their zero influence as $x_{n0} = nx_0/2N, n = 0...2N$.

These factors are clearly identified so far only from the standpoint of "internal – external" effects: three of them (see Tabl.1.17) are predominantly in the sphere of the biological factors (heredity), the other three are predominantly of social orientation. Based on the content characteristics of the parameters of the law of survival of populations, the first three factors are mainly determined by the parameter α - innate vitality, the other three –by the parameter γ, external vitality to preserve life and health. According to the table, the effect on the average life expectancy for the 1st year of life after the birth is made only by the factors with odd numbers (1, 3, 5). At the same time, the value of the factor 1 is the biggest at the ages of 0, 60 and 119 years old, and decreases to zero when the population reaches ages of 30 and 90 years old, factor 3 – at the age of 0, 30, 60, 90 and 119 years old, factor 5 – at the age 20, 40, 60, 80, 100 and 119 years old. Least of all biological factors affect the health and survival in the following age groups: 1st factor – at the age of 30 and 90 years old, the third factor – at the age of 15, 45, 75 and 105 years old, 5th - at the age of 10, 30, 50, 70, 90 and 110 years old. If the effect of these factors at the limit age has serious biological basis, then their impact in other age groups require in-depth special studies (the results of which may affect the health care arrangements!).

All the factors of social impact are even (2, 4, 6). Thus, the factor 2 reaches its maximum impact at the age of 30 and 90, the factor 4 - at the age of 15, 45, 75 and 105 and the factor 6 - at the age of 10, 30, 50, 70, 90 and 110. The least impact on the health and survival of these factors are in the following age groups: the second factor - at the age of 0, 60, 119, the fourth factor - at the age of 0, 30, 60, 90 and 119, the sixth factor - at the age of 0, 20, 40, 60, 80, 100 and 119.

Both the action of odd factors and action of even factors in the limit age are justified. The action of the even factors in other age groups also require specific studies to single out groups of lifestyle factors, the dominant effect of which in this age plays a crucial role in the health of people and determines their lifespan. (Perhaps these factors determined the existing concept of “social” and “biological” impact on an individual and his health).

Presented for the first time age-population structuring of factors by the strength of their impact introduces the concept of *vibration nature of the influence of “biological” and “social” processes throughout life* in the traditional knowledge and a need of substantial correction of purposes of diagnostic procedures during medical examinations, as well as focus of preventive and therapeutic measures, its correction based on the age of people.

At the same time, the data revealed hitherto unknown knowledge about *fluctuations biorhythms of population health in the life cycle*.

At the same time, the analysis shows that while direct “factorial” description of the survival curve $l(x)$ it is necessary to take into account many “factors”. Thus, to describe the survival curve of the population of Ukraine with the parameters $\alpha = 0.675, \gamma = 2.964$ for 31 December 1998, 281 factors must be taken into account, where the required accuracy, thus, is not provided, as illustrated in Figure 1.11.

$l(x)$

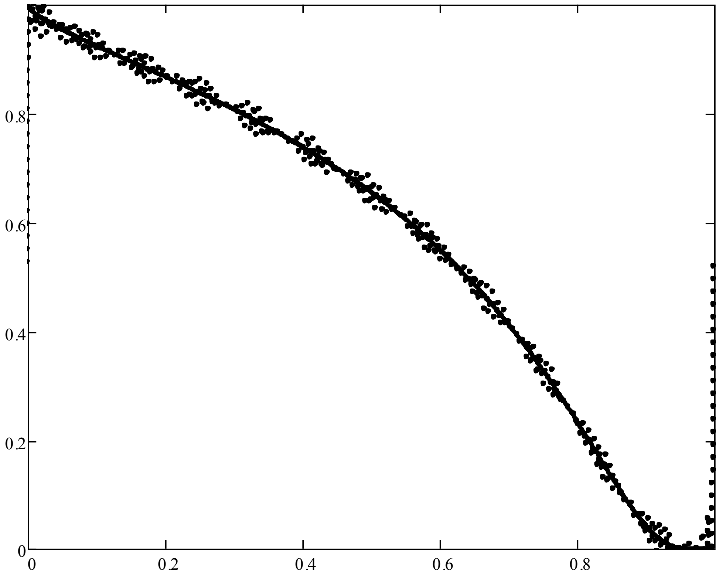

Fig. 1.11. The difference between the survival curve of the population of Ukraine for December 31, 1998 with parameters $\alpha = 0.675, \gamma = 2.964$ (solid curve) and the survival curve, made by 281 "factors"(141 harmonics) (dotted curve), accuracy $\varepsilon = 3.881 \cdot 10^{-4}$

Therefore it is more correct to define these integral "factors" differently, namely, by the deviation from the actual survival curve $l_r(y)$ from the desired $l_d(y)$ such as "normative" or "standard". With the help of y a dimensionless variable x/x_0 is denoted. By the definition of the survival function, the difference $l_d(y) - l_r(y)$ equals 0 (when $y = 0$ and $y = 1$). On this basis, it can be represented as follows:

$$l_d(y) - l_r(y) = \sum_{n=1}^{\infty} c_n \sin(\pi n y), \qquad (1.29)$$

where the coefficients c_n are defined as follows:

$$c_n = 2\int_0^1 [l_d(y) - l_r(y)] \sin \pi n y dy. \qquad (1.30)$$

Each harmonic is responsible for a “factor” in (1.29). However, since the infinite series (1.29) cannot be considered, it is terminated at a certain number N. Termination criterion can be such inequality:

$$\int_0^1 \left[l_d(y) - l_r(y) - \sum_{n=1}^{N} c_n \sin(\pi n y) \right]^2 dy < \varepsilon, \qquad (1.31)$$

where $\varepsilon -$a set level of accuracy. For example, if the actual curve has parameters $\alpha = 0.644, \gamma = 1.144$ and desired - $\alpha = 1.765$, $\gamma = 6.306$, then when $\varepsilon = 10^{-6}\ N = 40$, so the lowest age at which these “factors” strongly influence equal $x_0/2N$, i.e., about 1.5 years old, and the greatest - $x_0(1-1/2N)$ that is approximately 117.5 years old. If we assume that the real curve has parameters (a curve for Ukraine made according to the official data on infant mortality and life expectancy at birth on December 31, 1998), then with the same accuracy $N = 21$, and hence the lowest age at which these “factors” affect much is 2.83 years old, and the highest - 116.17 years old.

Mathematical correctness of this approach is illustrated in Figure 1.12, 1.13.

It should be noted that in such a way defined “factors” are not divided into factors of “heredity” and “lifestyle” as well as in Table 1.17, but the bigger the “number” of factor (harmonic), the more the role of heredity in it. In general, however, in such a way some “factor” with the number N has the greatest impact at the ages $x_{k\max} = x_0(k+0.5)/N$, $k = 0,1..N-1$. This factor has zero impact at the ages $x_{k0} = x_0 k/N, k = 0,1..N$.

However, it should be borne in mind that in less developed countries, which may be characterized by the worst of the curves on Figure 1.10 along with high mortality from children’s congenital malformations there can be high mortality from infectious diseases, malnutrition, accidents and armed conflicts and these are

Δl

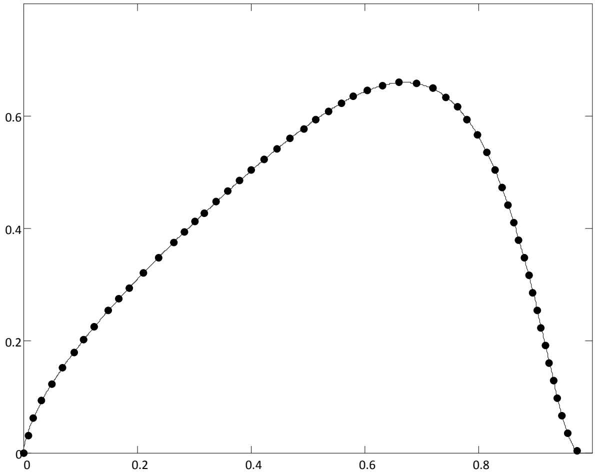

Fig. 1.12. The difference between "risk" of the survival curve with parameters $\alpha = 0.644, \gamma = 1.144$ and "normative" survival curve with parameters $\alpha = 1.765, \gamma = 6.306$ is determined directly (solid curve) and by expansion in 40 "factors"-harmonics (dotted curve)

Δl

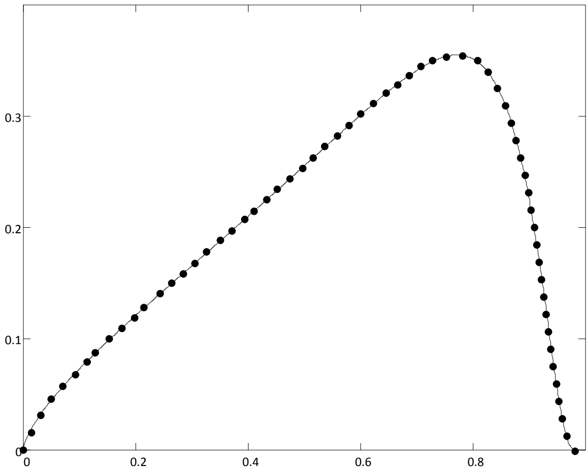

Fig. 1.13. The difference between the actual survival curve for Ukraine for December 31, 1998, with parameters $\alpha = 0.675, \gamma = 2.964$ and "normative" survival curve with parameters $\alpha = 1.765, \gamma = 6.306$ determined directly (solid curve) and by expansion in 21 "factor" - harmonic (dotted curve)

not “biological” and purely “social” factors or “lifestyle factors”, although they also can cause a low value of parameter α.

Further research, especially from the content standpoint, the deep structure of each of these, and, if necessary, other integral factors will enable to better understand the dynamics of population processes, the ability to regulate the duration of periods of life and related with them health care system performance, the effectiveness of existing and new programs to improve population health.

§ 1.10. The evaluation of habitability of the territories for population habitation on the basis of the integral parameters of its health

In the law of survival of population the concept of “environment” is traditional for socio-medical research: environment is a set of internal and external events (complex of natural bodies and phenomena) influencing the population and causing a corresponding reaction in it by the direct and indirect effects.

There is a variety of derivatives of the term depending on the semantic accents and the degree of their specificity (biotic, abiotic, external, internal, and anthropogenic environment and others).

In traditional hygiene the quality of the environment depends on the content of certain hazardous substances in water, air, soil and other environments. All of them somehow affect survival of population.

But the quality of the living environment of people is not only the quality in terms of hygiene, but also its social quality - traditions, laws, economy, health care, income level, policies to protect human health and so on. These factors together determine the concept of “socio-ecological environment of living of the population”, which affects its survival and health.

They, along with the physical environment should be integrally reflected in the law of survival of population that was taken into account by introducing an independent (in the formula of the law) parameter γ - as an integral indicator of environmental quality. This option combined all complex of environment concepts derivatives: external - the aggregate of the forces and phenomena of nature as the physical environment of people (its objects and space), including altered by human activity, and internal - population ones, where population as a host determines the development and the vital activity of its members and the quality of the entire living environment.

Here the population activity to preserve and promote the safety of its own health is connected with the formation of healthy and safe areas of existence and uses a strategy of organization to monitor and control the interaction between subject (a human, a group of people) with its environment, the results of which provide the desired quality of the state of the interaction region [54]. Specifically, the study of indicated specific dependencies provides information to manage their quality.

Population mortality is, in fact, a mirror of environment. The model found by the authors, which mortality conforms to – is actually the essence of the law of survival of population. But the indicator of environmental quality - γ was extracted in this model due to the targeted studies.

So, by splitting the sample in different regions (i.e., in case of variation in environmental conditions) there was determined which of the parameters of the law change little, which ones change more. First the values of the indicators were not of interest. It was important that they were different.

In the experiments, it was found that the **age limit** (x_0) varies relatively little (around 1-2%) – so, **it is virtually independent from the quality of the environment**.

The indicator of internal viability (α) had a significant effect on the shape of the survival curve, the shape of the curve of the force of mortality and distribution pattern of mortality, especially in younger age groups. From this it was concluded that it is the interaction of the population with the environment at the internal level: it is - a result of the parental inheritance, fetal development, the quality of obstetric and neonatal care, living conditions of the family in the early years of life. This index **fixes the quality of environment created by ancestors of newborn generation, and its influence is preserved on the interval of life, held under the direct influence of parents**.

When considering sampling in different regions **the indicator γ (external viability)** defined mortality (survival) rate in all age groups - from birth to the age limit, but more significantly in the so-called “mature” age groups. (its numerical fluctuations were the biggest). Consequently, **it integrally reflects the impact of the environment of human existence, their survival, when generation itself**

begins “tuning” the environment to meet its needs - here it is the most pronounced effect. It is the quality of environment which is a boomerang from actions of both generation and its ancestors. This integral indicator proved to be the most manageable compared with the other two indicators of elemental formula of the law - α and γ.

The parameter γ influences all temporal characteristics of the life cycle of generations: much weaker in the first years of life (up to 20.47 years old) and very strong in the middle and older (i.e., “mature”) ages. For this reason, it was considered as an indicator of the “external” viability and/or indicator of “environmental quality” formed by the people themselves in their places of residence.

And again: if the parameter α was for generations of newborns as an indicator of their ability to adapt to the environment, then the parameter γ - as an indicator of their ability in adulthood to adapt the environment to their needs and requirements. However, taking into account that mortality tables are formed by the method of “conditional generation”, which is obtained by means of a kind of “gluing” of segments of real generations, the quality factor of the environment reflects not its quality, which for a given generation of newborns can be manifested in the distant future, but that one which it is at the time of the study, and which it will most likely be if a new generation will exactly copy the lifestyle of its “ancestors”, by which it is meant not only the parents, and in general all older contemporaries of this generation living in the study period in the study area.

From considered standpoints traditional hygienic indicators are private, and the indicator of environmental quality (γ), introduced by us, is a function of them taken together with the social indicators of quality of the living environment. Thus, if it was impossible to access its integral measurement from private data, then with the release of the system kernel - health and survival of the population and their changes, it has become real to have an access to the generalized integral index of the environment (and measured in terms of public health). Besides if the connection of environmental factors with health and survival of the population was determined approximately (using correlations) now, using the law of survival of the population, when stratified by factors, mainly affecting people's health you can find their direct indicators and define the role and place of each of them in the aggregate impact on the health and survival of people in all stages of life.

This aspect virtually allows reconsidering methodological basis of the part of hygienic disciplines.

In addition, **the law of survival of populations allows formulating requirements for the quality of living conditions of population**, based on the requirements to the relative number $l(x_f)$ of individuals surviving to the fixed age x_f, for example, pension one.

Thus, for a given α the requirement to γ can be formulated as such inequality:

$$\gamma \geq \frac{-(x_f / x_0)^{\alpha}}{(1 - x_f / x_0)\ln[l(x_f)]}, \qquad (1.32)$$

where $l(x_f)$ – a relative number of individuals surviving from birth to the fixed age x_f. This can be illustrated by Fig.1.14.

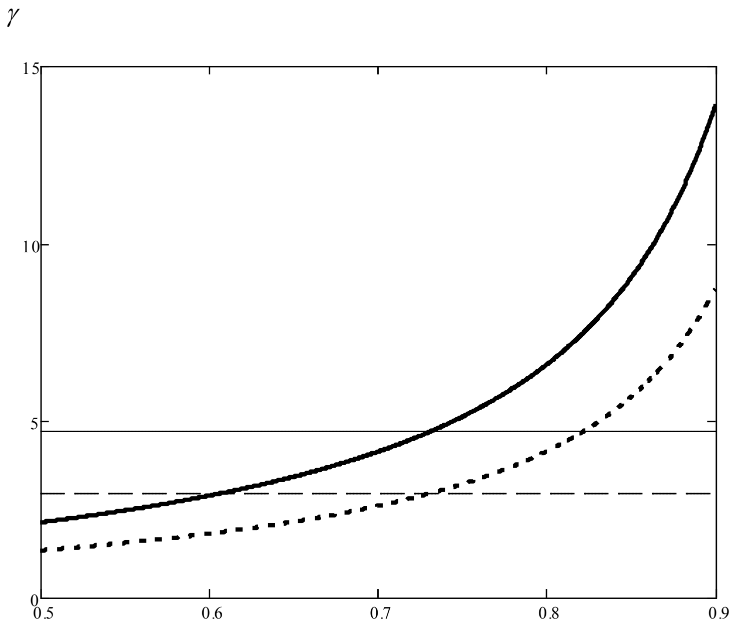

Fig.1.14. Dependence of the quality of the environment on the relative number of persons surviving till the age of 65 at $\alpha = 0.675$ (solid curve) and $\alpha = 1.447$ (dashed curve). The first value took place in Ukraine on December 31, 1998, the second is normative. Straight lines correspond to values of γ : dotted - normative, solid - occurred in Ukraine on December 31, 1998

Fig.1.14 shows that one and the same proportion of people surviving to a specified age while reducing the environmental quality factor (γ) if the value α increases, that is, the quality of the gene pool improves.

Dependence of the adaptation period on the factor of the environment quality γ at different values α is shown in Fig.1.15.

This figure shows that adaptation occurs faster if the value of γ is bigger, and if the values γ are the same - the bigger the value of α, the faster the adaptation. (However, as mentioned above, if $\alpha \geq 1$, then the period of adaptation $t_a = 0$).

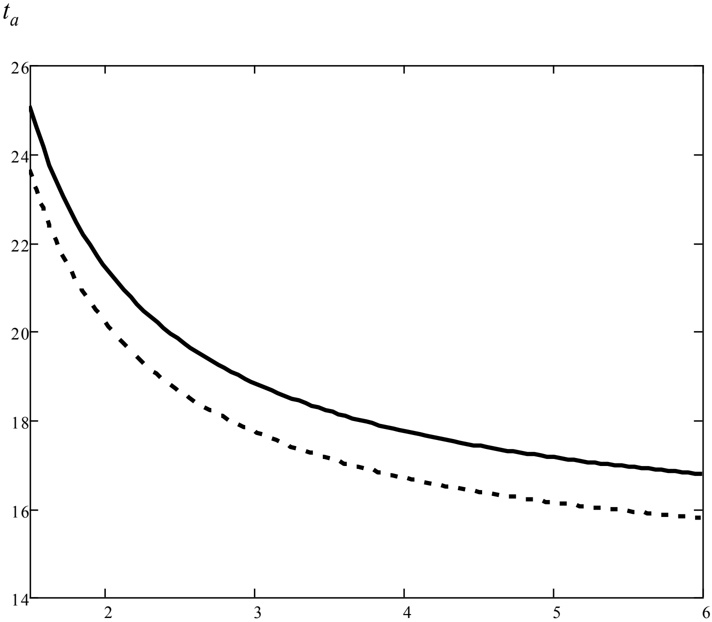

Fig.1.15. Dependence of the adaptation period t_a on the factor of the environment quality γ at $\alpha = 0.644$ (solid curve) and $\alpha = 0.675$ (dashed curve)

According to the above-described properties of the law of survival of population parameter γ is not included in the basic differential equation of survival function.

Environmental parameter γ with respect to this equation is the constant of integration, that is, γ very clearly characterizes the environment and the changes made in it by the activities of the population. In this case, the function of α and γ - $F(\alpha,\gamma)$, as the implementation of internal and external viability characterizes the degree of conversion (realization) of the resource of health and life of a generation in its life resource.

The latter, according to the above second theorem of law of survival (§ 1.5), cannot be fully realized, for it is always $F(\alpha,\gamma)<1$. And according to the first and third theorems of the law of survival of population the object “population” cannot exist without interaction with the environment and the amount of interaction will always be greater than zero (0), i.e., while interaction the “resource of vitality and viability” is always consumed.

Based on this, we can conclude that the average life expectancy ($e_0^{(0)}$) will always be less than the age limit, although it may approach it arbitrarily close (just as the third law of thermodynamics does not forbid to approach closer to absolute zero temperature as close as you like and the 2nd start does not prohibit the creation of heat engines with efficiency arbitrarily close to 100%, though not equal to this value).

Thus, the more favorable the environment, the more quickly and the more complete is the adaptation to it (if $\alpha < 1$) the resource of health and life (viability) of conditional generation is converted to its vital resource - both at $\alpha < 1$ and at $\alpha \geq 1$.

The attempts to measure and differentiate the population (of the territory, country) by the quality of the environment has long been known (constant “social” or “background” component in the B.Gompertz-W.Makeham’s model of survival [70, 73]). At the same time, the researchers [2, 7, 20, 31, 53, 57, 60] relate these parameters with the development of territories and a person, but do not emphasize what aspect of the development is in question, that is, the development of which contributes to a reduction of artificial indicators of mortality force introduced in the formula.

In the law of survival of populations the indicators α and γ are meaningfully clearly marked – these direct indicators of population health and fluctuations of their values reflect the degree of development and utilization of species and innate health resources measured in years of life. Also it is clearly indicated that the parameter α (internal viability) reflects the degree of adaptation of the population (generation) to the living environment, its conditions, quality, structure and way of life in it. The parameter γ (external viability) determines the degree of adaptation by the population (generation) itself for its own existence, that is, this parameter takes into account the anthropogenic influence on the changes in the environment, its condition, quality and way of life in it. The effect of this measure (γ) is, as mentioned above, mainly manifested in the survival of "mature", the older age groups, actively transforming environment by their work, actions, laws and consequences of their influences.

At the same time, the quality of the changed environment is of integral (generalized) character (socio-environmental), including all aspects of physical and social ecology, and not only the level of consumption of goods and services and meeting the spiritual needs. This integral index can be called a level of "goodwill" of territories for the conservation and development of health or indicator of their "habitability" to preserve the health and lives of the child population and working people and pensioners meaning not only a certain set of eco-physical characteristics, but the presence of the aggregate of economic, social, moral, psychological and other preconditions for maximum preservation, restoration and use of own life resource by the society as a whole and each of its members.

To determine the parameters of habitability quality of areas there were taken control parameters of α and γ as the parameters of quality of health conditions or survival of population depending on the area of its residence.

Knowing that they are mutually consistent with the quality of the environment as integrity, where the population itself is actively functioning, both indicators (α and γ) were used for cross assessment of both population (its health) and its environment (its quality).

Moreover, since these ratios are determined from mortality tables, that is, in the scale and units of public health, then the obtained evaluation criteria of areas are also expressed (first time!) in scale and units of population health.

This approach allowed us to assess the population and environment of its living (and its states) in the same methodological and methodical manner and, therefore, allowed to use the results in a consistent management of both public health and "health" (quality) of the environment - areas of its life activity.

There were singled out and indicated **three levels of quality criteria for territories habitability for population** (see Table 1.16 (§1.8), Table 1.18).

• Level I - **high-risk zone**; in it the value of at least one of the parameters α or γ is less than the lower limit of 95% of corresponding indicator spread according to Student;

• Level II - **control zone**; in it the values of both parameters α and γ are more than the lower limit of 95 % spread according to Student, but at the same time, at least one of them does not exceed the upper limit of 95% spread according to Student;

• Level III - **safety zone**; in it the values of both parameters α and γ are above the upper limits of 95% spread according to Student.

In the following Table 1.18 there are numerical values of these levels and their graphical representation is in the Figure 1.12.

In this table, the symbols $\bigcup$ and $\bigcap$, respectively, are theoretic symbols of *union and intersection of sets*.

Table 1.18

Levels of territories habitability

Level I - **high-risk zone**	$(0<\alpha<0{,}644)\bigcup(\alpha\geq 0{,}644\bigcap\gamma<1{,}144)$
Level II - **control zone**	$[(0{,}644\leq\alpha<1.447)\bigcap(\gamma\geq 1{,}144)]\bigcup[(\alpha\geq 1{,}447)\bigcap(1{,}144\leq\gamma\leq 4{,}719)]$
Level III - **safety zone**	$(\alpha>1.447)\bigcap(\gamma>4{,}719)$

As an example, the evaluation of areas habitability in Figure 1.18 are indicated in the Chernovtsy region (by cross), Kiev (by square) and Ukraine in general (by diamond). The corresponding values of α and γ are obtained on the basis of official data on infant mortality and life expectancy at birth in Ukraine as a whole, its regions and Kiev in 1998. The diagram shows that Kiev is in the zone of high risk, and Chernovtsy region and Ukraine as a whole are in the control zone. The latter is due to the relatively high incidence of infant mortality and low life expectancy at birth in comparison with advanced countries (USA, Japan, the majority of the EEC countries).

Below in Table 1.19 estimates of the territories of 25 regions of Ukraine, AR Crimea, Kiev city and country as a whole are presented in accordance with the established criteria.

The table shows that Ivano-Frankovsk region and Kiev are in the high risk area and other areas of Ukraine and Ukraine as a whole are generally in the control zone.

For example, in Figure 1.16 the limits of variation of α and γ in the regions of Ukraine, Crimea and Kiev are shown by point rectangle determined on the basis of tabular data (Table 1.19). The Figure shows that if to handle official data on mortality of children under 1 year old and the average life expectancy at birth as of 1998, then the parameters of the health and survival of the population of Ukraine are far from standard.

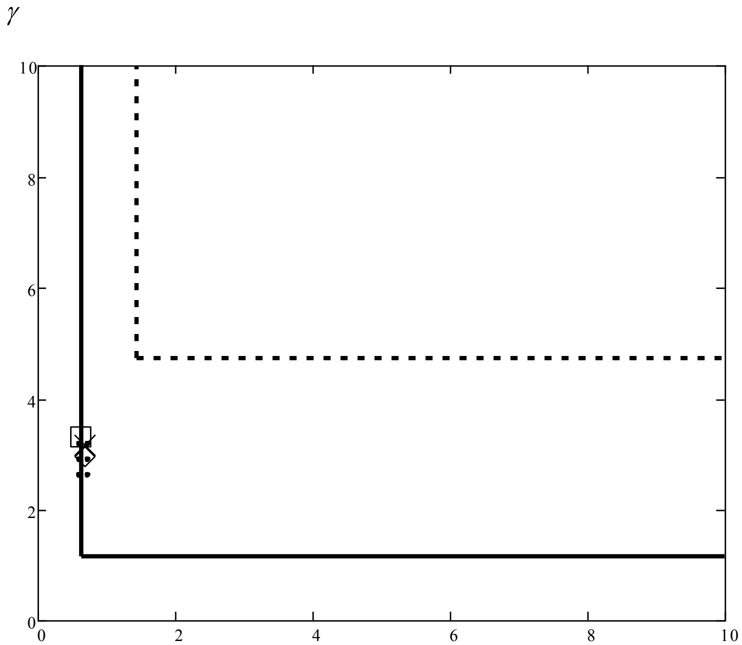

Fig.1.16. Location of zones of high risk, control and safety on the coordinate plane (α,γ):“corner” between the coordinate axes and a continuous loop - high-risk zone, “corner” between solid and dashed contours – control zone, rectangle above dotted outline - safety zone.

Table 1.19

The evaluation of different regions of Ukraine and the country as a whole in terms of habitability (C - control zone, HR - high-risk area)

Territory (region)	Mortality under the age of 1 year per 1000 live birth, q_0	The average duration of life expectancy at birth in years, $e_0^{(0)}$	Internal viability α	External viability γ	Zone
AR Crimea	15	67,10	0,651	2,893	C
Vinnitsa	11	68,10	0,731	2,854	C
Volyn	13	68,30	0,685	2,970	C
Dnepropetrovsk	14	66,00	0,684	2,704	C

Continuation of the Table 1.19

Donetsk	15	65,60	0,668	2,691	K
Zhytomir	13	67,50	0,687	2,869	C
Zakarpatie	12	68,40	0,693	2,964	C
Zaporozhie	14	67,00	0,676	2,833	C
Ivano-Frankovsk	15	70,10	0,624	3,332	HR
Kiev	13	66,30	0,695	2,715	C
Kirovograd	11	67,36	0,724	2,780	C
Lugansk	12	65,60	0,722	2,590	C
Lvov	14	70,20	0,652	3,284	C
Nikolaev	13	66,30	0,699	2,708	C
Odessa	14	66,20	0,684	2,727	C
Poltava	13	67,90	0,692	2,905	C
Rovno	13	68,60	0,674	3,028	C
Sumy	14	67,80	0,677	2,925	C
Ternopol	13	70,00	0,667	3,223	C
Kharkov	14	67,20	0,672	2,863	C
Kherson	14	65,70	0,682	2,675	C
Khmelnitskiy	12	68,70	0,703	2,982	C
Cherkassy	12	69,90	0,690	3,161	C
Chernigov	10	68,10	0,738	2,840	C
Chernovtsy	14	67,39	0,675	2,880	C
Kiev	16	69,70	0,613	3,304	Hr
Ukraine	**13**	**68,10**	**0,675**	**2,964**	C

However, the reserves and possibilities for their achievement exist in the country, as will be discussed below.

The main result of this research part is the following conclusion: *integral indicators of the law of survival of populations are indicators of internal and external viability of population (α and γ) suitable for cross-checking of population health and territories of its living* (general methodological, methodical and informational basis) and, accordingly, they are *suitable for the management system of population health and territories of its living as a single and indivisible integrity*.

§ 1.11. The analysis of the chronic diseases morbidity and prevalence, the effect of their consequences on preservation of the patients' health and population in general

Today disease prevalence rates are one of the leading characteristics of the manifestations of population health. The diseases prevalence is associated with changes in the external environment, seasonal and climatic conditions, population's way of life, prevention programs in residence areas and so on. It demonstrates some common patterns with other indicators of population health and today in the health care system morbidity is a key parameter in the organization of medical care, defining the requirements for the different types of medical and preventive care, resources providing and, in particular, health care peopleware [4].

Analysis of the population morbidity is a key component in the work of medical and preventive treatment facilities, both in current and future one - in the development of short -, medium - and long-term programs of activities. At the same time, modern methods of statistical study of morbidity, having many errors in collecting of data (volume and accuracy), data processing (use of primitive methods) and analysis (absence of "normative" database) cannot satisfy not only researchers, but also health care practitioners today. Additional negative factor in the use of morbidity materials is the fact that the prediction of infestation, disease and the consequences are not fully available for practitioners, especially taking into consideration the quality of the living environment, the level and quality of medical care and other factors. Here we come across the problems in the methods, poor information base of the branch, absence of deep scientific and theoretical development of the problem and lack of the internal coherence of national activities to improve population health.

A number of studies are devoted to the improvement of methods of in-depth analysis of morbidity in the aspect of these relations. The most famous of them – works by A.M.Merkov [25], D.M.Malinskiy [24] L.E.Polyakov [30], O.J.L.Murray, A.D.Lopez, D.T.Lavison [85] T.Grevill [59] – unfortunately had a limited application in science and did not come into practice because of their unfinished models. The reason, apparently, was that the actual practice of health care cannot retrieve time and integral indices of prevalence and course of chronic diseases according to their place and role in the overall dynamics of health and survival of the population in some areas.

Methods of in-depth assessment of the dynamics of morbidity, course of diseases and their consequences developed by the authors were based on a tabular method of analysis of the combined analysis of morbidity, course of diseases and mortality rates for chronic diseases that cause death as well as diseases, the outcome of which in most cases is a recovery [36, 37, 53]. They allowed taking into account relationship of morbidity and its consequences with geographical, topographical-geochemical, social and other features of the places of population residence, with other disorders, common in these areas, with the quality of prevailing health care systems in them (and, in view of specialization - by disease classes).

In the created tabular methods there were recorded cases of death from all causes, which made it possible to determine not only depleted morbidity, but also to trace the role of the studied diseases in the region and the current health care system in the final state of the population health as a whole. In addition, a comparison of the average life expectancy of the population with the utmost one allowed by determining the amount of non-complete use of health and life resource, coming to the measurement of the life quality in terms of health preservation, and comparing of the average life expectancy with the average duration of illness allowed determining the length of a “healthy” and “sick” living spaces and thus the quality of patients’ life.

At the same time, the account of time for the mass spread of disease in the tables allowed defining of morbidity peaks and falls and prevalence of diseases, identification of the relationship of these oscillations with various events in the local environment (socio-economic, environmental, organizational, medical, preventive and others).

The real possibility of grouping indicators for separate assessment of general social, territorial, and especially institutional measures to protect population health was also important, the indicators for separate assessment of the effectiveness of organizational-diagnostic, preventive and therapeutic events (programs) were also significant for institutional measures.

All figures calculated on the basis of combined tables processing are given in Table 1.21.

In this case, the general logic of analysis was based on the actual practice of population structuring in the areas of residence from the standpoint of health care office (Figure 1.17).

The following data were necessary for the calculation of the table indices:

a) a number of persons who got ill with the researched disease in the age interval [x, x + n];

b) a number of deaths from this disease in this range;

c) the duration of the disease until the end of the interval [x, x + n];

d) a number of persons who recovered from the disease in the same range;

e) a number of deaths from causes unrelated to the disease under study in the same interval;

e) a number of “healthy” individuals (not suffering from the disease under study) in the same interval.

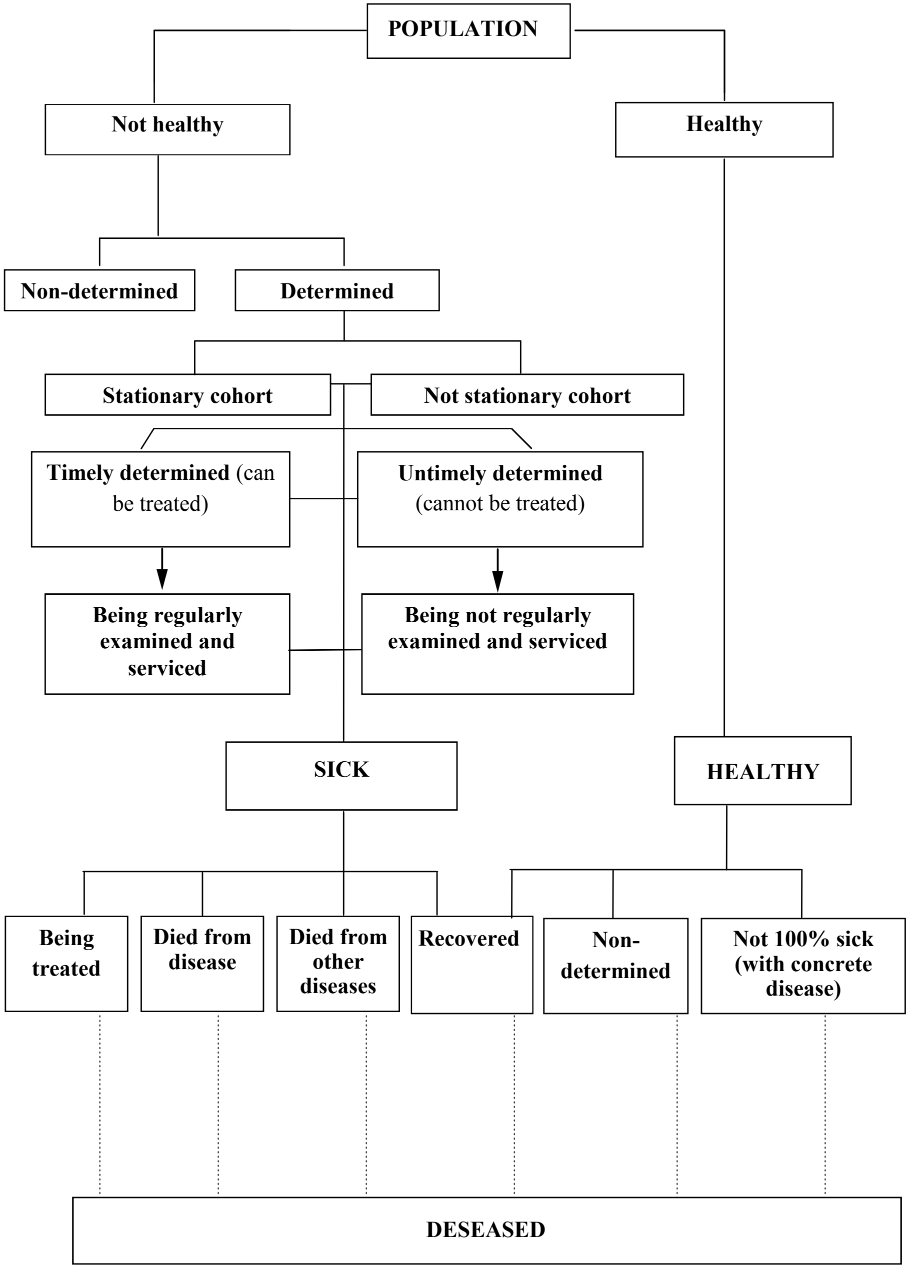

Figure 1.17. The distribution of the population in the health care system

Table 1.20

Table of morbidity, clinical course and mortality („morbidity-mortality")

No.	***Table indices***
1.	*Age (full years) - x*
2.	*A number of population within a specific interval*
3.	*A number of patients identified until age x*
4.	*The average time from age to early disease*
5.	*Life expectancy (expected) from age x - for the dead from the disease*
6.	*A number of deaths from other causes and among the healthy*
7.	*Amount of years of their (expected) life from age x to age x + n*
8.	*Average (expected) duration of their life*
9.	*A number of deaths from other causes while having the disease under study*
10.	*Their life expectancy in the range of (x, x + n)*
11.	*Their average life expectancy*
12.	*A number of people who have recovered from the disease under study in a specific range, but died in that period from other causes*
13.	*Amount of life expectancy in a particular range*
14.	*Their average life expectancy*
15.	*Age-specific mortality rates*
16.	*Age-specific mortality rates from other causes (for population in general)*
17.	*Age-specific death rates from the studied disease in the group of appropriate patients*
18.	*Age-specific rate of exhausted morbidity*
19.	*The probability to fall ill in a specific interval*
20.	*The probability of remaining patients until the end of the interval*
21.	*The probability of dying from a particular disease under study*
22.	*The probability to recover within a specific interval*
23.	*The probability of death from other causes (relative to the total population)*
24.	*A number of people fallen ill in a given period of time*
25.	*A number of people who have recovered within a specific interval*
26.	*A number of people remaining healthy in relation to the studied disease*
27.	*A number of deaths from the disease under study*
28.	*A number of deaths from other causes*
29.	*A number of healthy until age x*
30.	*A number of patients until age x*
31.	*Stationary number of patients (number of person-years of "disease" in a specific interval)*
32.	*Stationary number of healthy (number of person-years of "health" in a specific interval)*
33.	*A number of person-years of "health" at the age of more than x*
34.	*A number of person -years of "disease" at the age of more than x*
35.	*The expected duration of the "healthy" life*
36.	*The expected duration of the "disease"*
37.	*Life quality factor*

Complex tables of morbidity, clinical course and mortality were, in fact, a new information technology in medicine and, at the same time (by its content) a new system development of a method of control of the disease dynamics in the practice of health care management.

The used method of modeling of morbidity, clinical course and outcome of diseases, implemented in practice, had the following characteristics: previously known methods of constructing such tables only considered the impact of treatment on survival of patients with chronic diseases leading to death. In this case, the effect of the treatment was considered positive if patients' average life was prolonged. Our approach allowed considering the process of chronic diseases spreading more broadly for the first time, in particular:

a) *to trace the dynamics of growth of the patients number with age, as well as the change of the healthy number* (with respect to the selected disease) *with aging*;

b) *to determine exhausted morbidity by the identified one* due to the population-based approach;

c) *to divide regularly the life cycle of population into a healthy and unhealthy parts;*

d) *to single out intervals of the highest prevalence of diseases in the survival curve*;

e) *to display the characteristics of changes in the prevalence of certain diseases and their consequences with age graphically*;

f) *to determine the age limit of health preserving in relation to certain diseases - causes of death.*

For the first time the whole range of this knowledge created constructive opportunities reasonably and in a measurable way to move on to identifying the population needs in the relevant services, take into account actual resources, conditions and restrictions for their providing, as well as to determine the conditions and stages of achieving the desired results [36], examples are given in 3.9.

After processing of the combined table results using the parameters of the law of populations survival both numerically and graphically - on the scale of the dynamics of health preserving (survival) on the full life cycle it has become possible to determine [37] internal indicators (congenital) and external (acquired) viability of both patients with pathology under study and the entire population on the territory of patients' residence. At the same time, a comparative analysis of the values of these parameters with the control ones (for the whole population) allowed giving a grounded opinion on the predominant causes of appearing of the disease under study: genetic (congenital) or environmental (social) associated with inadequate health and environmental conditions, lifestyle (behaviors, traditions, written and unwritten laws of life creation in specific environmental conditions, including the matters of activity created in the territories of the system of protection of human health).

By this technique it became possible to determine the occurrence of the peak of mass health disorders by fixing of the inflection point to the survival curve, wherein the velocity of a particular disease reaches a maximum value. In the management of health care this sign (indicator) fixes the need for specific tactical and strategic action on elimination (reduction) of this peak or a shift "right – left" (by age group) in the life cycle. The latter one determines the timeframes of start and end (or terms prolongation) of preventive and curative measures (vaccinations, medical examinations, clinical examinations, etc.). To build such actions through the use of traditional information-methodical system is not possible, since it is impossible to get an accurate result of exhausted morbidity to assess the impact of planned actions on health indices of population.

It should be noted that in the 80-90s of the twentieth century, without having the data on the structure of the population over 85 years old, we had to cut short a mortality table (survival) at the age of 85 and the age limit equaled 101 ± 1 [36]. Knowing that there are centenarians older than this age, we tried to determine if there will be changes to the age limit if we exclude the main component of death causes - a disease of the blood circulatory system. It was found that in this case the age limit increases up to 116 years old [37]. However, in the future, as a result of the last 2001 census it became possible to build a very detailed (with a one-year interval) mortality tables based on the structure of the population and mortality at ages older than 100 years old. Just this made it possible to determine the Ukrainians' age limit (equal to 119 years old) [56]. Recalculation showed that 116 years old is the age limit of health preserving in relation to diseases of the blood circulatory system [53].

You can create a theoretical curve of survival of individuals, healthy as for a particular disease using the data of death causes and data of primary registration of disease (the latter - in the "outpatient medical card" or "control card of dispensary registration"), and only on the basis of complete dates of birth and death of the deceased and the actual start date (and end) of the disease. In the hypothetical curve the coordinates of its points (in the system of "a number of relatively healthy people – age") should closely approach the coordinates obtained directly from the combined tables (we have repeatedly carried out similar studies for the needs of health care practitioners [52]).

The improved (latest) version of the combined table "morbidity – mortality" providing orientation to available medical records [53] is given below.[1]

[1]Here and in § § 2.6-2.8 A.S.Biduchak's data were basic in the processing of morbidity of the rural population.

Table 1.21

Combined table of morbidity, clinic course of disease and mortality (M_b/MT "TAGOR")

No.	Parameters	Legend	Calculation formulas
1	Age-specific mortality rate, general	m_x	$m_x = D_x / P_x$
2	Age-specific mortality rate for a reason related to the disease under study (class of diseases)	m_x^+	$m_x^+ = D_x^+ / P_x$
3	Age-specific mortality rate from causes unrelated to the disease under study (class of diseases)	m_x^-	$m_x^- = D_x^- / P_x$
4	Age-specific morbidity rate of the disease under study (class of diseases)	s_x^+	$s_x^+ = S_x^+ / P_x$
5	General probability of death in this age range	q_x	$q_x = \dfrac{m_x n}{1 + m_x (n - t_x)}$
6	The probability of death from the disease under study (class of diseases) in this age range	q_x^+	$q_x^+ = \dfrac{m_x^+ n}{1 + m_x^+ (n - t_x^+)}$
7	The probability of death from causes unrelated to the disease under study (class of diseases) in this age range	q_x^-	$q_x^- = \dfrac{m_x^- n}{1 + m_x^- (n - t_x^-)}$
8	The probability of being sick with the disease under study in this age range	q_{sx}	$q_{sx} = \dfrac{s_x^+ n}{1 + s_x^+ (n - t_{xh})}$
9	The number of living and healthy at this age	$l_{x+n}^{(h)}$	$l_{x+n}^{(h)} = l_x^{(h)} \left(1 - s_x^+ - q_x^- + s_x^+ q_x^-\right)$
10	Total number of surviving to a certain age	l_{x+n}	$l_{x+n} = l_x (1 - q_x)$
11	The number of dying in this age range of all causes	d_x	$d_x = l_x - l_{x+n}$
12	The number of dying in this age range of the disease(class of diseases) under study	d_x^+	$d_x^+ = d_x \dfrac{q_x^+}{q_x^+ + q_x^-}$
13	The number of dying in this age range of causes unrelated to the disease under study (class of diseases)	d_x^-	$d_x^- = d_x - d_x^+$
14	The total number of patients in this age range	s_{x+n}	$s_{x+n} = l_{x+n} - l_{x+n}^{(h)}$
15	The prevalence of selected disease (class of diseases) among the living in this age range	S_x	$S_x = \dfrac{100000 s_x}{l_x}$

16	The number of man-year at the age older than this one	T_x	$T_x = \int_x^{x_0} l_x dx$
17	The number of man-year of healthy life at the age older than this one	$T_x^{(h)}$	$T_x^{(h)} = \int_x^{x_{0h}} l_x^{(h)} dx$
18	The average life expectancy after age x	$e_x^{(0)}$	$e_x^{(0)} = T_x / l_x$
19	The average healthy life expectancy after age x	$e_x^{(h)}$	$e_x^{(h)} = T_x^{(h)} / l_x$
20	The coefficient of life quality after the age x in the aspect of health in relation to the selected disease (class of diseases)	K_x	$K_x = e_x^{(h)} / e_x^{(0)}$
21	The lethality of selected disease (class of diseases) in this age range	M_x	$M_x = \dfrac{d_x^+}{d_x^+ + s_x}$
22	The number of living up to this age on the condition of exclusion of selected disease (class of diseases)of death causes	l_{x+n}^-	$l_{x+n}^- = l_x^- \left(1 - q_x^-\right)$
23	The number of man-year at the age older than this one on the condition of exclusion of selected disease (class of diseases) of death causes	T_x^-	$T_x^- = \int_x^{x_0} l_x^- dx$
24	The average life expectancy after age x on the condition of exclusion of selected disease (class of diseases) of death causes	e_x^-	$e_x^- = \dfrac{T_x^-}{l_x^-}$
25	The number of living up to this age on the condition of selected disease (class of diseases) being the cause of death	l_{x+n}^+	$l_{x+n}^+ = l_x^+ \left(1 - q_x^+\right)$
26	The number of man-year at the age older than this one, provided the selected disease (class of diseases) being the cause of death	T_x^+	$T_x^+ = \int_x^{x_0} l_x^+ dx$
27	The average life expectancy after age x, provided the selected disease (class of diseases) being the cause of death	e_x^+	$e_x^+ = \dfrac{T_x^+}{l_x^+}$

The following data are used for the analysis of the table: the number of people in the age range $(x, x+n)$ - P_x ,the total number of cases of selected disease (class of diseases) for a year - S_x^+, their healthy life span in the age range of the disease - t_{xh}, the number of deaths from selected diseases (class of diseases) for this year - D_x^+, the life span in the age range of death - t_x^+, the number of deaths from causes unrelated to the selected disease - D_x^-, the life span in the age range of death - t_x^-, the total number of deaths in this age range for this year - D_x, their life spans in the age range of death - t_x.

If there are no data about date of birth and death of the deceased, and the date of initial detection of the diseases studied there (they are not found), then the interval [0.1 year] was allowed $t_{xh} = t_x^+ = t_x^- = 0.33$, and for the rest of the age intervals $t_{xh} = t_x^+ = t_x^- = 0.5n$. Other parameters of the combined morbidity-mortality tables were calculated according to the formulas in the sequence shown in the table 1.21. However, taking into account that the numbers l_x, $l_x^{(h)}$, l_x^+ and l_x^- are determined recursively, for the beginning of analysis $l_0 = l_0^{(h)} = l_0^+ = l_0^- = 100000$ was taken.

The expressions for $T_x^{(h)}, T_x, T_x^+, T_x^-$ are recorded as integrals, as mortality statistics is detailed only till 70 years old. Further, there is a need to continue the corresponding curves of the dynamics of health and survival to the age limit of life ($x_0 = 119$ years old) or until the age of health maintaining as regards the studied disease (disease classes, and in case of chronic diseases of the circulatory system up to 116 years old [53]). Such an extension is made on the basis of models of two laws: the law of survival of the population and protection of health in case of specific (chronic) diseases.

The law of preservation of population health is as follows:

$$l_h(x) = \exp\left[-\frac{(x/x_{0h})^{\alpha_h}}{\gamma_h(1 - x/x_{0h})} \right] \qquad (1.33)$$

where x_{0h} – the age limit for population health preservation in relation to the studied disease (class of diseases);

α_h – stability factor of gene pool of population in relation to the influence of the disease (class of diseases) under study on it;

γ_h – factor of "favoring" of population's living environment and way of its living on health preservation in relation to the effects of the disease (class of diseases) under study.

The parameters α_h and γ_h are determined by minimizing the following function:

$$\Delta_h(\alpha_h, \gamma_h) = \sum_x \left[\frac{l_x^{(h)}}{10000} - l_h(x) \right]^2 \qquad (1.34)$$

of a similar view is the formula of the law of the survival of population for a hypothetical determining of the population survival if any studied disease (class of diseases) is excluded of number of causes of death:

$$l^-(x) = \exp\left[-\frac{(x/x_0)^{\alpha^-}}{\gamma^-(1 - x/x_0)} \right] \qquad (1.35)$$

where the main parameters (α^- and γ^-) are determined by minimizing the following function:

$$\Delta^-(\alpha^-, \gamma^-) = \sum_x \left[\frac{l_x^-}{10000} - l^-(x) \right]^2 \qquad (1.36)$$

The formula of law of the survival of population is derived in the same way to determine hypothetically the viability of population if the studied diseases (class of diseases) act as the cause of death:

$$l^+(x) = \exp\left[-\frac{(x/x_0)^{\alpha^+}}{\gamma^+(1 - x/x_0)} \right] \qquad (1.37)$$

parameters of which are determined from the minimum of the following function:

$$\Delta^{+}\left(\alpha^{+},\gamma^{+}\right)=\sum_{x}\left[\frac{l_x^{+}}{10000}-l^{+}(x)\right]^{2} \qquad (1.38)$$

The function of prevalence (S_x) of the disease under study (class of diseases) is defined as:

$$S(x)=\frac{l(x)-l_h(x)}{l(x)} \qquad (1.39)$$

The prevalence of the disease (class of diseases) under study in fractions of a unit, that is, without multiplications per 100,000 in the observed category of populations is defined by the formula:

$$S_l = x_0^{-1}\int_0^{x_0} S(x)dx \qquad (1.40)$$

At the same time, owing to the paradox of the survival scale curvature the values obtained in this way require clarification. Therefore, by formula (1.10), with the corresponding parameters of the laws, they are first defined for the small categories of the population (that is, in a certain case, separately for urban and rural men, urban or rural women etc.). For any other major category the improved value of the prevalence of the disease (class of diseases) under study - S_r is determined by the formula:

$$S_r = \frac{\sum_i S_{li}P_i}{\sum_i P_i} \qquad (1.41)$$

where $P_i -$ number of population of any small categories, $S_{li} -$the prevalence of the disease (class of diseases)under study in this category of population.

Social and medical essence of the law of preservation of health is the following:

-dynamics of preservation of health *h*-resource or population generations' (population) resistance to *h*-disease throughout life (from birth to x_{oh}), integrally reflected in the parameters of survival by the number of healthy in relation to the *h*-

disease (l_h) in all ages (x) groups - $l_h(x)$, directly dependent from irreversible (*exp*) losses ("-") of innate resource resistance to h-disease (α_h) in all age groups (x/x_{oh}) and rate of its loss in adulthood in different (by quality) socio-ecological environments of existence (γ_h), which together in accordance with the lifestyle selected by population (population) determine the stability and speed of losses health h-resource while adapting to h-disease throughout the lifespan - γ_h (1- x/x_{oh}).

Thus, the law of preservation of health by its essence:

- shows the dynamic (in all age groups - by sex and area of residence) pattern to resist h-diseases;

- is a special version of the law of survival of populations;

-is the law of formalized connection of factors both contributing to and opposing h-diseases throughout life;

- is a mathematical expression of the consistency and stability of the relationship between these factors;

- is the law of consistency in action and resistance to the "biological" and "social" h-pathology in any areas (taking into account age and sex of the population) in any time interval of the population existence;

- is the law of connection of life resource preservation and at the same time, h-health (i.e. health concerning h-disease) with the main factors that determine its preservation and loss by approaching them in time and space, where time is the age of the living and healthy (relative to h-disease) people in any time interval of observation, and space is the life cycle from birth to the age limit up to which you can live without ill h-disease;

- is the law of change of values of survival of groups of people not infected by h-disease – or $l_h(x)$, in other words, the law of transition of values $l_h(x)$from one level to another life-cycle -x_{oh}.

From the standpoint of medicine and health care one of the main bridges –of both routes to generic factors of health preservation, life and their measurement, are human diseases. They are an intermediate (transient) and, simultaneously, connecting link in the system of “population - living environment” reflecting the wide range of negatives in the quality of their interaction, derived from genetics, way and lifestyle of people. At the same time, those kinds of chronic diseases that are major causes of the population’s disability and death (reduction of its health and life resource) are of the priority significance.

Here is one example of a comparative analysis of the prevalence of the circulatory system diseases using the data of table of disease morbidity, course of disease and mortality conducted in four areas (see Table. 1.22) [53]), applicable for the development of targeted programs:

1) estimating total actual parameters of the internal and external viability of the population of the law of survival of populations in one of the rural areas of Chernovtsy region;

2) evaluation of changes of the same parameters under the influence of the current prevalence of chronic circulatory system diseases (parameters are marked by index “h”);

3) identification and assessment of the relevant hypothetical parameters in case of excluding chronic diseases of the circulatory system from the causes of death in the area (figures are indicated with “-”);

4) defining and evaluation of the same parameters in case of hypothetical excluding of all the causes of death but chronic diseases of the circulatory system (parameters are indicated with “+”).

At the same time, there was estimated the impact of these viability indicators on the average life expectancy of the population under the influence of the prevalence of the diseases under study on the index of life quality. In addition, the expected prevalence of these diseases was determined in the next interval after studied one.

Table 1.22

The complex of integrated indicators of population health in Kitsman District, Chernovtsy Region in 2010+)

Parameter	Population of district as a whole			Population of urban settlements of the district			Population of rural settlements of the district		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
x_0	119	119	119	119	119	119	119	119	119
α	2.644	2.914	2.581	2.969	2.777	4.418	2.594	2.942	2.200
γ	1.221	0.646	2.584	1.094	0.780	0.926	1.228	0.619	3.213
Δ	$3.614 \cdot 10^{-3}$	$4.472 \cdot 10^{-3}$	$3.673 \cdot 10^{-3}$	$8.35 \cdot 10^{-3}$	0.019	$1.35 \cdot 10^{-3}$	$3.24 \cdot 10^{-3}$	$3.12 \cdot 10^{-3}$	$4.54 \cdot 10^{-3}$
x_{0h}	116	116	116	116	116	116	116	116	116
α_h	1.701	1.854	1.560	1.705	1.477	2.294	1.705	1.981	1.442
γ_h	0.620	0.511	0.742	0.603	0.647	0.446	0.623	0.472	0.809
Δ_h	0.032	0.026	0.038	0.022	0.029	0.010	0.036	0.027	0.045
α^-	1.525	1.843	0.970	1.371	1.269	3.071	1.551	1.978	0.800
γ^-	4.127	2.137	12.325	4.834	3.330	3.457	3.986	1.929	13.45
Δ^-	$2.00 \cdot 10^{-3}$	$3.01 \cdot 10^{-3}$	$1.19 \cdot 10^{-3}$	$2.29 \cdot 10^{-3}$	$5.71 \cdot 10^{-3}$	$8.63 \cdot 10^{-4}$	$2.17 \cdot 10^{-3}$	$2.57 \cdot 10^{-3}$	$1.43 \cdot 10^{-3}$
α^+	5.799	5.743	7.385	9.087	10.207	6.813	5.332	5.142	7.523
γ^+	0.455	0.285	0.365	0.079	0.025	0.571	0.577	0.395	0.331
Δ^+	$6.82 \cdot 10^{-5}$	$1.07 \cdot 10^{-4}$	$7.97 \cdot 10^{-5}$	$5.38 \cdot 10^{-4}$	$5.69 \cdot 10^{-4}$	$5.00 \cdot 10^{-4}$	$4.45 \cdot 10^{-5}$	$2.22 \cdot 10^{-4}$	$4.27 \cdot 10^{-5}$
$e_0^{(0)}$	72.95	65.59	83.86	73.76	67.19	80.04	72.64	65.22	84.85
$e_0^{(h)}$	49.48	48.36	50.62	49.04	46.69	52.03	49.63	48.85	50.41
K	0.678	0.737	0.607	0.665	0.695	0.65	0.683	0.749	0.594
e_0^-	84.36	75.48	97.77	85.91	78.27	90.18	83.96	74.88	98.09
e_0^+	78.56	73.75	82.21	75.89	71.89	84.27	78.99	74.16	81.83
S_l	54187	52798	55283	55191	54364	54846	53871	52418	55266
S_r	54056	52828	55182	54605	54364	54846	53943	52418	55266

+) All comparative calculations were made by the trend tables of morbidity-mortality (M/M_bT"TAGOR").

Legend of parameters:

x_0 - the age limit (theoretical) - a biological, species resource health and life of homo sapiens;

α - an indicator of internal (innate) viability, ability to adapt to the living environment;

γ -an indicator of external (acquired) viability, the rate of environmental quality, ability to adapt the environment to own needs;

Δ - the sum of squares of deviations of the theoretical curve of survival from the real one received from the life tables made taking into account all causes of death;

x_{0h} - the age limit in the presence of common chronic diseases of the circulatory system;

α_h - an indicator of inner viability in case of h;

γ_h - an indicator of external viability in case of h;

Δ_h -the sum of squares of deviations of the theoretical "curve of health" for the number of "healthy" individuals derived from the combined tables "morbidity – mortality" at h;

α^- - an index of inner viability at the exclusion of chronic diseases of the circulatory system of the causes of death;

γ^- - an indicator of external viability at the exclusion of chronic diseases of the circulatory system of the causes of death;

Δ^- - the sum of squares of deviations of the theoretical curve from the curve obtained according to the mortality tables provided elimination of chronic diseases of the circulatory system from the causes of death;

α^+ - an index of inner vitality, provided chronic diseases of the circulatory system are the only cause of death;

γ^+ - an indicator of external viability, provided chronic diseases of the circulatory system are the only cause of death;

Δ^+ - the sum of squares of deviations of the theoretical curve in case of the aggregate impact of α^+ and γ^+;

$e_0^{(0)}$ -average life expectancy (at birth) under the action of all causes of death;

$e_0^{(h)}$ - average life expectancy (at birth) under the action of all causes of death (this and other indicators are trend ones, the effect of heterogeneity sex-age data of the population distribution is eliminated);

$K = e_0^{(h)} / e_0^{(0)}$ - coefficient of the quality of life taking into account current prevalence of chronic diseases of the circulatory system;

e_0^{-} - average life expectancy of the population provided elimination of chronic diseases of the circulatory system from the causes of death;

e_0^{+} - average life expectancy of the population provided chronic diseases of the circulatory system are the only cause of death;

S_l - expected prevalence of chronic diseases of the circulatory system among general population (per 100,000 of population) based on the curves of the dynamics of health and survival;

S_r - adjusted prevalence of chronic diseases of the circulatory system taking into account the number of people in each sex-age group specified in the combined table of "morbidity – mortality".

According to the data given in the table the inner viability (α) among men is higher than among women (2.914 > 2.581). In this case, for both sexes α is higher among residents of urban settlements as opposed to rural areas (2.969 > 2.644), and mainly (twice more) for women of urban settlements (4.418 > 2.200) and for men, on the contrary (2.942 > 2.777). These facts may indicate better preparation for childbirth in the cities, they are also stipulated by better accessibility (and timeliness) of health services.

The quality of the living environment (γ) to maintain the innate resource (α) in rural areas up to 12.25% (1.228> 1.094), and by gender – for women it is 4 times higher than for men (2.584 > 0.646). Comparison of γ for men living in cities and villages is consistent with the overall performance (0.780 > 0.619) - the excess is 26.0 ‰, and for women in urban settlements it is 3.47 times less than that of women living in rural areas (3.213 > 0.926).

Taking into account these indicators of viability overall life expectancy ($e_0^{(0)}$) was 72.95 years old, for residents of urban settlements - 73.76 years old, of rural settlements - 72.64 years old. Analysis by gender showed that in general in this area average life expectancy for women was equal to 83.83 years old (trend indicator), for men - 65.59 years old. At the same time, indicator for women of rural settlements was 84.85 years old, of urban settlements - 4.81 less (80.04 years old). For men, life expectancy in urban areas was 67.19 years old, in rural areas - 1.97 less (65.22 years old).

It should be noted that the age limit up to which health resource is preserved at the current prevalence of chronic diseases of the circulatory system among population equals to 116 years old, which is 3 years less than the calculated limit of the biological age of the population (119 years old) (Figure 1.18). This is clear, since absolutely healthy people do not die. Taking into account that $\alpha_h < \alpha$ and $\gamma_h < \gamma$ are always true, it can be concluded that the prevalence of diseases of the circulatory system is affected by both the quality of the gene pool, and the quality of socio - ecological environment of people and way of their life.

However, these factors affect population health in relation to circulatory diseases in different ways. For example, in general the population is influenced by the quality of the gene pool less than the living environment as $\alpha_h/\alpha > \gamma_h/\gamma$ these ratios are, respectively, 0.643 and 0.508. Men are more affected by the quality of the gene pool than the living environment (the ratio is, respectively, 0.636 and 0.791). And by contrast, women are much less influenced by heredity than the quality of the living environment, since the ratios α_h/α and γ_h/γ are respectively, 0.604 and 0.287.

At first glance, these results may seem paradoxical, but it should be borne in mind that the curve $l_h(x)$ (see Fig.1.19) describes the relative number of people who reach the age x alive and, at the same time, relatively healthy as for circulatory system diseases. And its type is significantly affected not only by the morbidity of circulatory system diseases and mortality from them, but mortality from causes not directly related to these diseases. At the same time, the share of men’s deaths from these causes, including men in children and young ages, is bigger than women’s.

Generally, in urban settlements the preservation of the population’s health resource in relation to diseases of the circulatory system is less affected by the quality of the gene pool than by the quality of the living environment, the corresponding ratios are 0.574 and 0.551.

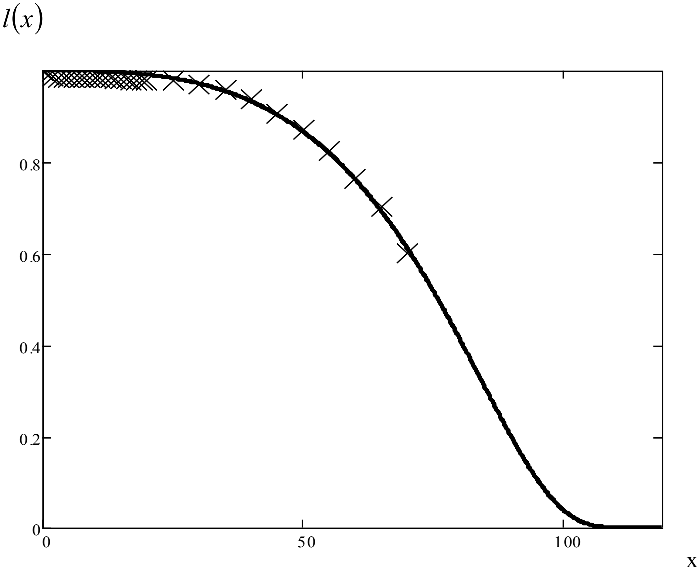

Fig.1.18. The curve of survival $l(x)$ for people of Kitsman District in all sex-age groups including all causes of death; table data are marked by crosses.

Urban men, because of these reasons, are influenced by the quality of the gene pool more than in women, as well as by the quality of the living environment, the corresponding ratio of men and women are 0.532 and 0.829l; 0.519 and 0.472. Almost a similar situation exists among rural residents: ratios for both sexes 0.657 and 0.507, for men - 0.673 and 0.763, for women - 0.655 and 0.252.

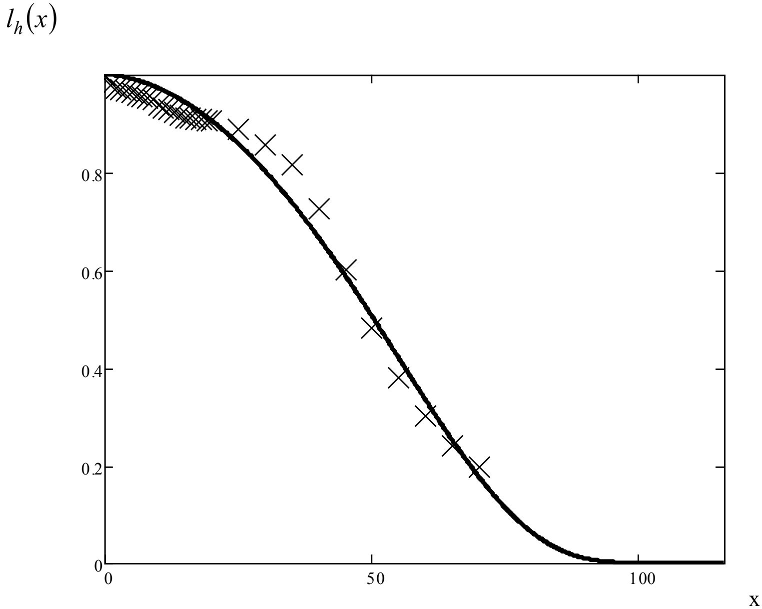

Fig.1.19. The curve of “health” $l_h(x)$ for circulatory system diseases of population in Kitsman District in all sex-age groups including all causes of death; table data are marked by crosses.

It should be noted that the diseases of the circulatory system significantly affect healthy life ($e_0^{(h)}$). In general, its duration is only 49.48 years old (67.79 %). It is 49.04 years old (66.50%) for the inhabitants of cities and 49.63 years old (68.30%) for the inhabitants of villages. In general, men’s healthy life under the influence of these diseases is 48.36 years old (73.70%), women’s healthy life under the influence of these diseases is 50.62 years old (60.70%). Separate analysis shows that healthy life expectancy for urban men is 46.69 years old (69.5% of their life expectancy), for rural men - 48.85 years old (74.9%), for urban women - 52.03 years old (65.0%), for rural women - 50.41 years old (59.4%), that is, these diseases make the greatest impact (in%) on inhabitants of rural communities.

Taking into account the above data the rate of quality of life throughout the life cycle will be (in general) 0.678 or 67.8%, in particular for men - 73.7%, for women - 60.4%, that is circulatory system diseases affect the quality of life of the female population the most significantly.

The prevalence of the circulatory system diseases and its essential link with the territory of living and population's way of life are clearly reflected in the comparative analysis of the parameter γ (indicator of the quality of living environment). Its value decreases sharply (twice) in the environment with widespread pathology of the circulatory system diseases - from 1.221 to 0.620 (49.2%), particularly for the male population from 0.646 to 0.511 (20.9%), but more significantly for women - from 2,584 to 0.742 (by 71.3%).

In its turn, the decrease of this index, along with genetic factors indirectly affects the reduction of the inner vitality of the population (α_h). In particular α_h, as a degree of genetic favored preservation of health in relation to α (for the whole population) decreases from 2.644 to 1.701 (35.7%), including men - from 2.914 to 1,854 (36.4%), for women - from 2.581 to 1.560 (39.6%). Fluctuations of these factors significantly affect the nature of the curvature of the dynamics of health and survival - it has dramatically decreasing character in the children's age groups (comparison of Δ and Δ_h).

Of great significance for analytical conclusions on the direction and volume of management activities in health care is the analysis of the population rates of the dynamics of health and survival of the population on the condition of the complete elimination of the circulatory system diseases from the causes of death (see Table 1.22 and Fig.1.20).

Significant improvement of external conditions of the population is required for the development of appropriate conditions. It is confirmed by the value

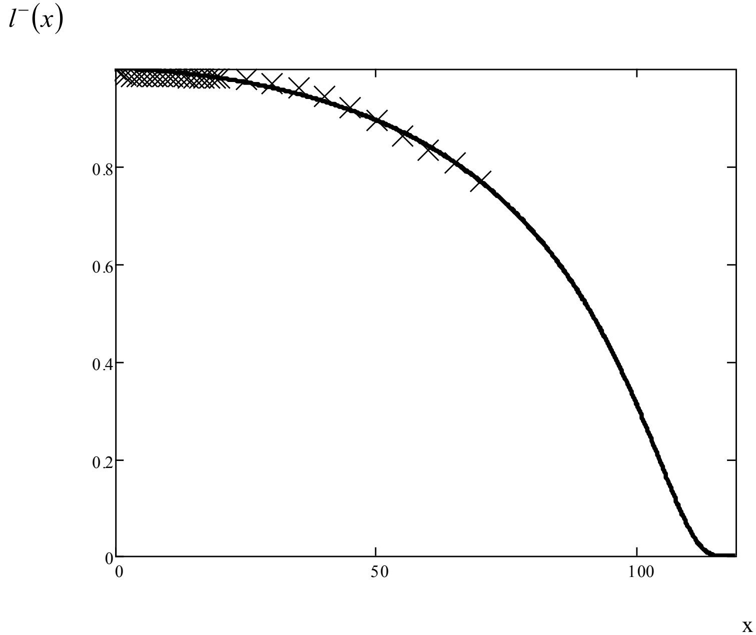

Fig.1.20. The curve of survival $l^-(x)$ for people of Kitsman District in all sex-age groups excluding circulatory system diseases from the causes of death; table data are marked by crosses.

of the index γ^-- it should increase dramatically - by 3.4 times (from 1.221 to 4.127), particularly for men - by 3.3 times (from 0.646 to 2.137), for women –by 4.8 times (from 2,584 to 12,325), including, in urban settlements –by 4.4 times (from 1.094 to 4.834), in rural settlements –by 3.25 times (from 1,228 to 3,986). Under these conditions, the preservation of health is provided at the inner vitality index (α^-) within "urban-rural" limits 1.371-1.551, and in general – 1.525, including for men - 1.843, for women - 0.970. Taking into account that circulatory system diseases hold the first place among the causes of death, observed significant excess of α in relation to α^-may be indirect evidence that among the factors of death that are not directly related to diseases of the circulatory system congenital anomalies play an essential role. In this case, the excess of α over α^+ when the action is caused by diseases of the circulatory system, emphasizes that these diseases manifest themselves very little in children's age groups. And if, intended value of γ^{+} is much less than γ, then this fact provides further evidence that circulatory system diseases are diseases of lifestyle in a broad sense of the concept.

Hypothetical removal of circulatory system diseases from the causes of death generally lead to increasing of life expectancy (e_0^-) till 84.36 years old, in other words it increases it for 11.41 years (15.6 %), including men - from 65.59 to 75.48 years old (15.1 % or 9.89 years), women - from 83.86 to 97.77 years old (16.6 %, or 13.91 years). In certain regions the changes in life expectancy will be as follows: for the residents of the urban settlements this rate will increase from 73.76 to 85.91 years old (16.5 %, or 12.15 years), including men - from 67.19 to 78.27 years old (16.5 %, or 11.08 years), women - from 80.04 to 90.18 years old (12.7%, or 10.14 years). For rural residents this figure will be equal to 83.96 years old (increase by 15.6%, or 11.32 years), including men - 74.88 years old (increase by 14.8% or by 9.66 years), women - 98.09 years old (increase by 15.6%, or 13.24 years).

If there is a substantial decline in the quality of living conditions of the population (γ^{+}), which, as noted above, contributes to the prevalence of diseases of the circulatory system, the generation of newborns for leveling the negative impact of this phenomenon will require to get from parents powerful innate health on the biological level to maintain (internal)viability on the condition of the action of the circulatory system diseases as the sole cause of death among the population (α^{+}) - see Fig. 1.21. The value of this rate should be equal to 5.799 or will increase relative to the present level of the indicator (2.644) by 2.2 times, particularly for men this figure should be equal to 5.743 (increase by 1.97 times), for women - 7,385 (increase by 2.86 times), in urban settlements it should make up 9,087 (increase by 3.1 times): for men - 10.207 (increase by 3.7 times), for women - 6,813 (increase by 1.54 times), and in the villages it should make up 5,332 (increase by 2.1 times):for men - 5,142 (increase by 1.75 times), for women - 7,523 (increase by 3.42 times).

Here, by the way, we should note the growth of parameter α for the 20-year period (from 1979 to 1999) in a similar situation in Ukraine - it was 20%, but because of negative shifts in the environment quality (by parameter γ) [30, 40].

It should be mentioned that the average life expectancy of the population if the cause of death is only diseases of the circulatory system (e_0^+) will be 78.56 years old, including men - 73.75 years old, women - 82.21 years old. Such a slight increase of this index proves that a variety of other factors influence the average life expectancy. The difference from $e_0^{(0)}$, that is, current average life expectancy when the effect of all causes of death is taken into account, will be (with a plus sign) 5.61 years, including men - 8.16 years, and for women, on the contrary, it will decreased by 1.67 years. In each case, the paradoxes of this kind require targeted research.

The average life expectancy (e_0^+) in urban settlements will grow by 2.13 years (men - by 4.70 years, women –by 4.23 years), and in rural villages it will grow by 6.35 years (men–by 8.94 years, while it will decrease by 3.02 years for women). The latter index causes a decrease in the average life expectancy for women in general. One of the hypotheses of a given phenomenon can be the following.

Let's assume that we get the two survival curves described by a set of parameters of the law of population survival - (x_0, α_1, γ_1) and (x_0, α_2, γ_2), where, $\alpha_1 < \alpha_2$, but $\gamma_1 > \gamma_2$, as it is in the results of the above studies - when comparing parameters

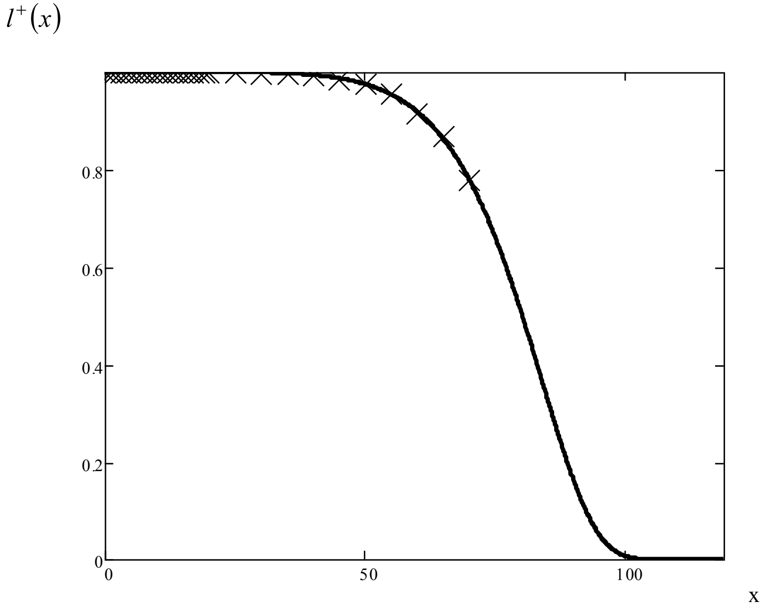

Fig. 1.21. Survival curve $l^+(x)$ of the population of Kitsman population in general, in all age-sex groups if the reasons for death are only diseases of the circulatory system; crosses are tabular data

of specific survival curves as a whole with the parameters of the survival curves for the same categories of people if the diseases of the circulatory system are the sole cause of death when $e_{01} > e_{02}$. According to our hypothesis, the obtained result may reflect the fact that the rescuing infants with certain congenital malformations we cannot always set (having available information) how these anomalies will show up in the older age groups in terms of health and survival in relation to, for example, diseases of the circulatory system. (The above does not say that babies must not be saved, but justifies the need to ensure these rescued children comprehensive treatment and prevention actions targeted at older age groups). However, it should be noted that in the particular case of the female part of the rural population of Kitsman District, Chernovtsy Region specified paradox has more “transparent” explanation. It means that if for this part of population diseases of the circulatory system is the only cause of death including young age (till 5 years old) it apparently points out the presence of girls with congenital malformations of the circulatory system in this group of population. And it means that the growth of the “inner viability” α by excluding deaths from other causes, including those in the younger age groups is not enough to compensate for the extremely low value of γ stipulated by the adverse effects of the living environment (conducive, because of the assumption of the action of only diseases of the circulatory system, to increase their prevalence). It should be noted that the traditional approach, which is either not based on the law of survival of the population in general or based on the law B.Gompertz-W.Makeham, this paradox is not visible, as it is believed that the exclusion of all causes of death, life expectancy at birth can only increase, not decrease. The point here is also the fact that, in accordance with the current interpretation of parameters B.Gompertz-W.Makeham’s law diseases of the circulatory system does not have the social (“background”) component and, therefore, should be seen as unavoidable.

Mathematical processing of tables of morbidity and course of disease, combined with the mortality tables allows getting practical health information on the expected prevalence of circulatory system diseases in the long term (in later years).For example, in the following year, for the investigated area at the same level of preventive measures and no significant changes in the living environment of people and their way of life such indicators (by the Table 1.22) of diseases prevalence should be expected (taking into account fluctuations of population structure by sex, age and place of residence):general indicator will reach 54056 per 100000 people, including men - 52828, women - 55182. The same rate in urban settlements will be 54605, including men - 54364, women - 54846, as a whole in the village areas - 53943, including men - 52418, women - 55266. Thus, a higher prevalence of diseases will be observed in general in urban settlements and among women with numerical superiority of the indicator for women from rural settlements.

The difference of observed indicators of the prevalence of diseases of the circulatory system from the expected may serve as a criterion of complete identifying of these patients and effectiveness of health care measures.

It should be noted that the combined morbidity-mortality table on the basis of which we obtained all indicators of the prevalence of circulatory system diseases, was grounded on two assumptions: the impossibility of a complete recovery from these diseases and matches of identified (by consulting and hospitalization) morbidity rate with depleted.

In general, summarizing the results of real example given in Table 1.22 you can get the following conclusions:

1. Diseases of circulatory system and their prevalence are a reflection of the conditions of the method and way of life of the population, bio-genetic component in their origin is negligible.

2. Influence of prevalence of diseases of the circulatory system on the rate of "healthy" life expectancy, as a part of life expectancy is big enough - reduction makes up 32.2% in total, including men - 26.3%, women - 39.4%, with a minor difference of the rates in urban settlements from rural ones (reduction makes up, respectively, 33.5% and 31.7%).

3. In case of the gradual elimination of chronic diseases of the circulatory system of the causes of death the increase in life expectancy is controlled by using parameters of the law of survival of populations. The current life expectancy (general) which equals to 72.95 years old, can grow up to 84.36 years old, including men - from 65.59 to 75.48 years old, women - from 83.86 to 97.77 years old, the highest rate is expected for rural women - 98.09 years old.

4. In case of only chronic diseases of the circulatory system as a cause of death, to maintain health and current dynamics of the population survival genetic (biological) component in newborns should increase by 2.2 times, including men – by 1.97 times, women - by 2.86 times, residents of urban settlements - by 3.1 times, of rural ones - by 2.1 times, the elimination of these diseases will have the

greatest impact on men from urban settlements - a genetic component must increase by 3.7 times.

5. Chronic circulatory system diseases significantly affect the quality of life of the population as a whole - they overall reduce it by 32.2% , including men - by 26.3%, women - by 39.6%, they have the largest effect on women in rural areas - their quality of life is reduced (at current volumes of these diseases) by 40.6%.

6.Use of the law of survival of populations for the above forecasts allows determining of the exact amount of “loading” of health services (doctors) with patients with these diseases (taking into account the territories and sex-age composition of the population, including non-detected cases). In particular, the expected overall prevalence of these diseases in the amount of 52800 per 100000 people, among men - 51600, women - 53900 with a slight excess in urban settlements in comparison with rural ones - 53500 and 52700, respectively, per 100000 people.

7.All the parameters shown in this example, fix controllability of prevalence and effects of chronic diseases in public health practice, the need for the scientific validity of planning, monitoring and forecasting of the effectiveness and impact of the introduction of targeted social and health programs to reduce the prevalence of chronic diseases and increase of the life expectancy of the population.

To sum up, we emphasize:

- developed system of global health monitoring of populations and, in particular, their morbidity and its consequences in a table-based method grounded on the law of survival (Tables of morbidity - mortality) is methodically transferred (for health care practices) to the level of control of separate, even relatively small groups of population (patients);

- processing of these data is technological enough and not complicated when you have a computer and generated appropriate information base;

- results can be used in the practice of the health care system, including the prediction of the consequences of this activity (while planning and monitoring of the effectiveness of targeted health and regional health and social programs).

- on the whole the given development is aimed at improving of the population health, increasing of its life expectancy, quality of life and quality of the healthcare industry and is a prime example of the possibility of obtaining accurate predictions in the development, implementation and monitoring of health and social programs (individual events).

An example of the extended development of scientific and methodological support for the planning and control of a phased implementation of targeted health and social programs to reduce morbidity from chronic diseases and their consequences is presented in §3.9.

A brief comparative analysis of the tables of morbidity-mortality (M/M_bT "TAGOR") and trend tables of morbidity-mortality (M/M_bT_t "TAGOR")used in this section is attached hereto.+)

The example of the integrated use of 2 laws - the survival of populations and preservation of health in tackling health care problems is provided below.

In 2010, it was found that for the population of Kitsman District, Chernovtsy Region (as a whole) integrated parameters of the law of survival of populations were x_0= 119 years old, α = 2.644, γ = 1.121, and the integrated parameters of preservation of public health in relation to chronic diseases of the circulatory system are accounted for x_{0h} = 116 years old, α_h = 1.701, γ_h = 0.620. As it was expected, the values of integral parameters of the law of health preservation of the population were less than the values of integral parameters of the law of survival of

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+) When using the express method of calculating M/M_bT "TAGOR" (by analogy with the reduced method of constructing MT "TAGOR" - see §1.6) in the calculation of morbidity and mortality there were used data for previously calculated time period of adaptation of newborn generation to the living environment (§1.11) populations. Significantly smaller α_h and γ_h in comparison with α and γ showed that, firstly, the population of Kitsman district has congenital abnormality of the circulatory system and, secondly, chronic diseases of the circulatory system are "social diseases", that is, diseases caused by way of life and living environment in a broad sense of the word.

- The curves of survival, preservation of life and health in relation to chronic diseases of the circulatory system, as well as the prevalence of the latter (expressed as a decimal) among the population of Kitsman District are represented in Figure 1.22, which shows that the curve $l_h(x)$ lies below the curve $l(x)$, as the entire population consists of patients and healthy people as for the presented classes of diseases. In addition, it is clear that while the aging of the population prevalence of chronic diseases of the circulatory system increases (which is not surprising since they are the main cause of death among the population and reduction of the life expectancy of the population).

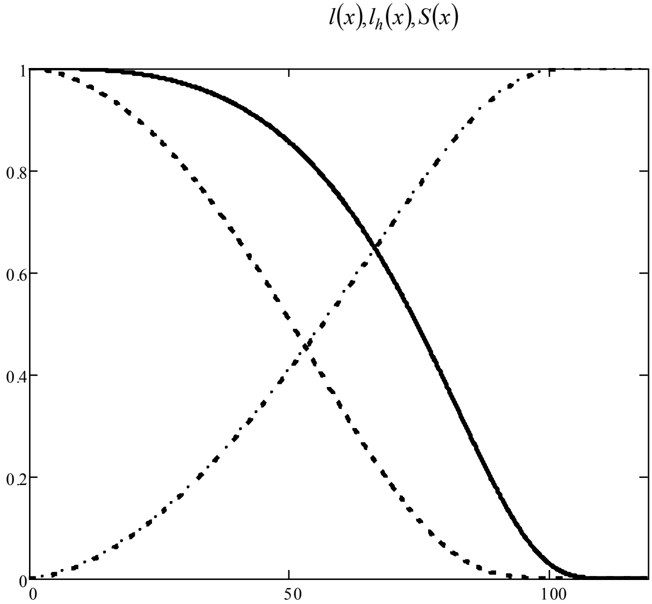

Figure.1.22 Curves: of survival - $l(x)$ - *a solid line*, of preservation of life and health in relation to chronic diseases of circulatory system - $l_h(x)$ - *a dotted line,* of the prevalence of chronic diseases of the circulatory system among the population of Kitsman District, Chernovtsy Region - $S(x)$ - *a dot-dash line*

- You should also pay attention to the fact that the most rapid increase in the prevalence of chronic diseases of the circulatory system was observed at the age of 50-60, that is in the working age.

- The law of preservation of health allows evaluating of the quality of life - as a percentage ratio of the average “healthy” life expectancy (concerning *h*-disease) to the average life expectancy at birth. Thus, in the considered case, the average life expectancy of the population in Kitsman District, Chernovtsy Region was 72.95 years old, but the duration of its “healthy” part (in relation to chronic diseases of the circulatory system) was only 49.48 years old, that did not reach the limit of working age. Indicator of the quality of life in these conditions was equal to 67.8 %.

- The average (by the composition of the population) prevalence of the circulatory system diseases in Kitsman District for major age-sex groups is presented in Table 1.23.

Table 1.23

The prevalence of chronic diseases of the circulatory system in Kitsman District, Chernovtsy Region per 100,000 people in different age groups according to the combined tables of morbidity-mortality

Age group, years	The prevalence of chronic diseases of the circulatory system per 100,000 people								
	Population in general			Urban population			Rural population		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
0-6	1481	1092	1925	499	798	106	1685	1151	2290
7-14	4080	3569	4601	3672	4176	2292	4149	3364	5017
15-17	7206	6208	8233	7320	9096	4246	7121	5403	9001
18-60	22900	21540	24320	23270	24110	21390	22660	20690	24810
> 60	65460	61820	68290	70690	68760	71500	63930	59650	67410

According to the table data in working age (18-60 years old) prevalence of chronic diseases of the circulatory system is about 20-25 thousand per 100,000 people. This is a fairly high rate, requiring increased attention to this category of the population.

In addition, the table data show that if on the whole in all age groups the prevalence of chronic diseases of the circulatory system was higher for women than for men, the men in the city, but this rate for urban men was higher than that of women of working age and younger, although it was higher for rural women (all age groups) than for men. This can partly be explained by better detection of patients in the city than in rural areas, and a greater share of mortality causes not related to circulatory system diseases for rural men (especially in younger age groups). In addition, it is also due to the relatively more healthy way of life of rural men than urban (although the most serious differences require special study).

It should also be noted that comparing the estimates of the prevalence of chronic diseases of the circulatory system or other chronic disease - the leading causes of population’s disability and death because of which a full recovery is impossible, with the actual (observed) prevalence, it is not difficult for a researcher or a manager to estimate, using the outlined approach, the accuracy of the diagnosis of these diseases and the effectiveness of treatment and preventive measures aimed at reducing of the negative impact of these diseases, the increase of duration and quality of life, which is important for health care managers and other professionals involved in the problems of the development and implementation of targeted programs for the protection and promotion of public health.

§ 1.12 The measurement and evaluation of the life quality indicators

While development of strategies to achieve "health for all" WHO pays special attention to solving the problem of the relationship of health and quality of life. It is proposed to monitor the potential health and quality of life, where quality of life is seen as an integral characteristic of the physical, psychological and social functioning of people based on the subjective perception and evaluation.

There are two main approaches to the assessment of quality of life. The first is used to study specific disease or group of diseases [76]. The second, more general approach is used for wide ranging of health problems taking into account effects of the disease and the health index [83]. There have been attempts to study the quality of life using the first and second approaches together [77, 82].

The approaches of intermediate nature are also used - between the second (common) and the first (by sickness), where the disease is assigned as a specific tool for the study of quality of life, particularly for the measurement of psychological well-being (by mood, by the index of overall psychological well-being and test of the level of symptoms).

Besides, the mechanism for measuring of the quality of life is generally used to study the most prevalent and socially important diseases. However, these studies do not single out and estimate common and individual contribution of genetic components and the adverse impact of the environment and way of life on the quality of life itself.

In general, there is no information in the literature that would point to a direct link of set of indicators that characterize the quality of life with the level of health and the possibility of systemic diseases development [31].

In the economic literature the level of quality of life is considered to be a level of the population well-being, consumption of goods and services, a set of conditions and indicators characterizing the measure of meeting the basic necessities of life, where well-being is both measure and the degree of people's provision with welfare and means of subsistence [7, 16].

Indicators reflecting standard of living of the population in quantitative equivalent are of interest for the comparative assessment of the state and regional levels of economic development of the territories and welfare, for the development of social policy and for determining of priority directions of environmental, social and medical support for individual groups.

Quality of life, as a generalized socio-economic category includes not only the level of consumption of goods and services, but also the level of meeting spiritual needs, health, life, environmental conditions, moral and psychological climate, peace of mind.

Some information about the individual components of the quality of the standard of living is given by statistic indicators such as people's income, expenditures and consumption of goods and services, savings, indices of gained property, housing supply, people's income differentiation, socio-demographic characteristics.

The determining factor for the prosperity of society is a level of economic development of the country, so the main indicators of the economy condition is often used as general indicators of living standards. They include gross domestic product (GDP), national income and net national disposable income.

In statistical practice, GDP, which is the final result of the production activity is the most widely used indicator. For the analysis of the standard of living, its dynamics and a comparative characteristic by regions GDP is calculated in real terms (at constant prices) per person. For international comparisons this index is priced in dollars based on purchasing power parity (PPP) of the currency.

One of the significant deficiencies of identified cost parameters is that they contain elements not directly related to the quality of life. Thus, the GDP includes spending on the army, state apparatus and so on, which do not reflect the real standard of living of the population.

So to assess the well-being of the population it is often suggested to use standardized demographic indicators that are closely linked with macroeconomic indicators, namely, the infant mortality rate and life expectancy (LE) at birth. The advantage of these indicators is that they reflect not only the quantitative characteristic of the standard of living, but also the qualitative one.

Cost of living index (COLI) is also used in statistical practice for generalizing the characteristics of social welfare. The cost of living is measured according to the dynamics of consumer prices and consumption patterns. COLI reflects the impact of prices on the welfare of the population. At the same time, the comparison of costs required to maintain a fixed standard of living in case of changing prices for consumer goods and services is of interest. When calculating this index a set of consumer goods (consumer basket), which is unique to the costs structure of each particular group of the population is determined. The cost of this set is calculated at current and base prices, and then a comparison of the obtained values is made. However, such calculation methodology actually reflects not so much a change in the cost of living, but consumer prices influence on it. In this regard, instead of COLI index one can use CPI - consumer price index, which characterizes the change in the cost of living based on one factor - the dynamics of prices of goods and services included in the consumer basket.

Some researchers [34] believe that one of the most appropriate indicators of the quality of life is the Human Development Index (HDI), proposed by a group of experts of the United Nations Development Program [61].

Thus, despite rather large range of specific indicators of the level and quality of living, the question of integral unified index of the quality of life remains open, controversial and topical [2, 7, 14].

The question of the connection of health and quality of life at the population level is still problematic.

Taking into account that according to all known definitions [2, 7] quality of life is seen as the “subjective rate individual’s satisfaction with the environment”, we offer regular and objective basis for determining this parameter staring with - the *degree of life and health preservation* on the ground of the control of three processes: *survival of population* (generally), *survival of patients with chronic* *pathology* and *survival of healthy people* (relative to some pathology leading usually to death).

In the first case, the index of quality of life is defined as the degree of proximity of the dynamic parameters of the survival process to the optimal ones (taken as the norm), defined on the basis of the law of survival of populations.

In the second case, the quality of life is considered from the point of view of health and diseases, as the ratio of healthy (in the traditional sense) life to the entire span of life.

In the third case, the life expectancy at birth relates to life expectancy at the exclusion of the action of the disease(s) leading to death.

The formulas for the calculation of these indicators (in percent) are as follows:

For the first case:

$$K_l = \frac{100 e_x^{(0)}}{e_{xn}^{(0)}} \qquad (1.42)$$

where $e_x^{(0)}$ and $e_{xn}^{(0)}$ – respectively, the current and the normative values of the life expectancy at birth for the total population. For example, according to official statistics for 1998, the life expectancy of the population of Ukraine was 68.10 years old, while normative value of the average life expectancy for the entire population defined by the authors was 80.24 years old. As a result, the index of quality of life of the population of Ukraine, defined in this way, was equal to 84.9%.on December 31, 1998.

For the second case the calculation formula is as follows:

$$K_h = \frac{100 e_x^{(h)}}{e_x^{(0)}} \qquad (1.43)$$

where $e_x^{(h)}$ – "healthy" life expectancy in relation to any disease leading ultimately to death. According to our calculations carried out on data from Kitsman District, Chernovtsy Region [53] the life expectancy at birth, defined in case of action of all causes of death on December 31, 2007 was 72.95 years old, and "healthy" life expectancy in relation to the diseases of circulatory system being the main cause of death made up 49.48 years old. Consequently, the factor of quality of life of the population of Kitsman District, Chernovtsy Region (in relation to the diseases of circulatory system), defined by the second method, was 67.8%on December 31, 2007.

For the third case, the calculations are as follows:

$$K_l^- = \frac{100e_x^{(0)}}{e_x^{(0)-}} \qquad (1.44)$$

where $e_x^{(0)-}$ – life expectancy at birth defined on condition of exclusion of any of the major pathologies of the number of causes of death.

For example, if we had managed to eliminate diseases of circulatory system from the causes of death in 2007, the life expectancy at birth of the population of Kitsman District, Chernovtsy Region would increase from 72.95 to 84.36 years old. Then the coefficient of the quality of life defined by the third method would be 86.5 % for the population Kitsman District, Chernovtsy Region on 31 December, 2007.

In all proposed variants the index of quality of life is of an integral character, and is measured as an objective reality on a natural basis for the first time. It is fundamentally different from the artificial indicator of **human development index**, since it includes everything, not just life expectancy, level of economic income and education.

At the same time, using topographic possibilities of "scale of longevity" you can also determine the structure of these factors and their role (degree of impact) on the population safety and health.

In its turn, the "human development index" is defined as follows [23]:

$$I_{hd} = \frac{I_l + I_{pr} + I_e}{3} \quad . (1.45)$$

In this formula: $I_l -$ life expectancy index, $I_{pr} -$ index of income level, $I_e -$ index of access to education. These indices are defined as follows. The "best" and “worst” global levels are provisionally selected for each indicator, on which the index depends. Then such ratios are made:

$$I_l = \frac{e_x^{(0)} - e_{xw}^{(0)}}{e_{xb}^{(0)} - e_{xw}^{(0)}}. \tag{1.46}$$

$$I_{pr} = \frac{V - V_w}{V_b - V_w}. \tag{1.47}$$

$$I_e = \frac{N_e - N_{ew}}{N_{eb} - N_{ew}}. \tag{1.48}$$

In formulas (1.46-1.48) indices b and w respectively belong to the best and worst values of the following indicators: life expectancy at birth, annual average income per capita, given, for example, in U.S. dollars, and relative proportion of persons aged 7 to 22 enrolled in any educational institutions. The corresponding figures without these indices are referred to any territory for which human development index is determined. Formula (1.45) shows that if on any territory all the indicators are simultaneously the best, the “human development index” equals to1, and if simultaneously the worst it equals to zero. It arises no objections. But it is well known that indicators included in the formulas (1.46) - (1.48) are not independent and therefore, even if you take them as a basis then “human development index” should have *not* an *additive*, *but multiplicative nature* and be determined, for example, as follows:

$$I'_{hd} = \sqrt[3]{I_l I_{pr} I_e} \tag{1.49}$$

if we assume that the level of life expectancy at birth, the level of average annual income per capita and the level of access to education are equally important for the well-being of society in the broadest sense.

This means that if on the territory under study any of particular indices has zero value, then human development index equals to zero, even if two other indices equal to 1. It may be objected that “it does not happen”, but from a mathematical point of view, the phrase “it does not happen” just means that these indices are not independent. At a fixed value of “old” human development index the “new” index has a maximum value, if all its elements are the same, and in this case it coincides with the “old” one. In the case of dissimilarity of components the “new” index is less than the “old” one. (This is an expression of the well-known theorem of arithmetical and geometrical means).

But with the law of survival of populations, there is no need to introduce a “human development index”. The fact that the indices α and γ, having (as applied to human society) both a biological and social nature (with a “superiority” of biological nature in α and of social component in γ) directly and essentially depend on the average annual income per capita and the availability of education (though, not only on them!) and together uniquely determine (at a known age limit!) the average life expectancy at birth. That is, **the use of the law and its parameters in the definition and evaluation of the level and quality of the population development in any territories more accurately, and the results are more correct in social, methodical and informational aspects.**

PART II

Population health and the system of health care

§ 2.1. Population health as a basis of forming the system of its protection

Social context of public health is extremely important for modern societies and states due to the necessity of choosing an effective development strategy in controversial circumstances and specific solutions of internal and external problems in all spheres of society.

Social significance of individual and public health is reflected in its relationship with the position of certain social groups in the system of social production. The features of this relationship are specific characteristics of the infrastructure of social production and population work employment formed and developed in accordance with the achieved level of population health and health of its groups.

Above mentioned problems require a combination of medical and social, medical and ecological, medical and organizational, medical-economic analysis for revealing the role of these factors in preserving and promoting public health, development of health care and infrastructure which promotes public health on the territory where they live. The object of study can be both series of inter-related socio-economic and medical-social phenomena and mechanisms of the connections between them. In this case, the entire spectrum of these problems can be reduced to the traditional approach from the standpoint of social medicine.

Health and health care act as the values whose availability is not the same for different groups and layers of the population due to the position of individuals and groups in the social system of inequality. That is why health is one of the reasons for identification and self-identification of people in the system of social inequality, and thus a prerequisite for their social interactions, social integration or disintegration, an essential factor of socio-psychological climate in groups, society and, consequently, the decisions to improve the method and image of life, forms and methods of protection of the living environment and their own health. That is, health determines the forms of civil and legal guarantees and obligations of the society on its protection and development, system resource support of it along with resource support of activities of the institutes which connected with the provision of population health in the territories of population living in one way or another [54].

Thus, the condition of population health is not only the basis for evaluating the effectiveness of the current system of power, but also one of the prerequisites for goal-setting in the field of social policy pursued by the government at the country's and regional levels [54].

In its turn, the relationship of public health with different spheres of human life and society emphasizes the complexity and social scale of these issues.

Hence we need a comprehensive system of health management, capable of overcoming interdepartmental barriers, to unite efforts of the society. Its formation is one of the most important organizational tasks in the nearest future. There must be established objective criteria and methods for valuation of human health and damage made to the country by individual and social ill health.

The State incurs huge economic losses from premature deaths of a significant part of the workforce. But these losses have no effect on the economy of productions. The cost of production should include the cost of health spent on its production. Of course, necessary and appropriate indicators and techniques are required to do this. This is a difficult task, but without its solution further progress will be difficult.

In addition, the necessity of a comprehensive national system of health management is prompted by the changing economic situation in the country, environmental pollution. Any physicians' efforts will be in vain if the growth of these dangerous trends will keep on. Hence, it is necessary to return the priority of prevention, which also means a significant correction of work of health care bodies themselves in accordance with changes in morbidity and mortality structure [5].

Besides, it is necessary to create coalitions and organization of target propaganda aimed at preventing of non-infectious diseases, especially those that are the leading causes of disability and death [58]. The question is about dealing with the most controversial aspects of policy development to promote health through cross-sectoral coordination.

The Coalition is an alliance of organizations working together to achieve a common goal. Initiative of decision-making and coordination are assigned to health care authorities to determine the goals and methods of achieving them and defining the strengths and weaknesses of the intervention (with the definition of its value and the benefits that can be derived from the coalition work) [58].

All aforesaid testifies to the existing difficulties in achieving health for all and limited to a greater or less extent opportunities of health care systems (by funding source) - budget, insurance, private and combined existing in the countries of the world community. Now these systems cannot fully meet the needs of the population for health care, achieve stable strengthening of its health for all sex and age, social and industrial groups. This is not only due to economic factors, particularly resource-intensive mechanism for their activity. To greater extent insolubility of the problem is caused by the lack of national and territorial **institutions and systems of population health management**.

Creating of such a system with the properties of predictability, controllability and resource saving where the territorial health care systems with the same properties function as one of its elements, is an essential task for any country.

At present time, any development of artificial rates of efficiency of territorial health systems functioning is considered to be non-correct, if these indicators are not derived from the health of the population living in these areas. Known attempts to link these indicators with the population health, focusing on traditional health care practice, mainly relied on the population morbidity.

Such one-sided orientation could not help solving the problem, as other traditional indicators of public health (fertility, physical development, disability and mortality) in the information database of health care are not systematically associated with morbidity, as well as between themselves. This eliminated practical opportunity to make a single model of public health and system of its protection on their basis.

Other notable attempts to define the integral indicators of health and effectiveness of health care actions using survival models of B.Gompertz-V.Makeham, W.Weibull and their variants have been fruitless because of the imperfections of these approaches due to the lack of systematic theoretical study of interconnection of concepts “health” and “survival” and imperfection of used methodological approaches and models while solving this systemic problem.

Practice has shown that solution of the problem is impossible solely in technical terms - on technical models [9]. Taking into account its interdisciplinary and systematic nature, solution should be firstly sought on the basis of serious theoretical system study of the problem of “health management” using appropriate results of the systematic methods.

For such a development the priority task was to single out system base or problem core (as integrity). The concept of “health” became such a core on the basis of studies [36]. Its deep decryption appeared possible only with the use of applied systems analysis based on general system theory (L.Bertalanffy, 1969). Simultaneously on the same basis there was conducted harmonization of other basic concepts related to the disclosure of the foundations of population health formation, such as: system environment of population, risk factors, lifestyle, prevention and others, i.e. concepts that are not quite constructive in today valeology due to inability to measure health on its basis and phenomena on which health is dependent.

Within conducted multifaceted study [36] we managed to find ways to develop a model of public health management with access to the social system of its protection and its strengthening in certain areas.

To carry it out, the following specific tasks set out in this monograph were progressively resolved:

system – a link of the concepts of “health” and “survival” is defined in the framework of their “safety”;

- the concept of population survival model;

- the law of survival of population is set, its mathematical model is made, as well as a graphical model of the dynamics of population health and survival in full life cycle (range of survival);

- the main direct and particular rates of population health at all stages of the life cycle, their boundary values, norms and standards of public health are identified;

- systemic relationship of population health with the quality of its environment, including the quality of territorial health care systems is found and measured;

- leading objectives in public health management and system tasks of its information support are stated;

- an information and methodological framework for decision support in the systems of population health management is developed;

- software for monitoring and evaluation of population health and system of its protection is developed;

- methodology and methods of predictable and resources saving regulation of public health at the territorial level, its protection and development in all forms of financing are established;

Developed concept of **“population health management”** defined the essence of territorial policy and health care systems:

1) recognition of system, indivisible integrity of the population and the environment of its living, the quality of their states;

2) proclamation of population health as the only criterion for assessing of the quality of socio-economic development of territories and the entire economic activity in them (UNGA 34/58, 1979);

3) social recognition that health is formed not only by efforts of the health care industry, but is the result of an indivisible operation and development of the population and its socio-ecological environment reflected in the parameters of its survival:

- biomedical (lifecycle stages);

- socio-medical (dynamics of quality of life);

- socio-ecological (dynamics of environmental quality);

- socio-economic (volume and structure of resources for conservation and development of health);

4) social recognition of human (population) health as an indicator of quality of social and natural environment of the areas where people live in indivisible integrity, where the population itself is a component of this integrity, which affects its condition;

5) recognition of the fact that public health is the result of preventive activity of the people themselves;

6) making health quality indicators as the basis of states' security, strategy and tactics of their policies.

The following concepts form the basis of strategy for improving the information base of health care and the conceptual framework of methodological approaches to its creation (or conversion):

- ideological and methodological shift from the concepts of "health care" to the concept of "health management" with understanding of indivisible unity of the population and its environment on the basis of the unity of medical and social, socio-medical, bio-medical, socio-ecological, socio-economic and demographic parameters during the process of its survival;

- formation of information and conceptual foundations of knowledge about the population and its health on the primacy of the dynamics of direct health indicators (in accordance with the law of survival of the population);

- formation of information and methodological foundations of control, evaluation of population health management based on regular integral parameters of its survival and habitability of the territories of its existence;

- taking decisions on population health management based on comparative analysis of parameters of real (observed) public health with its regularly justified regulations and standards;

- forecasting health of population based on evolutionary projected parameters of its health depending on resource constraints of relevant national and regional programs.

- from a practical point of view (from the standpoint of health care) implementation of the concept of "health management" is based on the use of vibrations of public health parameters in the development of health services and organizational forms of health care (by curve of health dynamics on a scale of longevity).

On this scale the survival curve accurately fixes the stages of development, sustainability and health loss in a particular area. In particular, the curve reflects problems boundaries associated with survival (by ageand sex groups, stages of the life cycle, deviations from standards of health, etc.), **tasks** requiring solutions (they stem from problems), as well as **conditions for their solutions** namely starting (initial) characteristics of "health resource", structure of necessary resources to reduce the risks of incomplete use of this resource (by sex, age and territories). At the same time, survival curves present real and desired **functional orientation** of the health care system, strategic objectives and **actions tactics** are defined. And all this should be on condition of health measurability at all stages of life, in all age and sex groups.

Territorial "map" or "net" of public health (fixed patterns) can be superimposed on the existing functional structure in the study area of the health care system.

Comparing net of health parameters with traditional indicators of evaluation of health care system activity, they can be **re-designated** in corresponding indicators of public health both in terminology and in the numerical values.

Then at any moment by health indicators you can give assessment of both public health and the work of the relevant health services, i.e. measure both in the same units. Thus, at the same time medical service will be able to identify (calculate) own intervals of impact on health, determine the parameters of the correction of their units activities, to determine their orientation, volume (taking into account resource constraints) and the boundaries of public health improving.

Thus, the definition of public health connection with the activities of health care will allow identifying of the desired orientation of the resource and organizational restructuring of health care where health specific invariants are like **nucleus** and, at the same time, formal coordination basis (or **code**), according to which a system of its protection - health care system is formed.

Development of the strategy and tactics of health care office activity on this basis will make it adequate and flexible with respect to the health of the served population: survival curve fixes the real situation, the range and direction of current and future decisions and, in fact, practical actions of the health care system itself. At the same time, with this approach, the adequacy and relevance of the medical service become **a guarantee of its own security and reliability**.

The transition to the concept of "population health management" makes population health status a core of health care policy, of its strategy and tactics, where health care services structure grounds on population health, becomes a derivative of population health that is as if "**it was grown from inside**".

In this approach we see a full match of "biological" and "social" - biological and social characteristics of survival, health safety and development.

At the same time, for the first time such approach will be fully responsible for humanistic orientation of health care, its "justice" [80] in relation to all groups while restructuring of health care.

The concept of "health management" is fully consistent with the requirements of UN Resolution 1979, where public health is literally recognized and referred to as "the sole criterion of all economic activities of the Commonwealth countries" (UNGA 34/58), and proposed development allows carrying out of scientific support of these activities in any territory.

Population health observed in the measurements (and curves) at all stages of its existence is a basis of the definition of health resources. Comparing them with the actual economic resources (in a particular area) and the intended use of the latter for leveling of negative processes in the population health clearly allows determining of the expected level of health, taking into account amount and points of resources distribution.

At the same time, found (§1.10) overall evaluation system of health and living environment will mutually allow distributing of resources, as well as combining resources of the whole society (and people themselves) to achieve better health.

In this approach, **health itself becomes an object of management and its quality and evaluation criteria are elevated to guidelines and, simultaneously, mechanisms for implementing systems of their management**.

At the same time, this approach stresses that any socio-environmental problems must be solved starting from the population health.

In the spectrum of the foregoing, the term "health management" can be summarized in the following definition: *these are organizational measures aimed at monitoring, evaluation and predicted quality control of system "population – environment" in order to use most of its internal and external resources for gradual improving of the quality state of system itself and its basic elements – population health and its living environment*.

This approach stipulates necessity of the formation of strategy and tactics of public health, its restructuring based on the primacy of human health.

The effectiveness of events on socio-economic restructuring of the territories of population living, strategy and tactics of all structural units of territories affecting public health are determined in a similar way.

At the same time, we consider the concept of "**management**" to be a means, an instrument of health care improving, solved in the traditional framework, where "management" as technology is considered only in terms of "**regulation**" as organizational measures aimed at monitoring, evaluation and regulation of the activities based on the proposed database and indicators.

Health monitoring is carried out using the proposed models of making tables of mortality/survival and combined tables of morbidity-mortality, the corresponding survival curves, as well as elemental indicators of formula of law of survival of the population.

Health assessment is based on the found “norms” and “standards” of public health, the corresponding survival tables, tables of evaluation criteria of areas habitability and tables of risks to health and life, by comparing actually obtained values of the controlled parameters with the established criteria for their evaluation. Visual assessment is carried out by the corresponding curves of survival by comparing stage dynamics of health and survival in the full life cycle.

Regulation, that is defining of the strategy and tactics of functional orientation of activities is performed “by deviations”.

Organization is planned by resources, desired structure of which is determined by calculation and requires a simple comparison with the actual distribution of resources.

The structure of resources includes survival risks (risks of health conservation) with regard to the adequacy of existing life support systems and, also health care system. In its values risks structure is common for all systems affecting the dynamics of population health in specific areas, as it is a result of their combined integrated impact, in a complex.

Besides, the main objectives are to search for unknown signs of states in the dynamics of public health with singling out of managed ones and finding opportunities to reduce hazards of both managed and controlled ones. Moreover, all managed ones should be changed into controlled (by developing appropriate methods), since only accountability allows managing.[+)]

It should be emphasized that the proposed system of “health management” is not based on some traditional, not interconnected indicators, but on the complex of interrelated and interdependent integral indicators. Here complex is not a simple

+) In our work, “management” - a means, an instrument of health care improving, which can be solved within the traditional framework. Hence, we paid attention to “management” as a technology, on the level of creating a new information and methodological framework, on the basis of which traditional organization activities are able to provide a new quality level of management of the industry and, in fact, population health.

additive association of found parameters. These are intensely united and internally system-coordinated all spectra of interaction of population in living environment capable of measuring, control and regulation of its health and longevity.

§ 2.2. Population health as a basis of forming management system of its protection and improvement, reorganization and regulation of the health care branch

Adverse changes in the population health mainly depend on environmental conditions - those ones which people are not able to balance. The reason is the disparity between the requirements of the environment and people's possibilities, that is, the inadequacy of lifestyle and living conditions.

Prognosis of these changes is to determine such characteristics of the environment and the population, which (if harmonized) will allow the latter to return equilibrium to its deviations, to adapt.

Balance and adaptation is not a one-way process in the group of managed processes. It is unidirectional if only there is a link-up (meeting) of aimed factors with unmanageable ones. The fact of people's settlement in certain geographical conditions could be taken as an example. Geographical conditions should be considered unmanageable, although it is more correct to assume that they should not be managed.

It is known that in the process of scientific and technological revolution there was a change not only of feelings, emotions, moods and worries inherent in both an individual and groups of people (population). With the development of work technology an individual and population simultaneously changed their nature, their adaptation possibilities related to the laws of social development. Hence the essence of social adaptation should be considered in a consistent relationship of the population and the environment, that is, to achieve good health, it is necessary to achieve optimal relationship characteristics of the population and the environment. And in order to achieve constantly dynamically improving health characteristics it is necessary to seek to standard characteristics of health quality and environmental quality, which indicates that the health is an integral derivative of population and environment relationship and it is a basis-marker and code of quality of both the environment and the population itself. At the same time, taking into account that the quality of the environment in which people live is a derivative of its actions, its functioning, the evaluation criteria of the environment should be found in the qualitative characteristics of the population. It is on this basis that we have found the optimum characteristics for the existence and interaction of the population and its environment (norms and standards - §1.8).

Found landmarks, when compared with the real characteristics provide the basis for the vision (definition) of:

- disruptions in relations of environment and population (by α and γ);

- deviations of real health indicators from the desired (normative, reference or other) ones;

- vector (direction) of deviations;

- the causes of deviations - by topological map of the phenomenon (dynamics of health and survival) with events occurring in the same time intervals in the same environment, “superimposed” on this dynamic.

This knowledge provides a useful basis for decision-making, actions, determination of their volume, a place of their application and direction (simultaneously, resource structure for disagreements leveling on the basis of age and sex risks to health and life).

Comparison of “necessary” to “really possible” (by levels of economic development of areas) provides a basis for determining of phases of the desired results achieving and, consequently, speed and timing of their achievements.

Use of this ideology, development of appropriate methods and obtained results suggest that: *population health is a base (code) of forming of a system of its protection and improvement management*.

It is known that the target of public health care is to protect and improve public health. At the same time, the health care system should be flexible in its structure and activities.

The results of the studies for the construction of an adequate (to population health) and relevant (by its structure) health care system require that the general goal (orientation) of health care should match age and sex dynamics of health and survival of population, where the implementation of all activities and programs should be directed at reducing of the duration of stages I and III –“adaptation” of the generations to the environment and “maladjustment” (on the survival curve) and, accordingly, on the extension of the second stage – of “adapted existence”, due to a substantial reduction of age-sex mortality at all stages of life and their causes - chronic diseases.

At the same time, our found **health standards** define the basic strategy of the health care system for decades, tactical aspects of its practical adjustment for sustained achievement of these standards.

Taking into account that the real survival curve (the dynamics of health) always has a unique (space-time) character due to the peculiarities of territorial peculiarities of socio-ecological environment of people’s living its own unique structure of health care must operate in each territory.

Dynamics of the proximity of health indicators to the standards (norms) defines the basic criteria for assessing the quality of the current system of health services. At the same time, it should be noted that found evaluation criteria of territories habitability (§1.10) not only allow to give an integrated assessment of the socio-ecological environment where people live and on this basis to plan work of areas administration, SES and medical service. These criteria simultaneously act as evaluation criteria of the work of the listed institutions, organizations and other social (territorial) institutions, activities of which directly or indirectly affect people health.

Besides, it is described above (§1.11) that for the first time we were able to determine the so-called complete health risks through integrated risk of survival based on age, sex and area of the population residence [36]. And these risks reflect both the quality and effectiveness of health care systems in these territories.

The estimates of the risks to health and survival allow determining the main points of necessary investment of resources, the structure of their distribution based on the structure of the population by age and sex. They also allow determining the amount of resources with the agreed territorial real economic constraints and a realistically attainable health in these conditions.

All above mentioned results are a source of solutions of quality (in other words, methodological), economic, resource (i.e., technological and methodological), as well as organizational problems of practical health care.

Summing up, we emphasize once again that methodically the **activities of all health care structures** while implementation of the concept "health management" **should be directed** to:

• **achievement of norms** and, in the longer term - **standards of population health and the quality of the living environment, where the evaluation criteria are the indicators of "normative" and "reference" tables of survival, the best rates of "habitability" of living territories (shown in units of population health)**;

• **reduction of the "adaptation" and "maladjustment" period while extending the period of "stable, adapted existence" by eliminating deviations of real indicators of survival tables from control values**;

• **reducing risks of "life resource" underutilization** in the territories of living on the basis of the relevant age-sex tables of risks to health and life, and **increase of the rate of "quality of life"** (by health);

• **leveling of medical and social risk factors for incomplete use of "life resource"** (chronic diseases leading to death), where the criteria of true decisions and actions are:

- *distancing of the age of mass health disorders;*

- *prolongation of "healthy" life;*

- *increase in the rate of "quality of life" of patients with chronic diseases.*

- *targeting direction of resources to improve population health*, where the assessment of correct choice (of decisions) is based on the correspondence of the actual distribution of resources with the calculated (by the risks to health and life) approximation of the real indicators of mortality tables to indicators of control tables, steady stable growth (in dynamics) of average lifetime - overall and by gender.

When discussing the concept of "health management" the question might arise: "Is it possible to manage health as it is possibly to manage only processes?" Indeed, only processes can be managed. But health in the human (population) life cycle acts as a *process*. If health is regarded as "the risk of existence (survival), the risk of capacity loss (retention)", then at precisely measured life cycle (by dates of birth and death) it is a process of existence with the change of states *duration of which is life* (of a human, population) and *qualitative characteristics of which are determined by the environment of existence*.

Measuring and conducting health assessment we always get rates of "states" at a particular point in the course of their change at the cycle of existence (life). Possibility to control and correct observed states is already management. Consequently, having these conditions we can talk about the possibility of health management. Moreover, it will be traditionally performed, as noted above, by the deviations from the recognized "norms", control "standards".

It should be noted that health is always "geared" into object – a "carrier" of health. Public health is derived from the quality of the population and the quality of the environment (as noted above), where health care is one of the active elements of the environment.

Today, the "health" (quality) of health care is not determined by the quality of population. System "works for itself" [70] and all the terms of its effectiveness are its own, by content they are far from the population, its states.

It is well known that health care as an object of activity is structured by levels - there is a hierarchy of relations with community: a family doctor - a medical specialist - Head of Department - Chief Physician – Head of Regional Medical Administration and so on, until the Minister of Health Care of Ukraine. Each of them considers an object and, consequently, its health in various ways in accordance with the hierarchy of functions of the health care of the population. Respectively, the flows (spectrum) of the actions of individual hierarchical structures of health care are defined. Genetically (derived from the term “genesis” - development) it turns out that there are many doctors, and hence the concepts of health, but the object itself is “homeless”, there is a loss of united service at many levels.

Considering “health”, it should be understood that this concept is always automatically linked to a specific object (“health of an individual”, “family health”, “population health”, etc.) and takes into account its invariant state where the invariant is an unchanging feature of the object as a system, a system base, a pattern created or observed by the researcher on the basis of a particular aspect of an object consideration in a particular environment at a particular time (§1.1).

Determining health observed by physicians in a specific time as an “invariant” state of the object (a person or people) taking into account sex, age, time, and area of observations, as well as the aspect (level) of its external observation (i.e. from an outsider’s viewpoint), the health system of this object (person, group of people, population) can be seen from the following angles (positions – by the hierarchy of medical staff)

- a doctor in charge;
- a doctor-specialist (a lot of them);
- a head of the department;
- a head of the medical institution;
- a head of medical and administrative areas, etc.

And always, in spite of different formal interpretation of “object health” by these persons, object in question will have it the same. Although its basic properties will always slightly differ in different observers - they will be reflected and fixed in functions, duties, decisions and responsibility limited by the position of the observer (researcher).

Taking it into consideration, the leading approach to object health management (system analysis) should be “**combined streams of object health protection**” at all levels of the job hierarchy as well as **“united responsibility”** for the decisions on conservation, restoration and development of health (its resource).

With this approach to solving problems of health management, proper *"management" is not dependent on possible changes to the object of observation, on the conditions of the system of its protection, as well as on the conditions of the influence of living environment on health of these objects (people, population)*.

The solution to this organizational and technological problem is solution to the problem of the health system management in general, and, more importantly, in the public interests.

The way to solve this problem: to select a doctor, fully responsible for the health of an individual or group of people (= family doctor) and provide it with resources of support and the development of health of subordinate objects at the expense of other levels.

In this system, *a person becomes a core of the system, its excitation signal, where the invariant of the human condition is an indicator of resources to support its health*.

But because of the "need for self-preservation" [70] *"every system works only on itself"*. That's why a person is an "excitement factor" always prevents health care and due to this, it is trying to exclude him (a patient) from the system. Therefore, the problems of control, accountability and resource saving of health care system appear.

Reorganization of health care with its "external" function of *"protection of population health"* should always be based on "internal" function - *monitoring of availability and effectiveness of services* measured, usually, by many traditional indicators of health manifestations and also by "life expectancy of population" (they act as external parameters). In this approach internal parameters are: a hierarchy of instructions, commands algorithms, actions control. (In this case they must be consistent with the quality of population).

The second item in the reorganization of health care is *the need to include an object (person, people) in the control of its own health protection (security)*. With this approach, the *management* of the health care system should *aim at control and correction of traditions of the population life*. They define both community lifestyle and resources to protect public health. The management method must be modifying of the industry actions with regard to the quality of population and deviations from the recognized “normative”, “standard” or other integrated (control) indicators of health and survival.

You should also pay attention to this fact: many scientific papers and case studies on the “prevention” contributed little in terms of describing the principles and approaches schemes to the management of relevant specific activities, monitoring and measuring of their efficiency and effectiveness.

The reasons are in the complexity of social and institutional environment in which prevention programs are implemented, in an infinite number and variety of factors, on which their effectiveness depends, as well as in the absence of theory of prevention control (there is only a collection of non-systematic ideas!!!).

There can be singled out the following system aspects of the prevention content:

- *actions directions*;
- *functions* (the action itself);
- *tasks* that should be solved;
- *exclusion of conditions that foster disharmony in the life* of an individual or group of people (population);
- *strengthening of the protective functions* of an individual or population *due to their encouragement and support* (for the population it is a set of mass health measures, a combination of leisure activities, as well as full implementation of labor laws, family and marriage legislation, etc.).

With this approach the **goal of prevention** *is: creation (construction) of a system, in which steady and purposeful processes of the normal life of both an individual and the population will take place*.

Then, for an individual (in the definition of “healthy” or “practically healthy”) the goal of prevention is building (creating and shaping) a system with the property of dependability when a person reasonably bases (relies) on performing of the actions for which the system is designed.

This allows an understanding of prevention as the actions which correct direction of the processes "pounding" them into the sustainable functioning. For example: dispensing drugs to eliminate the tendency to "scrapping" of a capable state of body, achieving of its sustainable and stable (balanced) functioning.

For the population the goal of prevention is achieving sustainable orientation of health processes (processes take place themselves!) with a fixed tendency of their orientation - in our desired direction (at vector "+" or "-"). Examples: mortality reducing, life expectancy increasing, etc. (due to the certain activities execution).

Then, in the above sense (content) of actions, *treatment* (e.g., medications rationing) *is understood as a correction of the direction of the processes* in the body (including such a well-known principle of treatment – "by exception", which takes into account deviations from the accepted "norms" and "standards" of processes observed in patients' organism.

In contrast to the treatment, **prevention itself** (as a form of assistance) is **understood as a change of actually observed** (current) **state** of an object in order to **guarantee shaping of the projected, observable and measurable future state**.

At the same time, in the case of measuring of humans' (people's) adaptation possibilities, an extension of the latter should be understood as the *expansion of the range of processes, by which their deliberate and measured modification can be performed* (to maintain a specified level of dependability as realization of the possibilities guaranteed by nature).

Then, methodological and, accordingly, information and methodological basis of the **system classification of prevention** should be the following *gradation of actions (measures)*:

1. *Purely "internal" prevention* is an activity aimed at preventing and eliminating of the processes within the system object which is negative for it (individual, family, population);

2. *Purely "external" prevention* is an activity aimed at preventing and eliminating of the processes in the environment of the system object existence and life activity (both in physical and social terms) which are negative for the system object (individual, family, population);

3. *"Externally-internal" and "internally-external" prevention* is an activity aimed at preventing and eliminating changes in the functions inside the system object caused by the processes that take place in itself or in its environment (the root cause determines the direction of pre-emptive actions!) which are negative for the system object.

The following things are taken into account in these actions:

- internal and external status characteristics of the object (health, sex, age, profession, place of residence, structure, method and way of life, etc.);

- vector of prevention orientation (with the "+" or "-");

- the speed of the impact of specific activities on the object;

- resistance of effects of these events (time periods of their conduct, repetition or duplication of activities, etc.);

- the volume of activities;

- level (by performers' administrative functions) of activities implementation;

- the degree of "locality" of implemented measures impact and others.

Hence, the **"prevention" should be understood as**:

- choice (selection) of actions (activities) taking into account the properties of their "dependability" (the extent of achieving "appointed" or "desired" result while their implementation);

- *control of these actions (activities) execution taking into account the properties of their "modifying"* (by versatility of observed features for comparing of the impacts of certain activities with "experience" of the system) - *with the aim of coordinated control of activities, changes in technology for their implementation, measuring their effectiveness*.

Presented systematic analysis of “prevention” was necessary, taking into account its integrity in the system of health care management. And it showed that *prevention* (the one that developed in different ways in different areas and in different countries) *requires the formation of new* (or substantial renovation of existing) *structures of information and methodological support of management decisions at all levels of leadership* in the public health sector.

Hence there is a challenge: to unite “protection streams” of public health at all levels of the industry. Solution to this problem is solution of the problem of health care management in general and in the public interest.

The way to solve this problem is: *to select a doctor*, fully responsible for the individual’s health (= family doctor) and *ensure its resources to support the individual at the expense of other levels*.

In this system *a person becomes a core of the system, its excitation signal, where the invariant of the human condition is an indicator of resources to support its health*.

But because of the “need for self-preservation”, as S.N.Parkinson [70] noted, “every system works only for itself, i.e. a person as an “excitement factor” impedes health care and it is trying to eliminate a person (patient) from the system. The problem of controllability, resources saving and accountability of health care system arises.

Reorganization of health care system with the “external” function of “protection of public health” should be based on “internal” function: *monitoring of the availability and efficiency of services*, estimated by an “average life expectancy” (external parameter). Internal parameters here are: the hierarchy of instructions, commands algorithms, actions control. At the same time, they should be consistent with the quality of the population.

The second item of reorganization is the need to *include the object (an individual, population) in protection (security) control of its health*. Accordingly, the management of the health care system should be directed to the traditions of the population’s life. They identify both society and lifestyle resources for health protection. And a method of management must be *varying of branch actions with regard to the quality of population* and its deviations from the recognized "standard", "norm" or other integrated (control) indicators of health and survival.

§ 2.3. Qualitative characteristics of the informative-methodical system of the health care management

Health care management is only the organizational aspect of the desired state of human health. That is, the health care system is simultaneously a means and an instrument of population health management.

The result of the activity of this system is manifested in specific services to population: preventive and curative. Intermediate result is in the nature and characteristics of the impact on the living conditions (the quality), i.e. on the population environment. The final result is in the observed state of its health.

On this basis, we can draw several important conclusions:

1. In the Department of Health "health management" does not clearly stand out - it is hidden inside the functioning of instruments (sectors) of the service, resulting in the fact that health care management **has no feedback with a specific condition of population**;

2. In the "health management" the system, branch itself is controlled. Person=patient or, particularly not patient in it is only an element. Therefore, **all the factors of management and managing effects are represented in terms of health care system** (treatment, visits, bed-days, etc.) - **health is veiled in them**;

3. In the "health management" **the purpose of the system and criteria of services effectiveness are provided in the resource terms**, i.e. in the actions of the industry, **although it is about health**, rather, about its concrete manifestations, but **it is not controlled**.

Here general conclusion appears to be the following: health care management, as a system, is stipulated **not by appropriate** (in terms of quality) **mechanism of the industry work in relation to population health** and, at the same time, forms a **costly strategy and mechanism of functioning of both separate services, and system in general**.

Just these circumstances were given the definition of "health care crisis", which refers not only to the budget or insurance health systems, but also to private one where person manages his financial costs (solvency), his own health and this health care system as a whole, i.e., resource management depends on his costs. Externally the quality of services and conditions of their providing seem better in this system. But they also do not correspond to the state of man, partial and inherently expensive in their basis. Moreover, experience shows that the population can be imposed with unnecessary services. That is, the notion of "crisis" refers to private health care too.

Based on the above, *health care management is resources management* (socio-economic approach), and *health management is the management of the people themselves, their way of life* (the quality of the living environment on the basis of positive changes in their behavior (attitude to themselves and living environment), *which needs resources* (biomedical, humanistic approach). Hence we obtain the conclusion that *resources are only an instrument to achieve the desired health and they are secondary* to human health.

This point of view shows the **need for complementarity of both approaches to population health protection**. But this will only be possible **when determining the performance criteria in the health care sector in the terms and concepts of population health**.

We also note that in the management of health care system, based on any economic basis, a particular socio-economic order - in accordance with the structure of roles and functions of different population segments in the society is always reflected.

In contrast, the health management (preservation of health and life resource) reflects medico-biological approach to shaping of the health care system. It manifests exclusively humanistic aspect of medicine for all segments and age-sex groups. In accordance with this approach, any person or group of people without any restrictions on their rights is considered as the main object of the socio-ecological environment created by the society. And it is implementation of the concept of "health management" that is a basis and a core of the problem of equality and equity in health care system [80, 90] solved at the level of the WHO and the international community, the success of solving this problem.

Health in the concept of “health management” is defined as the derivative of the socio-ecological environment created by people themselves and exclusively in agreed connection with it. If we consider that the environment has fixed characteristics (including quality of population health) by locality then it logically follows that improvement of population health cannot be separated from the solutions of socio-environmental issues in these regions, as well as the fact that the solution of these problems is possible (and only!) in agreed connection with population health. This gives reason to emphasize that the social direction of the society to preserve and promote population health is a core of solution of current socio-environmental and particularly environmental problems.

We emphasize that the law of survival of population for the first time allowed accurately describing the process of population dynamics of health – population health, taking into account congenital and factors acquired in its habitat in their system, indivisible unity.

We have already noted that the management of health care use immense number of resource indicators, structured in levels of management. Inclusion in the activity of health care system of five groups of the so-called population health indicators (demographic - births and deaths, as well as morbidity, physical development and disability) as “quality” rates has been and remains an *artificial* one because of their complete disagreement with both health indicators in methodological and methodical aspects of information, and in their complete disagreement with one another, for the same reasons.

The above figures are not health indicators, as only health manifestations are observed in the society. The above indicators are markers of these manifestations; they “highlight” certain aspects of population health at different stages of the life cycle - from birth to death. But how can they be identified and structured? In this regard, there is no serious theoretical study of the problem - if it were, then there would be no methodical and information mismatch of these indicators. These indicators are artificially called collective, population, adding simple multiplication on the so-called "collective basis" - 100, 1000, 10000, 100000 to the usual formula for calculating of individual rates-indexes.

While solving health management issues we should also consider the following: at present time information and methodical system of decision-making in health care management is based on the rule of a *truncated pyramid*. Indicators at its base (based on reporting form 20, inserts and supplements thereto) are used at the level of health care facility. Indicators in the top of the pyramid going through the "screening" stage in the interim documents to the level of the Ministry of Health Care are used last in the system of state planning and resourcing of the industry. They make much less quantity than in the analysis of data obtained in Form 20 and others at the primary level. But still, there are a lot of them to exclude the possibility of a totally coherent forecast for all (or at least, the main) aspects of the health care system. So it is impossible for professional manager to simulate an integral forecast based on departmental annual "Report on population health and health care activities". There must be at least several dozens of professional managers by separately structured blocks of the industry, but even gathered together, they will still act as in a famous Krylov's fable, or in accordance with the law S.N.Parkinson [70]: each will "pull the blanket on himself". Such a long-term mismatch in industry activities, working for the same goal - the preservation and strengthening of population health, performing one mission (corresponding to the target) and the reason for the existence of which is also "preservation and promotion of population health" could be resolved only through a fundamental restructuring of both informational and methodological framework and health management in general. It is only possible if decision makers understand that health care system (its structure, functions and programs) is secondary, health is primary, that it is a "code" and basis of all industry structures, that population health defines both the needs and, at the same time, opportunities to meet them.

What *qualities new information and methodological support system* for managerial decisions in health care must have? The WHO gave an exhaustive answer to this question in the "Report of the WHO Expert Committee" in 1995

[66]. The new system should eliminate differences in the assessment of population health at the national and territorial levels, that is, should be universal for all levels of management. In addition, control parameters should be minimized in it, it should combine quantitative and qualitative parameters of population health, external and internal factors of health, should interdisciplinary represent range of monitored parameters in integral form. It must meet the requirement of "focus on action" - namely, to improve population health at all stages of its existence, life, should contribute to the development of national and regional policies on health care, their development plans with the assessment of the impact on human health. Finally, the new system should allow correctly determining of the direction of investments in the programs on health improvement. In this case, the priority requirements for health are [62, 63, 66, 80, 90] their quality, fairness and equality in the delivery of services by all groups, as well as determination of the structure necessary for resource investments - in terms of efficiency of health care system performance.

All of the above *WHO requirements for new information systems correspond to our offered system*. It contains minimum control parameters (just three) for both national and any territorial level, in which, as we have shown, there is a combination of both external quantitative and qualitative and internal characteristics of public health. These indicators are integrated and interdisciplinary - they have a quality of the genome, the living environment, the quality of health resource implementation, the degree of adaptation to the environment and the degree of its "tuning" for the preservation of life and health; that is they have medical, demographic, social, environmental and other knowledge. All figures, both separately and in combination, are aimed at action - increasing of opportunities to maximize use of congenital resource of public health throughout the life cycle - from birth to death. Analysis and evaluation of tabular, numerical and graphical representations of these parameters contribute to the development of any, both general and targeted programs to preserve population health, as the causes of survival (death) based on the parameters of the law of survival reveal disease and lifestyle, availability and quality of medical services, as well as the overall quality of social and socio-ecological environments. Efficient planning, forecasts making, policy development, direction and content of programs to improve population health are available on their basis.

It should also be emphasized that three parameters of the law are easier to manage –manageability of the system is known to significantly improve, increase with decreasing of control parameters. In addition, the parameters α, γ and x_0 are inherently integrated knowledge:

- about people's health in all sex and age groups and the factors on which it depends;

- about quality of their living territories - their habitability, the activity of life and health support system in them;

- about policy (national and territorial) on preservation and quality of population;

- on practical implementation of this policy (both in terms of population health and the volume and structure of investments for its protection and development);

- on the adequacy of the organizational structure of the health care system with health of individual groups of population and relevance of its functioning (taking into account sex and age);

- on the quality of people's life in the territories of residence, current laws in them (both written and unwritten).

Also it should be specially emphasized that the described information-methodical system, although based on the integral parameters of the law of survival and the age limit invariance as one of the fundamental parameters of the biology of the species, **allows correct transition to the traditional system of parameters in health care system**. For this purpose, there were established norm and reference mortality table, morbidity tables, tables of risks to health and life, etc. In addition, the system allows strictly structuring of redundant mortality when compared with control values (norms, standards) and on the basis of meaningful interpretation of the results it allows coming to:

- deep evaluation of the running processes, on the surface of which before there was recorded just life expectancy, that is to see the inside (roots and summands) of this indicator;
- evaluation of factors affecting health;
- development of an optimal strategy to improve population health, both at the level of areas and departmental actions (programs).

At the same time, the WHO concept on quality of health care systems provides the transition from the model, disease-oriented, to the "holistic" approach with the following list of activities aimed at the modernization of the health care system [64, 65]:

- *maintenance organization* (standards, accreditation);
- *financing* (budgeting, payment system);
- *technical characteristics* (external system of quality assurance);
- *clinical training* (training programs, licensing, certification, satisfaction with the results of citizens and patients service);
- *patients' safety* (legislation, inspection, risk management);
- *formation of indicators on the quality system* (indicators, databases, instruments, proofs).

Thus, the main task of health authorities is to **ensure social guarantees for population** in the form of opportunities for appropriate types and amount of medical care and to ensure its availability.

These bodies' leverage to medical facilities in this case is:

- licensing of health care facilities;
- standardization of medical services provided to health facilities;
- compliance with the standards of evidence based medicine.

In this case, the power structures at all levels must settle the issues of coordination of social opportunities and administrative structures (other than health), contributing to a full functioning health care system in the territory as a complex of cross-sectoral activities, aimed at promoting a positive influence on health factors and, accordingly, confrontation on factors that have a negative impact [62].

Part III

Prognosticating of population health and evaluation of the efficiency of the health improvement programs

Today, as already noted, planning of costs in the industry is made on the basis of “achieved”, taking into account just departmental interests and traditional indicators, such as number of beds, doctors, cost of health facilities equipment, medicines and the like. This approach has a certain right to exist, but it is “specifically technological” and very far from the interests of society and its individual members, both patients and healthy people. It does not mean that we should “break” all, but, in our opinion, it would be more correct if both patients and healthy members of society will participate more actively in the formulation and implementation of the targeted programs on their own health protection and promotion, of course, under the coordination of these actions by the authorities and professionals who would carry out “scientific and technological” support of these programs during their development and implementation.

The law of the survival of populations and integral health indicators closely related to it enable to approach this question in an entirely new way. And the industry itself seems to be operating more efficiently if its funding and logistical support will be carried out not only from the state budget or legally (or illegally) from the patients’ pocket directly during treatment, but by the whole society on the basis, as we have emphasized, of the understanding of human life and health importance as an absolute humanitarian value and the relationship of solidarity, partnership and balance of interests in accordance with the principle “healthy person pays for patient and rich person pays for poor one” which is based on this understanding.

From this perspective, the law of survival allows prognosticating based on observable demographic indicators, population health in terms of its survival and to determine the optimal cost structure for the protection and strengthening of its health on the basis of sex-age structure of the population in a particular area based on the amount of the life resource which is to be restored.

It should be also taken into account that any forecast will come true (find out to be real) due to the actions while developing and realizing of which:

1. control ("normative"!) or forecasting indicators (see §1.8) or guidelines recommended by the WHO for the region under study (for example, in accordance with the Policy of Health "Health - 21") are selected as forecasting indicators of population health (see §3.10);

2. the desired tendency to improvement of the indicators of population health in the area under study is taken into account (and is mathematically calculated – by years) (see §3.8-3.9);

3. political, social and economic conditions for the implementation of the health improvement programs in the region (country) are provided [62].

This section focuses on these questions covering.

§ 3.1. The tables of mortality (survival) as an instrument of population health prognosticating

We will show how to construct a **prognosticating mortality table** based on the probability of death q_0 before the age of 1 year old and an average life expectancy $e_0^{(0)}$ at birth. If the age life limit x_0 is regarded as known, the law of survival of populations implies that integrated indicators of population health α and γ satisfy the following system of transcendental equations:

$$\begin{cases} \int\limits_0^1 (1-q_0)^{x_0^{\alpha-1} y^{\alpha}(x_0-1)/(1-y)} dy = e_0^{(0)} / x_0 \\ \gamma = -\dfrac{1}{x_0^{\alpha}\left(1-x_0^{-1}\right)\ln(1-q_0)} \end{cases} \qquad (3.1)$$

This system of equations can be solved only numerically, so at the end of the monograph detailed tables (TAGOR) are given allowing to define the values of α and γ by specified values of $e_0^{(0)}$ and q_0. The tables are constructed on the assumption that x_0 = 119 years old. If the values $e_0^{(0)}$ and q_0 are different from the table ones, then under the condition $q_{01} \le q_0 \le q_{02}, e_{01}^{(0)} \le e_0^{(0)} \le e_{02}^{(0)}$ where $q_{01}, q_{02}, e_{01}^{(0)}, e_{02}^{(0)}$ – adjacent table values q_0 and $e_0^{(0)}$ (closest to the specified ones), corresponding to the given values indicators α and γ can be defined as follows:

$$\alpha = \alpha_{01} + \frac{(\alpha'_{01} - \alpha_{01})(q_0 - q_{01})}{q_{02} - q_{01}} + \frac{(\alpha''_{01} - \alpha_{01})\left(e_0^{(0)} - e_{01}^{(0)}\right)}{\left(e_{02}^{(0)} - e_{01}^{(0)}\right)}, \qquad (3.2)$$

$$\gamma = \gamma_{01} + \frac{(\gamma'_{01} - \gamma_{01})(q_0 - q_{01})}{q_{02} - q_{01}} + \frac{(\gamma''_{01} - \gamma_{01})\left(e_0^{(0)} - e_{01}^{(0)}\right)}{\left(e_{02}^{(0)} - e_{01}^{(0)}\right)}. \qquad (3.3)$$

At the same time α_{01} and γ_{01} are table values of α and γ which correspond to the values of $q_0 = q_{01}$ and $e_0^{(0)} = e_{01}^{(0)}$; α'_{01} and γ'_{01} are the table values of α and γ, corresponding to the values $q_0 = q_{02}$ and $e_0^{(0)} = e_{01}^{(0)}$; α''_{01} and γ''_{01} are the table values of α and γ, corresponding to the values of $q_0 = q_{01}$ and $e_0^{(0)} = e_{02}^{(0)}$.

As integral health indicators α and γ are defined, the indicators of prognosticating mortality table can be calculated in terms of the survival function $l(x)$ corresponding to these parameters in the following sequence:

1) $l_x = 100000 l(x)$, (3.4)

2) $p_x = l(x+1)/l(x)$, (3.5)

3) $q_x = 1 - p_x$, (3.6)

4) $d_x = l_x - l_{x+1}$, (3.7)

5) $L_x = 100000 \int_x^{x+1} l(x)dx$, (3.8)

6) $T_x = \sum_{x'=x}^{x_0} L_x$, (3.9)

7) $e_x^{(0)} = T_x / l_x$. (3.10)

These are these logic mortality tables built according to this logics which can serve as an instrument of population health prognosticating and the calculation of the optimal structure of the distribution of funds for its protection and promotion (§3.3-§3.6).

§3.2. The transition from the traditional indices of public health to population ones and vice versa.

Let's consider the example of restoring a full mortality (survival) table by publicly available data on infant mortality and average life expectancy. According to the "Worldwide infant mortality and average life expectancy rates" (in on-line version), these indicators, for example, in Germany in 2007 were 4.03 per mille and 78.38 years old, respectively. When $x_0 = 119$ years old these figures correspond to the following integral health indicators (see tables of TAGOR in the Addendum): $\alpha = 0.856, \gamma = 4.1838$. These figures correspond to the U-shaped mortality curve, because $\alpha < 1$. In this case the period of adaptation of newborns generation to the environment is 8.69 years, where "biological" part determined only x_0 and α is 7.50 years, the modal age at death makes up 104.72 years old, the median age of survival is 87.47 years old, beginning of maladjustment period makes up 95.43 years old, i.e. in accordance with common standards in social medicine and demography we observe the process of survival of "high quality", despite the fact that $\alpha < 1$, since we have to deal with high-quality (friendly) living environment (γ), to which the conditional as well as actual generation adapts quickly and its maladjustment occurs slowly. In accordance with the obtained values of integral parameters of health restored table of survival (mortality) for the population of Germany is as follows (Table 3.1).

Table 3.1.

Restored table of survival (mortality) for the population of Germany (both sexes)

Age	Number of surviving	Probability of surviving to the next age interval	Probability of dying in this age range	Number of dying in this age range	Number of living in this age range	Number of man-year in at the age older than this one	Average life expectancy after this age
x	l_x	p_x	q_x	d_x	d_x	T_x	$e_x^{(o)}$
0	100000	0.995970	0.004030	403	99783	7841999	78.42
1	99597	0.996677	0.003323	331	99429	7742216	77.74
2	99266	0.996857	0.003143	312	99109	7642787	76.99

Continuation of Table 3.1

x	l_x	p_x	q_x	d_x	d_x	T_x	$e_x^{(o)}$
3	98594	0.996948	0.003052	302	98803	7543678	76.23
4	98652	0.997010	0.002990	295	98504	7444875	75.47
5	98357	0.997041	0.002959	291	98211	7346731	74.69
6	98066	0.997043	0.002957	290	97921	7248160	73.91
7	97776	0.997054	0.002946	288	97632	7150239	73.13
8	97488	0.997056	0.002944	287	97345	7052607	72.34
9	97201	0.997037	0.002963	288	97057	6955262	71.55
10	96913	0.997028	0.002972	288	96769	6858205	70.77
11	96625	0.997009	0.002991	289	96481	6761436	69.98
12	96336	0.996979	0.003021	291	96190	6664955	69.18
13	96045	0.996949	0.003051	293	95899	6568765	68.39
14	95752	0.996930	0.003070	294	95605	6472866	67.60
15	95458	0.996889	0.003111	297	95309	6377261	66.81
16	95161	0.996847	0.003153	300	95011	6281952	66.01
17	94861	0.996816	0.003184	302	94710	6186941	65.22
18	94559	0.996764	0.003236	306	94406	6092231	64.43
19	94253	0.996732	0.003268	308	94099	5997825	63.64
20	93945	0.996679	0.003321	312	93789	5903726	62.84
21	93633	0.996625	0.003375	316	93475	5809937	62.05
22	93317	0.996571	0.003429	320	93157	5716462	61.26
23	92997	0.996527	0.003473	323	92836	5623305	60.47
24	92674	0.996461	0.003539	328	92510	5530469	59.68
25	92346	0.996405	0.003595	332	92180	5437959	58.89
26	92014	0.996338	0.003662	337	91846	5345779	58.10
27	91677	0.996280	0.003720	341	91507	5253933	57.31
28	91336	0.996201	0.003799	347	91163	5162426	56.52
29	90989	0.996142	0.003858	351	90814	5071263	55.73
30	90638	0.996061	0.003939	357	90460	4980449	54.95
31	90281	0.995979	0.004021	363	90100	4889989	54.16
32	89918	0.995907	0.004093	368	89735	4799889	53.38
33	89550	0.995824	0.004176	374	89364	4710154	52.60
34	89176	0.995739	0.004261	380	88986	4620790	51.82
35	88796	0.995642	0.004358	387	88603	4531804	51.04
36	88409	0.995543	0.004457	394	88213	4443201	50.26
37	88015	0.995455	0.004545	400	87816	4354988	49.48
38	87615	0.995343	0.004657	408	87412	4267172	48.70
39	87207	0.995253	0.004747	414	87001	4179760	47.92
40	86793	0.995126	0.004874	423	86582	4092759	47.16
41	86370	0.995021	0.004979	430	86156	4006177	46.38
42	85940	0.994892	0.005108	439	85721	3920021	45.61
43	85501	0.994772	0.005228	447	85278	3834300	44.85
44	85054	0.994639	0.005361	456	84827	3749022	44.08
45	84598	0.994515	0.005485	464	84367	3664195	43.31
46	84134	0.994354	0.005646	475	83897	3579828	42.54
47	83659	0.994215	0.005785	484	83418	3495931	41.79
48	83175	0.994061	0.005939	494	82929	3412513	41.03
49	82681	0.993904	0.006096	504	82430	3329584	40.27
50	82177	0.993733	0.006267	515	81920	3247154	39.51
51	81662	0.993547	0.006453	527	81399	3165234	38.76
52	81135	0.99369	0.006631	538	80867	3083835	38.00
53	80597	0.993176	0.006824	550	80323	3002968	37.25
54	80047	0.992967	0.007033	563	79766	2922645	36.51
55	79484	0.992753	0.007247	576	79197	2842879	35.77
56	78908	0.992536	0.007464	589	78615	2763682	35.02
57	78319	0.992301	0.007699	603	78019	2685067	34.28
58	77716	0.992061	0.007939	617	77409	2607048	33.54
59	77099	0.991790	0.008210	633	76784	2529639	32.81

Continuation of Table 3.1							
x	l_x	p_x	q_x	d_x	d_x	T_x	$e_x^{(o)}$
60	76466	0.991526	0.008474	648	76143	2452855	32.08
61	75818	0.991229	0.008771	665	75487	2376712	31.35
62	75153	0.990938	0.009062	681	74814	2301225	30.62
63	74472	0.990614	0.009386	699	74124	2226411	29.90
64	73773	0.990281	0.009719	717	73416	2152287	29.17
65	73056	0.989912	0.010088	737	72689	2078871	28.46
66	72319	0.989546	0.010454	756	71943	2006182	27.74
67	71563	0.989156	0.010844	776	71177	1934239	27.02
68	70787	0.988713	0.011287	799	70389	1863062	26.31
69	69988	0.988284	0.011716	820	69580	1792673	25.61
70	69618	0.987798	0.012202	844	68748	1723093	24.91
71	68324	0.987296	0.012704	868	67892	1654345	24.21
72	67456	0.986747	0.013253	894	67011	1586453	23.52
73	66562	0.986178	0.013822	920	66105	1519442	22.83
74	65642	0.985573	0.014427	947	65171	1453337	22.14
75	64695	0.984898	0.015102	977	64209	1388166	21.46
76	63718	0.984212	0.015788	1006	63218	1323957	20.78
77	62712	0.983448	0.016552	1038	62196	1260739	20.10
78	61674	0.982651	0.017349	1070	61142	1198543	19.43
79	60604	0.981767	0.018233	1105	60054	1137401	18.77
80	59499	0.980823	0.019177	1141	58931	1077347	18.11
81	58358	0.979814	0.020186	1178	57772	1018416	17.45
82	57180	0.978716	0.021284	1217	56575	960644	16.80
83	55963	0.977521	0.022479	1258	55337	904069	16.15
84	54705	0.976218	0.023782	1301	54058	848732	15.51
85	53404	0.974815	0.025185	1345	52736	794674	14.88
86	52059	0.973280	0.026720	1391	51367	741938	14.25
87	50668	0.971580	0.028420	1440	49952	690571	13.63
88	49228	0.969733	0.030267	1490	48487	640619	13.01
89	47738	0.967678	0.032322	1543	46971	592132	12.40
90	46195	0.965429	0.034571	1597	45401	545161	11.80
91	44598	0.962936	0.037064	1653	43777	499760	11.21
92	42945	0.960158	0.039842	1711	42094	455983	10.62
93	41234	0.957026	0.042974	1722	40353	413889	10.04
94	39462	0.953576	0.046424	1832	38551	373536	9.47
95	37630	0.949641	0.050359	1895	36688	334985	8.90
96	35735	0.945208	0.054792	1958	34761	298297	8.34
97	33777	0.940137	0.059863	2022	32771	263536	7.80
98	31755	0.934404	0.065596	2083	30719	230765	7.26
99	29672	0.927743	0.072257	2144	28605	200046	6.74
100	27528	0.920081	0.079919	2200	26432	171441	6.23
101	25328	0.911087	0.088913	2252	24206	145009	5.73
102	23076	0.900589	0.099411	2294	21932	120803	5.24
103	20782	0.888124	0.111876	2325	19622	98871	4.75
104	18457	0.873219	0.126781	2340	17287	79249	4.29
105	16117	0.855184	0.144816	2334	14949	61962	3.84
106	13783	0.833200	0.166800	2299	12630	47013	3.41
107	11484	0.806078	0.193922	2227	10363	34383	2.99
108	9257	0.772064	0.227936	2110	8190	24020	2.59
109	7147	0.728977	0.271023	1937	6161	15830	2.21
110	5210	0.673512	0.326488	1701	4337	9669	1.85
111	3509	0.601596	0.398404	1398	2782	5332	1.52
112	2111	0.507816	0.492184	1039	1560	2550	1.21
113	1072	0.388060	0.611940	656	713	990	0.92
114	416	0.240385	0.759615	316	233	277	0.67
115	100	0.090000	0.910000	91	42	44	0.44
116	9	0	1	9	2	2	0.22

Continuation of Table 3.1							
x	l_x	p_x	q_x	d_x	d_x	T_x	$e_x^{(o)}$
117	0	0	1	0	0	0	0
118	0	0	1	0	0	0	0
119	0	0	1	0	0	0	0

This mortality table is a "trend" one, that is, it presents a smoothed dynamics of mortality rather than real (see §1.6). It allows determining age-specific rates of average life expectancy of the population, its main periods, modal and median age of death more accurately for management purposes, and these rates practically allow evaluating the effectiveness of social and recreational programs existing in Germany in the period of study.

Using integral (α, γ) and traditional indicators (by trend tables of mortality) of different areas, regions, districts, settlements, etc., it is not difficult to carry out health and social care mapping (certification) of any areas by territory both in terms of real time and in perspective (based on the results of targeted medical-social and socio-environmental programs). Cartograms in working order, for practical purposes, can be supplemented with color diagrams, which allow predicting the direction of actions (programs) in a real situation (see Fig.3.1).

Average trend life expectancy

1. Standard - 85.80

2. Norm - 79.09

3. Kitsman District - 76.63

4. Kelmentsi District- 74.98

5. Storozhynets District- 74.77

6. Glyboka District - 74.36

7. Novoselitsa District- 73.58

8. Gertsa District - 72.43

9. Khotin District - 72.24

10. Sokiryany District- 71.48

11. Vizhnitsa District - 70.95

12. Zastavna District- 70.35

13. Putila District- 70.30

14. Totally in Region - 70.09

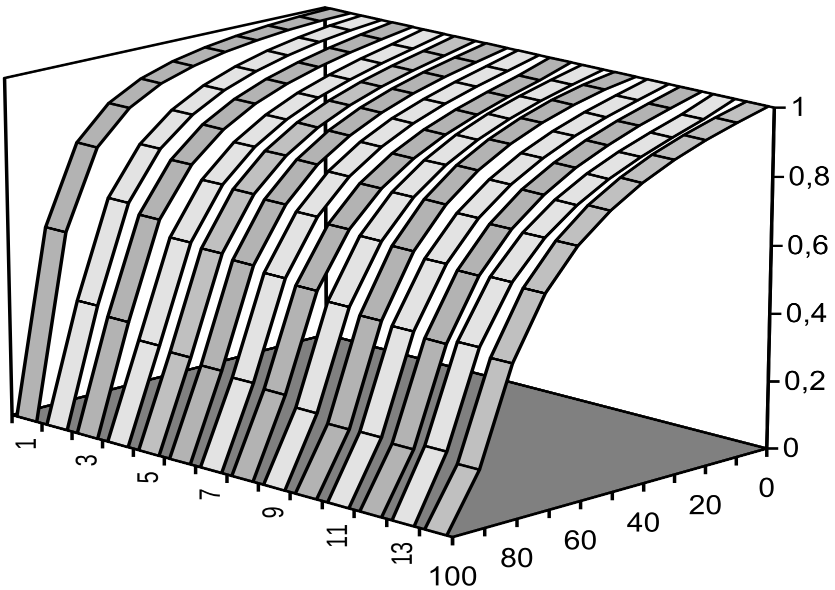

Fig.3.1. Dynamics of rural residents' survival of Chernovtsy region by age (with a 10-year span of the life cycle)

As can be seen from the Figure, all the districts of Chernovtsy region need implementing of the targeted programs aimed at achieving of the best regulatory or standard dynamics of population health, but to varying degrees, that is structurally different activities, costs for their implementation, etc.

Herewith, territory passport must include the data for the development of social and health improvement programs (see §3.4).

§ 3.3. Determining the desired values and planning the desired dynamics of integral indices of population health

After construction of mortality table with real values of integral health indicators α_r and γ_r (according to §3.2), by given parameters of relative reduction of mortality in certain age groups (λ_x), the number of survivors (l_x^d) of "desirable" mortality table, using the number of survivors (l_x^r) of "real" mortality table can be defined as follows:

$$\begin{cases} l_0^d = 100000 \\ l_{x+1}^d = l_x^d - (1-\lambda_x)(l_x^r - l_{x+1}^r) \end{cases}. \qquad (3.11)$$

If on the basis of additional studies structure of mortality by causes in each age group is known and relative indicators of mortality reduction are set by causes $\lambda_x^{(j)}$, then the numbers l_x^d are defined as follows:

$$\begin{cases} l_0^d = 100000 \\ l_{x+1}^d = l_x^d - (l_x^r - l_{x+1}^r)\sum_j \beta_x^{(j)}(1-\lambda_x^{(j)}) \end{cases}, \qquad (3.12)$$

where $\beta_x^{(j)}$ – relative proportions of cause-specific mortality in x-age group.

After the "desirable" mortality table being constructed the integral parameters of population health can be defined either explicitly by the method of least squares (it is in this way that a numerical example was made in §2.4) or, if you cannot apply it they can be approximately defined by TAGOR tables given in the Addendum. To find them by tables TAGOR the "desirable" mortality rate per 1000 people (or the probability of death q_0^d) under the age of 1 year old, and the average life expectancy at birth are pre-defined by the formulas:

$$\begin{cases} q_0^d = \dfrac{l_0^d - l_1^d}{l_0^d} \\ L_0^d = 0.33 l_0^d + 0.67 l_1^d \\ L_x^d = 0.5(l_x^d + l_{x+1}^d) \text{ при } x > 0 \, . \\ T_0^d = \sum\limits_{x' \ge 0} L_x^d \\ e_0^{(0)d} = T_0^d \big/ l_0^d \end{cases} \qquad (3.13)$$

By the known values q_0^d (or more accurate $m_0^d = 1000 q_0^d$) and $e_0^{(0)d}$ the desired integrated health indicators α_d and γ_d are defined by means of tables as described in §3.2.

Knowing real and integral health indicators you can plan the dynamics of the transition from one to the other based on the concept of sustainable growth by L.Euler [14], which is widely used today in the economics. The essence of this concept lies in the fact that each of the integrated health indicators for the planned transition time is growing exponentially in accordance with the relations:

$$\begin{cases} \alpha(t) = \alpha_r (\alpha_d / \alpha_r)^{t/T} \\ \gamma(t) = \gamma_r (\gamma_d / \gamma_r)^{t/T} \end{cases} . \qquad (3.14)$$

In these relations: $t -$ current time, measured from the start of the national or territorial target program on health improvement, $T -$ planned period to achieve the desired values of integral health indicators. Comparing integrated health indicators desired for each year with achieved ones, you can monitor the progress of the program and, if necessary, adjust the appropriate activities.

For each year of the program implementing on the basis of formulas (3.4) - (3.10) relation (3.14) allows constructing a prognosticating mortality table and based on comparing it with the real one you can pay greater attention to the health of those age groups for which the number of survivors differ from those projected in the direction of decreasing, taking into account the structure of cause-specific mortality in these groups.

§ 3.4. Database for development of the social and health improvement programs, the indicators of achieving control indices and the objectives of programs of population health preserving and building up

A computer database as a passport of the area under study is created to improve the health of the population in the territories of its residence in case of the development of appropriate social and health programs for getting and further use of integral indicators. It consists of the following groups of data:

1. census by gender, indicating the complete dates of birth (day, month, year) and areas of residence (full name of the settlement) according to regional statistics department;
2. fertility over the past 5 years including sex and full date of child's birth according to the territorial Civil Registry Offices;
3. mortality for the last 2 years by gender, full date of birth and death, cause of death (immediate cause and main disease) and place of residence according to the statistics departments or territorial Civil Registry Offices;
4. mortality rate for children under 1 year (separate database) including all characteristics from clause 3 according to the statistics department;
5. indicators of average life expectancy at birth by gender, areas of residence (city, village, region, district, etc.) according to regional statistics department;
6. directory of areas (settlements, zones and other medical districts depending on the focus and objectives of health programs, indicating: city, village or urban village, names of geochemical, landscape, economic, hospital and other areas;
7. regulatory and standard indicators by gender, territories based on this monograph;
8. regulatory and standard mortality tables by sex and territories based on this monograph;
9. table of evaluation criteria of livability of residence areas based on this monograph;
10. TAGOR reference tables based on this monograph;

These blocks of data are basic, main while development of any social and health improvement programs. Additional data blocks are created gradually according to the targets solution. These blocks should be classified as:

-socio-ecological passports of territories;

-data on morbidity and diseases prevalence;

-data on injuries (occupational, transport and others);

-health passport of territories (by type of care, subordinate territories, their resource endowments etc.);

-emergency situations, organization of assistance to the population to eliminate them (services, their capacity and others);

-production potential of territories (including social insurance coverage of employees, etc.).

Planning and implementation of any general and targeted social and health improvement programs (national, regional, departmental), their content, depth, focus and resource endowment will determine the variety and depth of any additional databases and their relation to the challenges of protecting and managing of the population health and territories of its residence.

The processing of these data by the monograph methods, technologies and models allows more reasonable determining of the forecast parameters of population health conditions and areas of its residence, pace and steps to achieve them, accumulating a database for ongoing monitoring and so on.

At the same time, control indicators and targets of programs to strengthen and preserve population health are achieved if:

1) integrated health indicators α and γ simultaneously increase or α remains unchanged, and γ increases in accordance with the desired dynamics;

2) mortality in all age groups is reduced, and average life expectancy increases;

3) the structure of funds allocation for specific programs of both integrated prevention and reduction of the prevalence of specific diseases and mortality from them is in correspondence with the calculated one, or close to it.

If the ratio between α and γ is reverse, i.e. α increases, but γ decreases sharply or, vice versa, then it is necessary to apply a dynamic phased plan adjusted for each stage of treatment and prevention programs and their financing structure so as to maintain the upward trend of one of the indicators, brake drop or ensure the growth of another one.

For example, in case of a sharp increase of α and decrease of γ the emphasis of targeted activities (with a corresponding change in the financing structure) must be shifted towards the citizens of working and retirement age, while the reverse trend it must be shifted towards children and adolescents, even if mortality rates among them are satisfactory from the point of view of traditional ideas.

§ 3.5. Estimation of the risks to population health (life) and determining of the desired, dynamically corrected structure of distributing means for their leveling in social and health improvement programs

Traditionally, in social medicine and general hygiene physical risks to public health, such as parameters of water quality, air and soil pollution etc. are basically measured. Thus, the so-called TLV of harmful substances, permissible levels of radiation exposure, etc. are often quite arbitrary and reflect rather the interests of "polluting" companies and agencies than the interests of the population health and survival, in a narrow and in a broad sense. But social risks defined by economic development of territories, crime situation and finally by the style of relationships between people in the course of their life are not measured at all. But these are integral indicators of population health and survival that allow measuring these risks as well. Moreover, if it were possible to construct at least regression models of integrated health indicators dependence on these factors (and some of them must be first "ranked" or "digitized"), it would allow a completely new, more correctly putting and solving of the question of what is "acceptable" and what is clearly "unacceptable".

However, based on mortality tables, it is also possible to measure risks in another way, namely in terms of potential or actually not fully used by each age group of country's population in general in any territory of vital resource. We will show how this can be done.

Suppose we have built two mortality tables: one by real values of integral health indicators, with the system of average life expectancy - $e_x^{(0)r}$ and the other by their desired values with the system of average life expectancy - $e_x^{(0)d}$. In this case, a vital resource in man-years (ΔT_x), potentially underutilized for each age group , the number of which is equal to P_x, is:

$$\Delta T_x = P_x\left(e_x^{(0)d} - e_x^{(0)r}\right) \qquad (3.15)$$

Then, assuming that each man-year of lost resource is equally valued one can define both absolute costs of its recovery and relative shares of R_x in it of every age group, that is, the structure of their distribution. Values of R_x in per cent are defined as follows:

$$R_x = 100\Delta T_x \Big/ \sum_{x=0}^{x_0} \Delta T_x \,. \qquad (3.16)$$

However, this method of the risks measuring and identifying of the desired structure of financing for their leveling is correct for long-term, especially preventive targeted programs. For short-term programs and programs associated with a decrease in the morbidity of specific diseases - causes of death there is a different, more correct approach connected with the definition of life resource potentially underutilized by population in the current year. For any age group it is defined as:

$$\Delta T'_x = P_x \left(\frac{L_x^d}{l_x^d} - \frac{L_x^r}{l_x^r} \right) \qquad (3.17\ )$$

where L_x^d and L_x^r -number of living and l_x^d and l_x^r - number of survivors in the desired and actual mortality tables. Accordingly, financing structure is defined as follows:

$$R'_x = 100\Delta T'_x \Big/ \sum_{x=0}^{x_0} \Delta T'_x \qquad . (3.18)$$

When comparing both structures the first one has a “skew” in the direction of predominance of the expenditures share for the younger age groups, and the second one has a “skew” in the direction of dominance (moreover, suppressing dominance!) of costs share for the older age groups. It is easy to understand, because, on the one hand, it is well known that taking care of health from an early age is a key to a long life and on the other hand, the bulk of mortality, for example, caused by diseases of the circulatory system is accounted for the age group of “50 years old and older”. Examples with necessary calculations are given in §3.6.

§ 3.6. A curtailed technique of estimating the necessary means for leveling risks to population health based on the integral indices of population health (IIPH)

Example 1. ***To determine the structure of financing for "carrying" integrated health indicators of Chernovtsy Region population (α_r and γ_r) in 2020 to standard ones (α_d and γ_d) by potentially underutilized life resource.***

Initial data: $\alpha_r = 0.675, \gamma_r = 2.880, \alpha_d = 1.245, \gamma_d = 3.736, T = 9$, where T - potentially underutilized life resource (in years).

Having these data the structure of financing for 2012, determined by potentially underutilized life resource is presented in Table 3.2.

Table 3.2

Structure of financing for 2012 for "carrying" integrated indicators of population health in 2020 to standard ones by potentially underutilized life resource (structure of the population and mortality were taken in 2011)

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man-years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
0	9934	1.49	14846	2.82
1	9997	1.30	12952	2.46
2	9743	1.21	11828	2.25
3	9568	1.15	11045	2.10
4	8960	1.11	9910	1.88
5	8839	1.07	9414	1.79
6	8734	1.03	8988	1.71
7	9395	1.00	9366	1.78
8	9594	0.97	9286	1.76
9	10294	0.94	9689	1.84
10	10352	0.92	9489	1.80
11	11199	0.89	10008	1.90
12	11586	0.87	10105	1.92
13	11750	0.85	10011	1.90
14	11857	0.83	9876	1.88
15	12967	0.81	10565	2.01
16	13272	0.80	10585	2.01
17	13945	0.78	10892	2.07
18	13851	0.77	10601	2.01
19	14875	0.75	11159	2.12

Continuation of Table 3.2				
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
20-24	78527	0.71	55643	10.56
25-29	69658	0.65	45063	8.55
30-34	65791	0.59	39019	7.41
35-39	62566	0.54	34086	6.47
40-44	60334	0.50	30203	5.73
45-49	66961	0.46	30765	5.84
50-54	57170	0.42	24044	4.56
55-59	53321	0.38	20444	3.88
60-64	33912	0.35	11785	2.24
65-69	41314	0.31	12913	2.45
≥ 70	90966	0.13	12220	2.31
Totally	901232	-	526801	100.0

The table shows that in this case the largest relative share of allocations falls in the age group of 20-24 years old (10.56%).

Example 2. ***To determine the structure of allocations for "carrying" integrated health indicators of Chernovtsy Region population in 2020 to the standard ones by potentially underutilized vital resource in the current year***. Input data are the same as in the previous example. Having these data allocations structure for 2012, determined by potentially underutilized vital resource in the current year, is shown in the Table 3.3.

Table 3.3

Structure of allocations for 2012 for "carrying" integrated health indicators in 2020 to standard ones by potentially underutilized vital resource in the current year

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta\tau_x$	$\Delta T'_x$	R'_x
0	9934	$2.04 \cdot 10^{-3}$	20.30	5.70
1	9997	$7.10 \cdot 10^{-4}$	7.11	2.00
2	9743	$5.19 \cdot 10^{-4}$	5.06	1.42
3	9568	$4.24 \cdot 10^{-4}$	4.05	1.14
4	8960	$3.64 \cdot 10^{-4}$	3.27	0.92
5	8839	$3.23 \cdot 10^{-4}$	2.86	0.80
6	8734	$2.93 \cdot 10^{-4}$	2.56	0.72
7	9395	$2.69 \cdot 10^{-4}$	2.53	0.71
8	9594	$2.51 \cdot 10^{-4}$	2.41	0.68

Continuation of Table 3.3				
x	P_x	$\Delta\tau_x$	$\Delta T'_x$	R'_x
9	10290	$2.35 \cdot 10^{-4}$	2.42	0.68
10	10352	$2.23 \cdot 10^{-4}$	2.30	0.65
11	11199	$2.12 \cdot 10^{-4}$	2.37	0.67
12	11586	$2.03 \cdot 10^{-4}$	2.35	0.66
13	11750	$1.95 \cdot 10^{-4}$	2.29	0.64
14	11857	$1.88 \cdot 10^{-4}$	2.22	0.63
15	12967	$1.82 \cdot 10^{-4}$	2.36	0.66
16	13272	$1.77 \cdot 10^{-4}$	2.34	0.66
17	13945	$1.72 \cdot 10^{-4}$	2.40	0.67
18	13851	$1.68 \cdot 10^{-4}$	2.32	0.65
19	14875	$1.64 \cdot 10^{-4}$	2.44	0.69
20-24	78527	$1.56 \cdot 10^{-4}$	12.27	3.45
25-29	69658	$1.48 \cdot 10^{-4}$	10.31	2.90
30-34	65791	$1.45 \cdot 10^{-4}$	9.56	2.69
35-39	62566	$1.47 \cdot 10^{-4}$	9.18	2.58
40-44	60334	$1.52 \cdot 10^{-4}$	9.16	2.57
45-49	66961	$1.61 \cdot 10^{-4}$	10.76	3.02
50-54	57170	$1.74 \cdot 10^{-4}$	9.94	2.79
55-59	53321	$1.92 \cdot 10^{-4}$	10.24	2.88
60-64	33912	$2.17 \cdot 10^{-4}$	7.36	2.07
65-69	41314	$2.51 \cdot 10^{-4}$	10.35	2.91
≥ 70	90966	$1.99 \cdot 10^{-3}$	180.87	50.81
Totally	901232	-	355.96	100.0

In this and subsequent similar tables $\Delta\tau_x$ – lifetime, averagely lost by one member of the relevant age group due to diseases of the circulatory system. The table shows that with this approach the largest share in the structure of allocations accounts for children under 1 year old (5.70%) as the least protected group, and persons older than 70 years old (50.81%), which also belong to the little protected categories and share of which is the biggest in the mortality structure.

Example 3. ***To determine the structure of the allocations for the hypothetical excluding circulatory system diseases from the causes of death for the population of Chernovtsy Region in 2020 by potentially underutilized life resource by the following initial data:*** $\alpha_r = \alpha_d = 2.770, \gamma_r = 1.144, \gamma_d = 3.736, T = 9$. In this formulation of the problem it is recognized that cardiovascular diseases are predominantly social in nature. Seeking structure of allocations for 2012 is shown in the Table 3.4.

Table 3.4

Structure of allocations for 2012 for the hypothetical exclusion of diseases of the circulatory system from the number of causes of death in Chernovtsy Region in 2020 by potentially underutilized life resource

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
0	9934	1.97	19611	1.35
1	9997	1.97	19735	1.36
2	9743	1.97	19233	1.32
3	9568	1.97	18886	1.30
4	8960	1.97	17683	1.22
5	8839	1.97	17441	1.20
6	8734	1.97	17228	1.19
7	9395	1.97	18524	1.28
8	9594	1.97	18907	1.30
9	10290	1.97	20273	1.40
10	10352	1.97	20371	1.40
11	11199	1.97	22016	1.52
12	11586	1.96	22752	1.57
13	11750	1.96	23045	1.59
14	11857	1.96	23221	1.60
15	12967	1.96	25353	1.75
16	13272	1.95	25902	1.78
17	13945	1.95	27160	1.87
18	13851	1.94	26916	1.85
19	14875	1.94	28835	1.98
20-24	78527	1.92	150860	10.38
25-29	69658	1.89	131220	9.03
30-34	65791	1.83	120687	8.31
35-39	62566	1.77	110903	7.63
40-44	60334	1.70	102465	7.05
45-49	66961	1.61	107934	7.42
50-54	57170	1.51	86556	5.96
55-59	53321	1.41	74947	5.16
60-64	33912	1.28	43673	3.00
65-69	41314	1.16	48015	3.31
≥ 70	90966	0.46	42380	2.92
Totally	901232	-	1452742	100.0

In this structure, the largest share of the allocations accounts for the age group of 20-24 years old (10.38%).

Example 4. ***To determine the structure of the allocations for the hypothetical excluding circulatory system diseases from the causes of death for the population of Chernovtsy Region in 2020 by potentially underutilized vital resource in the current year.*** Input data are the same as in Example 3. Structure of allocations for the year of 2012 is shown in Table 3.5.

Table 3.5

Structure of allocations for 2012 for the hypothetical exclusion of diseases of the circulatory system from the number of causes of death in Chernivtsi Region in 2020 by potentially underutilized vital resources in the current year

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta\tau_x$	$\Delta T'_x$	R'_x
0	9934	$5.10\cdot10^{-8}$	$5.06\cdot10^{-4}$	$3.57\cdot10^{-5}$
1	9997	$4.57\cdot10^{-7}$	$4.56\cdot10^{-3}$	$3.22\cdot10^{-4}$
2	9743	$1.23\cdot10^{-6}$	0.012	$8.43\cdot10^{-4}$
3	9568	$2.32\cdot10^{-6}$	0.022	$1.57\cdot10^{-3}$
4	8960	$3.74\cdot10^{-6}$	0.034	$2.36\cdot10^{-3}$
5	8839	$5.45\cdot10^{-6}$	0.048	$3.40\cdot10^{-3}$
6	8734	$7.48\cdot10^{-6}$	0.065	$4.61\cdot10^{-3}$
7	9395	$9.82\cdot10^{-6}$	0.092	$6.51\cdot10^{-3}$
8	9594	$1.25\cdot10^{-5}$	0.120	$8.43\cdot10^{-3}$
9	10290	$1.54\cdot10^{-5}$	0.159	0.011
10	10352	$1.87\cdot10^{-5}$	0.194	0.014
11	11199	$2.23\cdot10^{-5}$	0.250	0.018
12	11586	$2.62\cdot10^{-5}$	0.304	0.021
13	11750	$3.05\cdot10^{-5}$	0.358	0.025
14	11857	$3.51\cdot10^{-5}$	0.416	0.029
15	12967	$4.01\cdot10^{-5}$	0.520	0.037
16	13272	$4.55\cdot10^{-5}$	0.603	0.043
17	13945	$5.11\cdot10^{-5}$	0.714	0.050
18	13851	$5.73\cdot10^{-5}$	0.794	0.056
19	14875	$6.38\cdot10^{-5}$	0.950	0.067
20-24	78527	$8.65\cdot10^{-5}$	6.79	0.48
25-29	69658	$1.33\cdot10^{-4}$	9.27	0.65
30-34	65791	$1.94\cdot10^{-4}$	12.76	0.90
35-39	62566	$2.72\cdot10^{-4}$	17.03	1.20

Continuation of the Table 3.5				
x	P_x	$\Delta\tau_x$	$\Delta T'_x$	R'_x
40-44	60334	$3.72 \cdot 10^{-4}$	22.47	1.59
45-49	66961	$5.00 \cdot 10^{-4}$	33.51	2.36
50-54	57170	$6.65 \cdot 10^{-4}$	38.01	2.68
55-59	53321	$8.77 \cdot 10^{-4}$	46.77	3.30
60-64	33912	$1.15 \cdot 10^{-3}$	39.16	2.76
65-69	41314	$1.52 \cdot 10^{-3}$	62.90	4.44
≥ 70	90966	$1.23 \cdot 10^{-2}$	1123	79.23
Totally	900428	-	1417.33	100.0

In this structure, the largest share of the allocations accounts for persons older than 70 years old, since it is this group which has the major share of the mortality from diseases of the circulatory system.

Example 5. ***To determine the structure of the allocations for the hypothetical exclusion of circulatory system diseases from the causes of death for the population of Kitsman District, Chernovtsy Region in 2020 by potentially underutilized resource life by the following initial data:*** $\alpha_r = \alpha_d = 2.664, \gamma_r = 1.221, \gamma_d = 4.127, T = 9$. Seeking structure of allocations for 2012 is shown in Table 3.6.

Table 3.6

Structure of allocations for 2012 for a hypothetical excluding of circulatory system diseases from the causes of death in Kitsman District, Chernovtsy Region in 2020 by potentially underutilized life resource

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
0	819	2.08	1709	1.45
1	796	2.08	1660	1.41
2	756	2.08	1577	1.34
3	745	2.08	1554	1.32
4	673	2.08	1404	1.19
5	683	2.08	1424	1.21
6	653	2.08	1361	1.15
7	684	2.08	1425	1.21
8	690	2.08	1437	1.22
9	808	2.08	1681	1.42

Continuation of the Table 3.6				
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
10	789	2.08	1640	1.39
11	850	2.08	1765	1.49
12	906	2.07	1878	1.59
13	892	2.07	1846	1.56
14	884	2.07	1827	1.55
15	983	2.06	2028	1.72
16	972	2.06	2000	1.69
17	963	2.05	1978	1.67
18	963	2.05	1973	1.67
19	998	2.04	2039	1.72
20-24	5593	2.02	11316	9.58
25-29	5197	1.98	10296	8.72
30-34	5062	1.92	9752	8.26
35-39	4889	1.86	9091	7.70
40-44	4925	1.78	8765	7.42
45-49	5279	1.69	8911	7.54
50-54	4636	1.58	7348	6.21
55-59	4114	1.47	6054	5.12
60-64	3045	1.35	4107	3.47
65-69	3524	1.21	4293	3.63
≥ 70	8101	0.49	3989	3.37
Totally	70872	-	118128	100.0

In this structure, the largest share of the allocations accounts for the age group of 20-24 years old (2.58%).

Example 6. ***To determine the structure of the allocations for the hypothetical excluding circulatory system diseases from causes of death for the population of Kitsman District, Chernovtsy Region in 2020 for potentially underutilized vital resources in the current year***. Input data are the same as in Example 5. The structure of allocations for the year of 2012 is shown in Table 3.7.

Table 3.7.

Structure of allocations for 2012 for a hypothetical excluding of circulatory system diseases from the causes of death in Kitsman District, Chernovtsy Region in 2020 by potentially underutilized life resource in the current year

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta\tau_x$	$\Delta T'_x$	R'_x
0	819	$9.31\cdot10^{-8}$	$7.63\cdot10^{-5}$	$6.05\cdot10^{-5}$
1	796	$7.39\cdot10^{-7}$	$5.89\cdot10^{-4}$	$4.67\cdot10^{-4}$
2	756	$1.86\cdot10^{-6}$	$1.40\cdot10^{-3}$	$1.11\cdot10^{-3}$
3	745	$3.36\cdot10^{-6}$	$2.51\cdot10^{-3}$	$1.99\cdot10^{-3}$
4	673	$5.23\cdot10^{-6}$	$3.52\cdot10^{-3}$	$2.79\cdot10^{-3}$
5	683	$7.45\cdot10^{-6}$	$5.09\cdot10^{-3}$	$4.04\cdot10^{-3}$
6	653	$1.00\cdot10^{-5}$	$6.53\cdot10^{-3}$	$5.18\cdot10^{-3}$
7	684	$1.29\cdot10^{-5}$	$8.82\cdot10^{-3}$	$6.99\cdot10^{-3}$
8	690	$1.61\cdot10^{-5}$	0.011	$8.81\cdot10^{-3}$
9	808	$1.96\cdot10^{-5}$	0.016	0.013
10	789	$2.35\cdot10^{-5}$	0.019	0.015
11	850	$2.77\cdot10^{-5}$	0.024	0.019
12	906	$3.23\cdot10^{-5}$	0.029	0.023
13	892	$3.72\cdot10^{-5}$	0.033	0.026
14	884	$4.24\cdot10^{-5}$	0.038	0.030
15	983	$4.81\cdot10^{-5}$	0.047	0.038
16	972	$5.40\cdot10^{-5}$	0.053	0.042
17	963	$6.04\cdot10^{-5}$	0.059	0.046
18	963	$6.72\cdot10^{-5}$	0.065	0.051
19	998	$7.43\cdot10^{-5}$	0.074	0.059
20-24	5593	$9.89\cdot10^{-5}$	0.553	0.44
25-29	5197	$1.48\cdot10^{-4}$	0.772	0.61
30-34	5062	$2.12\cdot10^{-4}$	1.074	0.85
35-39	4889	$2.93\cdot10^{-4}$	1.431	1.13
40-44	4925	$3.95\cdot10^{-4}$	1.944	1.54
45-49	5279	$5.24\cdot10^{-4}$	2.764	2.19
50-54	4636	$6.88\cdot10^{-4}$	3.189	2.53
55-59	4114	$8.99\cdot10^{-4}$	3.697	2.93
60-64	3045	$1.17\cdot10^{-3}$	3.570	2.83
65-69	3524	$1.53\cdot10^{-3}$	5.406	4.29
≥ 70	8101	$1.25\cdot10^{-2}$	101.204	80.26
Totally	70872	-	126.13	100.0

In this structure, the largest share of the allocation accounts for the persons older than 70 years old (80.26%).

The above examples show that if you do not spend money and efforts on prevention of diseases, such as the circulatory system diseases at younger ages, then you will need to bear the greatest costs for their treatment at older ages. And with limited resources to appropriate target programs the interests of children, adolescents and citizens of working age will be dramatically diminished. This highlights the limitation of the approach based on the elimination of specific diseases (although in some cases it can and should be the case), and the benefits of an integrated approach to prevention and treatment, in which the appropriate treatment and preventive measures for each age group in a particular area are “their own” - in accordance with the actual structure of morbidity and mortality by causes and the desired dynamics of integrated health indicators. One could, of course, reduce the structural “misalignments” between the age groups, additionally introducing their “price” or “weight” of the unit of lost vital resource (subject to restoration) for each of them, but as such an approach in the practice of national health care is offered for the first time, then it is still unknown how to do it reasonably. Moreover, the task of such based assessment of resource unit is not the task of “pure” social medicine and requires the involvement of other professionals: economists, sociologists, etc.

In the works [50, 51] we also examined the possibility of achieving WHO Policy guidelines “Health for All” for the European Region in Ukraine in 2020. These guidelines are formulated as indicators of the relative reduction in mortality from specific causes in specific age groups and suggest: achieving mortality rate under the age of 1 year old of no more than 10.0 per 1,000 of population and the following indicators of the relative reduction in mortality at the age up to 65 by separate classes in accordance with ICD-X (in %): I - 40, II - 15, III + IV - 40, V + VI - 33, X - 40, XIX + XX - 50. Overall reduction in mortality at the age of 65 and older should have been 17.0%. If you take figures of 2000 for Chernovtsy Region as start ones, then reaching these landmarks the average life expectancy of the population was to increase from 71.62 to 77.09 years old, for men - from 67.13 to 73.92 years old, for women - from 75.79 to 79.50 years old. If the figures α for all categories of the population will be equal to the starting values then indicator γ for the total population is to increase from 1.19 to 1.66 till 2020 or to 39.8%, for men - from 0.9 to 1.36 or to 51.7%, for women - from 1.52 to 1.93 or to 27%.

In this case, the structure of compensation costs of the society and industry for improving of the public health and restoration of vitality and viability of potential population, adequate to the WHO tasks of Health for All, would require increasing of the expenses on protecting and promoting of the population health (compared to 2000) for children and adolescents - by 5.1%, for the working age population - by 126.0%, for the elderly - by 118.0% in 2020. The solution of these changes in the structure of social transfers could be a significant increase in the share of wages in the structure of production cost, because wages in the market conditions is transformed into an effective instrument of labor reproduction, including the terms of improving working people health.

§ 3.7. A curtailed technique of estimating the necessary means for leveling risks to population health based on the indices of infant mortality and average span of expected life.

Example 1. ***To build a dynamic structure of allocations to reduce death rate for infants under 1 year old by 20% in Chernovtsy Region within 10 years and to reduce the gap between the actual and standard average life expectancy for the entire population by 50%.***

Baseline: $\boldsymbol{m_{0r} = 0.01, m_{0d} = 0.008, e_{0r}^{(0)} = 74.92, e_{0d}^{(0)} = 77.58}$

By tables TAGOR-A we define that $\alpha_r = 2.369, \alpha_d = 2.382, \gamma_r = 1.588, \gamma_d = 1.868$. Therefore the structure of allocations for the first year of the relevant program implementation is as follows (Table 3.8):

Table 3.8

Structure of allocations for the first year of the program implementing defined by potentially underutilized life resource

(the population structure is taken for the year of 2011)

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
0	9934	0.27	2702	1.38
1	9997	0.27	2719	1.39
2	9743	0.27	2650	1.36
3	9568	0.27	2601	1.33
4	8960	0.27	2435	1.25
5	8839	0.27	2401	1.23
6	8734	0.27	2370	1.21
7	9395	0.27	2547	1.30
8	9594	0.27	2598	1.33
9	10294	0.27	2784	1.42
10	10352	0.27	2795	1.43
11	11199	0.27	3018	1.54
12	11586	0.27	3116	1.59
13	11750	0.27	3153	1.61
14	11857	0.27	3174	1.62
15	12967	0.27	3462	1.77
16	13272	0.27	3533	1.81

Continuation of the Table 3.8

x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
17	13945	0.27	3701	1.89
18	13851	0.26	3663	1.87
19	14875	0.26	3920	2.01
20-24	78527	0.26	20436	10.46
25-29	69658	0.25	17670	9.04
30-34	65791	0.25	16159	8.27
35-39	62566	0.24	14773	7.56
40-44	60334	0.23	13591	6.95
45-49	66961	0.21	14271	7.30
50-54	57170	0.20	11422	5.84
55-59	53321	0.19	9886	5.06
60-64	33912	0.17	5767	2.95
65-69	41314	0.15	6357	3.25
≥ 70	90966	0.06	5778	2.98
Totally	901232	-	195452	100

Table 3.9

Structure of allocations for the fifth year of the program implementing, defined by potentially underutilized life resource

(the population structure is taken for the year of 2011)

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
0	9934	0.27	2682	1.38
1	9997	0.27	2699	1.38
2	9743	0.27	2630	1.35
3	9568	0.27	2582	1.32
4	8960	0.27	2417	1.24
5	8839	0.27	2383	1.22
6	8734	0.27	2353	1.21
7	9395	0.27	2529	1.30
8	9594	0.27	2579	1.32
9	10294	0.27	2764	1.42
10	10352	0.27	2775	1.42
11	11199	0.27	2997	1.54
12	11586	0.27	3095	1.59
13	11750	0.27	3132	1.61
14	11857	0.27	3153	1.62
15	12967	0.27	3439	1.76
16	13272	0.26	3510	1.80
17	13945	0.26	3677	1.89
18	13851	0.26	3641	1.87
19	14875	0.26	3896	2.00
20-24	78527	0.26	20322	10.42

Continuation of the Table 3.9				
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
25-29	69658	0.25	17587	9.02
30-34	65791	0.24	16101	8.26
35-39	62566	0.24	14738	7.56
40-44	60334	0.23	13578	6.96
45-49	66961	0.21	14280	7.32
50-54	57170	0.20	11449	5.87
55-59	53321	0.19	9928	5.09
60-64	33912	0.17	5803	2.98
65-69	41314	0.16	6412	3.29
≥ 70	90966	0.06	5889	2.99
Totally	901232	-	195020	100

Table 3.10

Structure of allocations for the tenth year of the program implementing, defined by potentially underutilized life resource

(the population structure is taken for the year of 2011)

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
0	9934	0.27	2655	1.37
1	9997	0.27	2672	1.38
2	9743	0.27	2603	1.34
3	9568	0.27	2556	1.32
4	8960	0.27	2393	1.23
5	8839	0.27	2359	1.21
6	8734	0.27	2329	1.20
7	9395	0.27	2503	1.29
8	9594	0.27	2554	1.31
9	10294	0.27	2737	1.41
10	10352	0.27	2748	1.41
11	11199	0.27	2968	1.53
12	11586	0.26	3065	1.58
13	11750	0.26	3102	1.60
14	11857	0.26	3124	1.61
15	12967	0.26	3408	1.75
16	13272	0.26	3479	1.79
17	13945	0.26	3645	1.88
18	13851	0.26	3609	1.86
19	14875	0.26	3863	1.99
20-24	78527	0.26	20159	10.38
25-29	69658	0.25	17465	8.99
30-34	65791	0.24	16010	8.24
35-39	62566	0.23	14677	7.56

Continuation of the Table 3.10				
x	P_x	$\Delta e_x^{(0)}$	ΔT_x	R_x
40-44	60334	0.22	13544	6.97
45-49	66961	0.21	14271	7.35
50-54	57170	0.20	11466	5.90
55-59	53321	0.19	9965	5.13
60-64	33912	0.17	5840	3.01
65-69	41314	0.16	6470	3.33
≥ 70	90966	0.06	6021	3.08
Totally	901232	-	194260	100

Example 2. ***To build a dynamic structure of allocations to reduce the morbidity of circulatory system diseases at the age of under 1 year old to 30% in the territory Kitsman District, Chernovtsy Region within 10 years, with an increase of healthy life expectancy (in relation to these diseases) till the age of 60 to 50%.***

Baseline: $\boldsymbol{m_{0r} = 0.00049, m_{0d} = 0.00035, e_{0r}^{(0)} = 49.63, e_{0d}^{(0)} = 54.82}$.

By TAGOR-B tables it is defined that $\alpha_r = 1.705, \alpha_d = 1.735, \gamma_r = 0.623, \gamma_d = 0.770$. Therefore the structure of allocations for the first year of the relevant program implementation is as follows (Table 3.11):

Table 3.11.

Structure of allocations for the first year of the program implementing by potentially underutilized life resource of a healthy life in relation to diseases of the circulatory system for the population of Kitsman District

(the population structure is taken for the year of 2011)

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	R_x
0	819	0.43	350	1.84
1	796	0.43	340	1.78
2	756	0.43	322	1.69
3	745	0.42	316	1.66
4	673	0.42	284	1.49

Continuation of the Table 3.11				
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	R_x
5	683	0.42	286	1.50
6	653	0.42	272	1.43
7	684	0.41	283	1.48
8	690	0.41	284	1.49
9	808	0.41	330	1.73
10	789	0.40	319	1.67
11	850	0.40	341	1.79
12	906	0.40	360	1.89
13	892	0.39	352	1.85
14	884	0.39	345	1.81
15	983	0.39	380	1.99
16	972	0.38	372	1.95
17	963	0.38	364	1.91
18	963	0.37	360	1.89
19	998	0.37	369	1.94
20-24	5593	0.36	1997	10.48
25-29	5197	0.33	1737	9.11
30-34	5062	0.31	1572	8.25
35-39	4889	0.29	1400	7.34
40-44	4925	0.26	1290	6.77
45-49	5279	0.24	1253	6.57
50-54	4636	0.21	988	5.18
55-59	4114	0.19	778	4.08
60-64	3045	0.17	504	2.64
65-69	3524	0.14	503	2.64
≥ 70	8101	0.05	410	2.16
Totally	70872	-	19061	100

Table 3.12.

Structure of appropriations for the fifth year of the program implementing by potentially underutilized life resource of a healthy life in relation to diseases of the circulatory system for the Kitsman District population

(the population structure is taken for the year of 2011)

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	R_x
0	819	0.43	351	1.81
1	796	0.43	341	1.76
2	756	0.43	323	1.67
3	745	0.43	317	1.63
4	673	0.43	285	1.47
5	683	0.42	288	1.48
6	653	0.42	274	1.41
7	684	0.42	285	1.47

Continuation of the Table 3.12				
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	R_x
8	690	0.42	285	1.47
9	808	0.41	332	1.71
10	789	0.41	322	1.66
11	850	0.41	344	1.77
12	906	0.40	363	1.87
13	892	0.40	355	1.83
14	884	0.40	348	1.79
15	983	0.39	384	1.98
16	972	0.39	376	1.94
17	963	0.39	368	1.90
18	963	0.38	364	1.88
19	998	0.38	374	1.93
20-24	5593	0.37	2023	10.43
25-29	5197	0.35	1764	9.10
30-34	5062	0.32	1601	8.25
35-39	4889	0.30	1429	7.37
40-44	4925	0.28	1320	6.81
45-49	5279	0.24	1286	6.63
50-54	4636	0.22	1016	5.24
55-59	4114	0.20	803	4.14
60-64	3045	0.17	522	2.69
65-69	3524	0.15	522	2.69
≥ 70	8101	0.05	430	2.22
Totally	70872	-	19395	100

Table 3.13.

Structure of allocations for the tenth year of the program implementing defined by potentially underutilized life resource for a healthy life in relation to diseases of the circulatory system for the Kitsman District population (the population structure is taken for the year of 2011)

Age	Group size, number of people	Lost life expectancy, years	Potentially underutilized resource man- years	Relative share of resources (allocations), in %
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	R_x
0	819	0.43	352	1.78
1	796	0.43	342	1.73
2	756	0.43	324	1.64
3	745	0.43	318	1.61
4	673	0.43	286	1.45
5	683	0.42	289	1.46
6	653	0.42	275	1.39
7	684	0.42	286	1.45
8	690	0.42	287	1.45
9	808	0.41	334	1.69

Continuation of the Table 3.13				
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	R_x
10	789	0.41	324	1.64
11	850	0.41	346	1.75
12	906	0.40	366	1.85
13	892	0.40	358	1.81
14	884	0.40	351	1.78
15	983	0.39	387	1.96
16	972	0.39	379	1.92
17	963	0.39	372	1.88
18	963	0.38	369	1.87
19	998	0.38	378	1.91
20-24	5593	0.37	2050	10.37
25-29	5197	0.35	1794	9.08
30-34	5062	0.32	1633	8.26
35-39	4889	0.30	1462	7.40
40-44	4925	0.28	1355	6.85
45-49	5279	0.25	1325	6.70
50-54	4636	0.23	1050	5.31
55-59	4114	0.20	832	4.21
60-64	3045	0.18	543	2.75
65-69	3524	0.15	546	2.76
≥ 70	8101	0.06	455	2.2
Totally	70872	-	19768	100

§ 3.8. The method of prognosticating the dynamic structure of the necessary means for leveling risks to population health based on the indices of infant mortality and average life span of a forthcoming life

First let us have a detailed look at the algorithm of population health prognosticating based on mortality data using TAGOR tables. Today we generally defined the average life expectancy of the population in the Chernovtsy region: it is 72.95 years old, and the mortality rate of infants under 1 year is 9.6 per 1000 births. According to the policy guidelines of WHO “Health for All” for the European Region to 2020 the mortality rate should not exceed 10.0 per 1,000 live births. At the same time, it was determined that if the tasks of WHO policy “Health for All” for the European Region (to reduce mortality from major diseases - causes of death) are implemented in Chernovtsy Region life expectancy of the population in general in Chernovtsy Region can be increased to 77.09 years old. According to TAGOR tables the initial health status defined on the basis of data on mortality and life expectancy can meet the integral parameters of the law of survival of populations $\alpha_r = 0.707103, \gamma_r = 3.561851$, and the integral parameters $\alpha_d = 0.663153, \gamma_d = 4.393456$ meet the desired state of population health. However, since $\alpha_d < \alpha_r$, a reduction of the parameter α is not desired, then we will take $\alpha_d = \alpha_r = 0.707103$.

After the transfer of integral indicators in traditional primary health integral parameters we will get the following trend table of mortality (see Table 3.14)

Table 3.14

Trend table of mortality corresponding to the initial integral parameters of population health in Chernovtsy Region

Age	Number of surviving	Probability of surviving to the next age interval	Probability of death in this age range	Number of dying in this age range	Number of living in this age range	Number of man-years at the age older than given one	Average life expectancy after this age

x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99040	0.00960	960	99439	7294993	72.95
1	99040	0.99378	0.00622	616	98723	7195554	72.65
2	98424	0.99455	0.00545	536	98152	7096831	72.10
3	97888	0.99497	0.00503	492	97640	6998679	71.50
4	97396	0.99524	0.00476	464	97162	6901039	70.86
5	96932	0.99541	0.00459	445	96708	6803877	70.19
6	96487	0.99553	0.00447	431	96271	6707169	69.51
7	96056	0.99563	0.00437	420	95846	6610898	68.82
8	95636	0.99569	0.00431	412	95430	6515052	68.12
9	95224	0.99574	0.00426	406	95021	6419622	67.42
10	94818	0.99578	0.00422	400	94618	6324601	66.70
11	94418	0.99579	0.00421	398	94219	6229983	65.98
12	94020	0.99581	0.00419	394	93823	6135764	65.26
13	93626	0.99580	0.00420	393	93430	6041941	64.53
14	93233	0.99580	0.00420	392	93038	5948511	63.80
15	92841	0.99579	0.00421	391	92646	5855473	63.07
16	92450	0.99577	0.00423	391	92255	5762827	62.33
17	92059	0.99574	0.00426	392	91863	5670572	61.60
18	91667	0.99571	0.00429	393	91471	5578709	60.86
19	91274	0.99569	0.00431	394	91078	5487238	60.12
20	90880	0.97795	0.02205	2004	449419	5396160	59.38
25	88876	0.97652	0.02348	2087	439206	4946741	55.66
30	86789	0.97461	0.02539	2204	428492	4507535	51.94
35	84585	0.97217	0.02783	2354	417111	4079043	48.22
40	82231	0.96912	0.03088	2539	404896	3661932	44.53
45	79692	0.96534	0.03466	2762	391661	3257036	40.87
50	76930	0.96060	0.03940	3031	377197	2865375	37.25
55	73899	0.95460	0.04540	3355	361257	2488178	33.67
60	70544	0.94696	0.05304	3742	343545	2126921	30.15
65	66802	0.93699	0.06301	4209	323702	1783376	26.70
70^{+}	62593	0	1	65293	1459674	1459674	23.32

The following table of mortality will meet finite integral parameters of population health (see Table 3.15)

Table 3.15

Trend table of mortality meeting finite integral parameters of population health in Chernovtsy Region

Age	Number of surviving	Probability of surviving to the next age interval	Probability of death in this age range	Number of dying in this age range	Number of living in this age range	Number of man-years at the age older than given one	Average life expectancy after this age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99221	0.00779	779	99545	7766064	77.66
1	99221	0.99495	0.00505	501	98963	7666519	77.27
2	98720	0.99559	0.00441	435	98499	7567556	76.66
3	98285	0.99592	0.00408	401	98083	7469057	75.99
4	97884	0.99614	0.00386	378	97694	7370974	75.30
5	97506	0.99628	0.00372	363	97323	7273280	74.59
6	97143	0.99638	0.00362	352	96966	7175957	73.87
7	96791	0.99646	0.00354	343	96619	7078991	73.14
8	96448	0.99651	0.00349	337	96279	6982372	72.40
9	96111	0.99655	0.00345	332	95945	6886093	71.65
10	95779	0.99658	0.00342	328	95615	6790148	70.89
11	95451	0.99658	0.00342	326	95288	6694533	70.14
12	95125	0.99659	0.00341	324	94964	6599245	69.37
13	94801	0.99660	0.00340	322	94640	6504281	68.61
14	94479	0.99659	0.00341	322	94318	6409641	67.84
15	94157	0.99658	0.00342	322	93997	6315323	67.07
16	93835	0.99657	0.00343	322	93675	6221326	66.30
17	93513	0.99655	0.00345	323	93352	6127651	65.53
18	93190	0.99653	0.00347	323	93029	6034299	64.75
19	92867	0.99649	0.00351	326	92705	5941270	63.98
20	92541	0.98209	0.01791	1657	458590	5848565	63.20
25	90884	0.98092	0.01908	1734	450124	5389975	59.31
30	89150	0.97936	0.02064	1840	441203	4939851	55.41
35	87310	0.97739	0.02261	1974	431681	4498648	51.53
40	85336	0.97490	0.02510	2142	421404	4066967	47.66
45	83194	0.97181	0.02819	2345	410204	3645563	43.82
50	80849	0.96794	0.03206	2592	397880	3235359	40.02
55	78257	0.96305	0.03695	2892	384195	2837479	36.26
60	75365	0.95678	0.04322	3257	368853	2453284	32.55
65	72108	0.94861	0.05139	3706	351485	2084431	28.91
70^{+}	68402	0	1	68402	1732946	1732946	25.33

The survival curves shown in the Figure 3.1 will correspond to these tables.

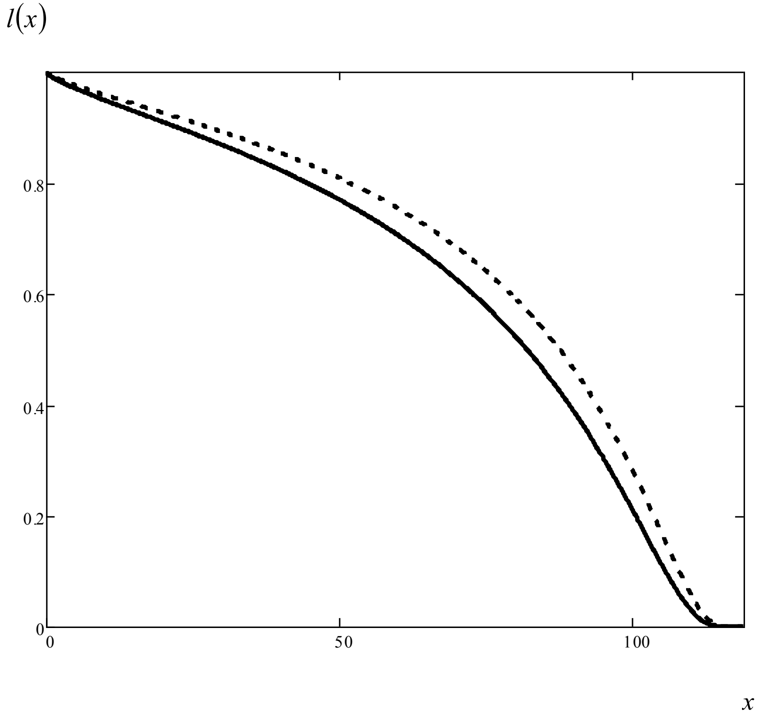

Figure 3.1. The survival curves of the population of Chernovtsy Region: a solid line is a real curve, a dashed line is a desired curve.

To construct the dynamic structure of risks and allocations distribution for their leveling it is necessary to build a model of temporary change of a parameter γ (parameter α, as it was noted, remains unchanged). Suppose that we begin to implement a targeted program of conservation and promotion of public health since 2012, and we want to achieve final results in 2020. Then, according to the Euler's concept of sustainable growth with time being the equation of parameter γ change should be as follows:

$$\gamma(t) = 3.561851\left(\frac{4.394356}{3.561851}\right)^{t/9}. \tag{3.19}$$

The diagram of a time dependence of the parameter γ corresponding to the equation (3.19) is shown in the Figure 3.2.

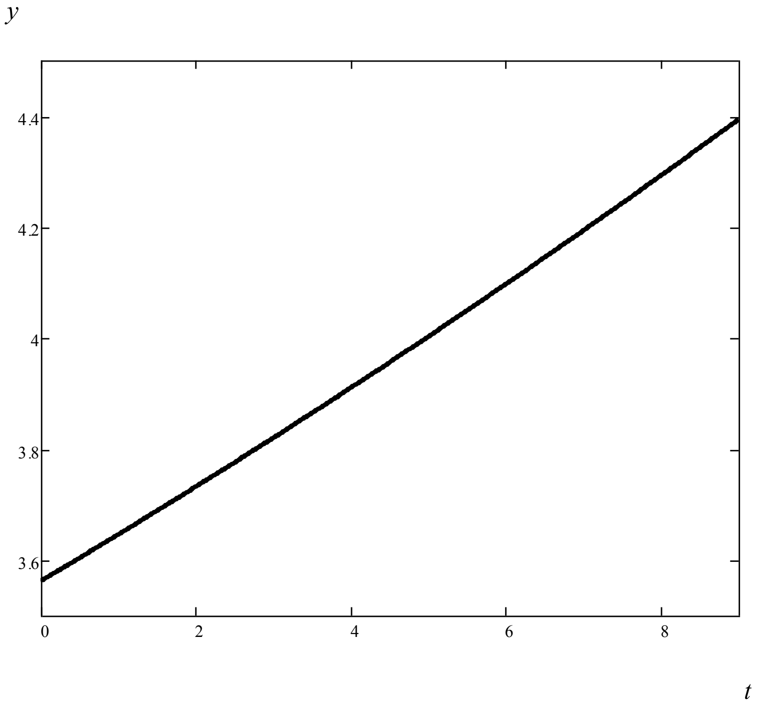

Figure 3.2. Time prognosticating dependence of the coefficient of environmental quality

Without revealing the dynamic structure of allocations for all nine years of the target program realization, we will show it for the first, fifth and ninth years. To do it we will additionally need mortality tables at the end of the first, fourth, fifth and eighth years of the program. They are listed below (Tables 3.16-3.19).

Table 3.16

Trend table of mortality of population in Chernovtsy Region, corresponding to the end of the first year of the program

Age	Number of surviving	Probability of surviving to the next age interval	Probability of death in this age range	Number of dying in this age range	Number of living in this age range	Number of man-years at the age	Average life expectancy after this

						older than given one	age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99062	0.00938	938	99452	73483633	73.49
1	99062	0.99392	0.00608	602	987520	7249181	73.18
2	98460	0.99468	0.00532	524	98194	7150429	72.62
3	97936	0.99509	0.00491	481	97694	7052235	72.01
4	97455	0.99534	0.00466	454	97227	6954541	71.36
5	97001	0.99552	0.00448	435	96783	6857314	70.69
6	96566	0.99564	0.00436	421	96355	6760531	70.01
7	96145	0.99573	0.00427	411	95939	6664176	69.31
8	95734	0.99580	0.00420	402	95533	6568237	68.61
9	95332	0.99584	0.00416	397	95133	6472704	67.90
10	94935	0.99587	0.00413	392	97439	6377571	67.18
11	94543	0.99589	0.00411	389	94349	6282832	66.45
12	94154	0.99590	0.00410	386	93962	6188483	65.73
13	93768	0.99591	0.00409	384	93576	6094521	65.00
14	93384	0.99590	0.00410	383	93193	6000945	64.26
15	93001	0.99588	0.00412	383	92810	5907752	63.52
16	92618	0.99587	0.00413	383	92427	5814942	62.78
17	92235	0.99584	0.00416	384	92043	5722515	62.04
18	91851	0.99582	0.00418	384	91659	5630472	61.30
19	91467	0.99578	0.00422	386	91274	5538813	60.56
20-24	91081	0.97845	0.02155	1963	450526	5447539	59.81
25-29	89118	0.97705	0.02295	2045	440521	4997013	56.07
30-34	87073	0.97518	0.02482	2161	430020	4556492	52.33
35-39	84912	0.97281	0.02719	2309	418859	4126472	48.60
40-44	82603	0.96983	0.03017	2492	406871	3707613	44.88
45-49	80111	0.96612	0.03388	2714	393873	3300742	41.20
50-54	77397	0.96148	0.03852	2981	379657	2906869	37.56
55-59	74416	0.95563	0.04437	3302	363975	2527212	33.96
60-64	71114	0.94815	0.05185	3687	346531	2163237	30.42
65-69	67427	0.93839	0.06161	4154	326964	1816706	26.94
70^+	63273	0	1	63273	1489742	1489742	23.54

Table 3.17

Trend table of mortality of population in Chernovtsy Region, corresponding to the end of the fourth year of the program

Age	Number of surviving	Probability of surviving to the next age interval	Probability of death in this age range	Number of dying in this age range	Number of living in this age range	Number of man-years at the age older than given one	Average life expectancy after this age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99125	0.00875	875	99488	7507649	75.08
1	99125	0.99433	0.00567	562	98836	7408161	74.74
2	98563	0.99505	0.00495	488	98315	7309325	74.16
3	98075	0.99541	0.00459	450	97848	7211010	73.53
4	97625	0.99566	0.00434	424	97412	7113162	72.86
5	97201	0.99582	0.00418	406	96997	7015750	72.18
6	96795	0.99593	0.00407	394	96597	6918753	71.48
7	96401	0.99602	0.00398	384	96209	6822156	70.77
8	96017	0.99607	0.00393	377	95829	6725947	70.05

							Continuation of the Table 3.17
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
9	95640	0.99612	0.00388	371	95455	6630118	69.32
10	95269	0.99615	0.00385	367	95086	6534663	68.59
11	94902	0.99616	0.00384	364	94721	6439577	67.86
12	94538	0.99618	0.00382	361	94358	6344856	67.11
13	94177	0.99618	0.00382	360	93997	6250498	66.37
14	93817	0.99617	0.00383	359	93638	6156501	65.62
15	93458	0.99616	0.00384	359	93279	6062863	64.87
16	93099	0.99614	0.00386	359	92920	5969584	64.12
17	92740	0.99613	0.00387	359	92561	5876664	63.37
18	92381	0.99609	0.00391	361	92201	5784103	62.61
19	92020	0.99607	0.00393	362	91839	5691902	61.86
20-24	91658	0.97989	0.02011	1843	453710	5600063	61.10
25-29	89815	0.97859	0.02141	1923	444309	5146353	57.30
30-34	87892	0.97684	0.02316	2036	434426	4702044	53.50
35-39	85856	0.97462	0.02538	2179	423903	4267618	49.71
40-44	83677	0.97184	0.02816	2356	412580	3843715	45.94
45-49	81321	0.96839	0.03161	2571	400277	3431135	42.19
50-54	78750	0.96404	0.03596	2832	386790	3030858	38.49
55-59	75918	0.95857	0.04143	3145	371872	2644068	34.83
60-64	72773	0.95156	0.04844	3525	355227	2272196	31.22
65-69	69248	0.94244	0.05756	3986	336487	1916969	27.68
70^+	65262	0	1	65262	1580482	1580482	24.22

Table 3.18

Trend table of mortality of population in Chernovtsy Region, corresponding to the end of the fifth year of the program

Age	Number of surviving	Probability of surviving to the next age interval	Probability of death in this age range	Number of dying in this age range	Number of living in this age range	Number of man-years at the age older than given one	Average life expectancy after this age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99145	0.00855	855	99500	7560008	75.60
1	99145	0.99446	0.00554	549	98862	7460508	75.25
2	98596	0.99516	0.00484	477	98354	7361646	74.66
3	98119	0.99552	0.00448	440	97897	7263292	74.03
4	97679	0.99576	0.00424	414	97471	7165395	73.36
5	97265	0.99591	0.00409	398	97065	7067924	72.67
6	96867	0.99604	0.00396	384	96675	6970859	71.96
7	96483	0.99610	0.00390	376	96295	6874184	71.25
8	96107	0.99617	0.00383	368	95923	6777889	70.52
9	95739	0.99621	0.00379	363	95557	6681966	69.79
10	95376	0.99624	0.00376	359	95196	6586409	69.06
11	95017	0.99625	0.00375	356	94839	6491213	68.32
12	94661	0.99626	0.00374	354	94485	6396374	67.57
13	94307	0.99627	0.00373	352	94132	6301889	66.82
14	93995	0.99626	0.00374	351	93780	6207757	66.07
15	93604	0.99625	0.00375	351	93429	6113977	65.32
16	93253	0.99624	0.00376	351	93078	6020548	64.56
17	92902	0.99621	0.00379	352	92726	592747	63.80
18	92550	0.99619	0.00381	353	92374	5834744	63.04
19	92197	0.99615	0.00385	355	92020	5742370	62.28
20-24	91842	0.98036	0.01964	1804	454728	5650350	61.52

Continuation of the Table 3.18							
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
25-29	90038	0.97908	0.02092	1884	445521	5192652	57.70
30-34	88154	0.97737	0.02263	1995	435836	4750101	53.88
35-39	86159	0.97520	0.02480	2137	425520	4314265	50.07
40-44	84022	0.97248	0.02752	2312	414413	3888745	46.28
45-49	81710	0.96910	0.03090	2525	402336	3474332	42.52
50-54	79185	0.96485	0.03515	2783	389087	3071996	38.80
55-59	76402	0.95950	0.04050	3094	374420	2682909	35.12
60-64	73308	0.95265	0.04735	3471	358038	2308489	31.49
65-69	69837	0.94373	0.05627	3930	339574	1950451	27.93
70^+	65907	0	1	65907	1610877	1610877	24.44

Table 3.19

Trend table of mortality of population in ChernovtsyRegion, corresponding to the end of the eighth year of the program

Age	Number of surviving	Probability of surviving to the next age interval	Probability of death in this age range	Number of dying in this age range	Number of living in this age range	Number of man-years at the age older than given one	Average life expectancy after this age
x	l_x	p_x	q_x	d_x	L_x	T_x	$e_x^{(0)}$
0	100000	0.99202	0.00798	798	99534	7715065	77.15
1	99202	0.99484	0.00516	512	98939	7615531	76.77
2	98690	0.99550	0.00450	445	98464	7516592	76.16
3	98245	0.99583	0.00417	410	98038	7418128	75.51
4	97835	0.99603	0.00397	388	97640	7320090	74.82
5	97447	0.99619	0.00381	371	97261	7222450	74.12
6	97076	0.99629	0.00371	360	96896	7125189	73.40
7	96716	0.99637	0.00363	351	96541	7028293	72.67
8	96365	0.99643	0.00357	344	96193	6931752	71.93
9	96021	0.99646	0.00354	340	95851	6835559	71.19
10	95681	0.99650	0.00350	335	95514	6739708	70.44
11	95346	0.99651	0.00349	333	95180	6644194	69.69
12	95013	0.99652	0.00348	331	94848	6549014	68.93
13	94682	0.99652	0.00348	330	94517	6454166	68.17
14	94352	0.99651	0.00349	329	94188	6359649	67.40
15	94023	0.99650	0.00350	329	93859	6265461	66.64
16	93694	0.99649	0.00351	329	93530	6171602	65.87
17	93365	0.99647	0.00353	330	93201	6078072	65.10
18	93035	0.99644	0.00356	331	92871	5984871	64.33
19	92704	0.99642	0.00358	332	92539	5892000	63.56
20-24	92372	0.98167	0.01833	1693	457665	5799461	62.78
25-29	90679	0.98047	0.01953	1771	449009	5341806	58.91
30-34	88908	0.97889	0.02111	1877	439902	4892797	55.03
35-39	87031	0.97686	0.02314	2014	430186	4452895	51.16
40-44	85017	0.97432	0.02568	2183	419706	4022709	47.32
45-49	82834	0.97115	0.02885	2390	408291	3603003	43.50
50-54	80444	0.96720	0.03280	2639	395740	3194712	39.71
55-59	77805	0.96219	0.03781	2942	381813	2798972	35.97
60-64	74863	0.95579	0.04421	3310	366213	2417159	32.29
65-69	71553	0.94744	0.05256	3761	348573	2050946	28.66
70^+	67792	0	1	67792	1702373	1702373	25.11

Based on the initial and final mortality tables, we calculated the number and age structure of people saved resulting from implementation of the proposed hypothetical target program. The results are presented in Table 3.20.

Table 3.20

Age structure and the number of people annually saved in Chernovtsy Region as a result of the program implementation

Age	Number of group, people	Reduction of age mortality coefficient	Number of saved people
x	P_x	Δm_x	ΔD_x
0	9934	$1.82855 \cdot 10^{-3}$	18
1	9997	$1.17718 \cdot 10^{-3}$	12
2	9743	$1.04463 \cdot 10^{-3}$	10
3	9568	$9.50544 \cdot 10^{-4}$	9
4	8960	$9.06305 \cdot 10^{-4}$	8
5	8839	$8.71633 \cdot 10^{-4}$	8
6	8734	$8.46807 \cdot 10^{-4}$	7
7	9395	$8.32003 \cdot 10^{-4}$	8
8	9594	$8.17057 \cdot 10^{-4}$	8
9	10294	$8.12424 \cdot 10^{-4}$	8
10	10352	$7.97101 \cdot 10^{-4}$	8
11	11199	$8.02994 \cdot 10^{-4}$	9
12	11586	$7.87578 \cdot 10^{-4}$	9
13	11750	$8.03991 \cdot 10^{-4}$	9
14	11857	$7.99350 \cdot 10^{-4}$	9
15	12967	$7.94724 \cdot 10^{-4}$	10
16	13272	$8.00836 \cdot 10^{-4}$	11
17	13945	$8.07202 \cdot 10^{-4}$	11
18	13851	$8.24408 \cdot 10^{-4}$	11
19	14875	$8.09431 \cdot 10^{-4}$	12
20-24	78527	$8.45841 \cdot 10^{-4}$	66
25-29	69658	$8.99485 \cdot 10^{-4}$	63
30-34	65791	$9.73204 \cdot 10^{-4}$	64
35-39	62566	$1.07076 \cdot 10^{-3}$	67
40-44	60334	$1.18774 \cdot 10^{-3}$	72
45-49	66961	$1.33535 \cdot 10^{-3}$	89
50-59	57170	$1.52106 \cdot 10^{-3}$	87
55-59	53321	$1.79959 \cdot 10^{-3}$	94
60-64	33912	$2.06223 \cdot 10^{-3}$	70
65-69	41314	$2.45887 \cdot 10^{-3}$	102
≥ 70	90966	$3.40998 \cdot 10^{-3}$	310
Total	901232	$1.41917 \cdot 10^{-3}$	1279

Further, based on the indicators of mortality tables, we define the stages of allocations structure for targeted programs of public health conservation and promotion. Structure of allocations for the first, fifth and ninth years of the program implementing, defined by potentially underutilized life resource, as shown in Tables 3.21 - 3.23.

Table 3.21

Structure of allocations for the first year of the program implementing defined by potentially underutilized life resource

Age	Number of group, people	Lost average life expectancy, years old	Total underutilized resource, man-years	Share of allocations, %
x	P_x	Δe_x	ΔT_x	R_x
0	9934	0.54	5364	1.61
1	9997	0.53	5298	1.59
2	9743	0.52	5066	1.52
3	9568	0.51	4880	1.47
4	8960	0.50	4480	1.35
5	8839	0.50	4420	1.33
6	8734	0.50	4367	1.31
7	9395	0.49	4604	1.38
8	9594	0.49	4701	1.41
9	10294	0.48	4941	1.49
10	10352	0.48	4969	1.49
11	11199	0.47	5264	1.58
12	11586	0.47	5445	1.64
13	11750	0.47	5522	1.66
14	11857	0.46	5454	1.64
15	12967	0.45	5835	1.75
16	13272	0.45	5972	1.80
17	13945	0.44	6136	1.84
18	13851	0.44	6094	1.83
19	14875	0.44	6545	1.97
20-24	78527	0.43	33767	10.15
25-29	69658	0.41	28560	8.59
30-34	65791	0.39	25568	7.71
35-39	62566	0.38	23375	7.15
40-44	60334	0.35	21117	6.35
45-49	66961	0.33	22097	6.64
50-59	57170	0.31	17723	5.33
55-59	53321	0.29	15463	4.65
60-64	33912	0.27	9156	2.75
65-69	41314	0.24	9915	2.98
≥ 70	90966	0.22	20013	6.04
Total	901232	0.37	332601	100

Table 3.22

Structure of allocations for the fifth year of the program implementation defined by potentially underutilized life resource

Age	Number of group, people	Lost average life expectancy, years old	Total underutilized resource, man-years	Share of allocations, %
x	P_x	Δe_x	ΔT_x	R_x

0	9934	0.52	5166	1.58
1	9997	0.51	5098	1.56
2	9743	0.50	4872	1.49
3	9568	0.50	4784	1.47
4	8960	0.50	4480	1.37
5	8839	0.49	4331	1.33
6	8734	0.48	4192	1.28
7	9395	0.48	4510	1.38
8	9594	0.47	4509	1.38
9	10294	0.47	4838	1.48
10	10352	0.47	4865	1.49
11	11199	0.46	5152	1.58
12	11586	0.46	5330	1.63
13	11750	0.45	5288	1.62
14	11857	0.45	5336	1.64
15	12967	0.45	5835	1.79
16	13272	0.44	5840	1.79
17	13945	0.43	5996	1.84
18	13851	0.43	5956	1.83
19	14875	0.42	6248	1.91
20-24	78527	0.42	32981	10.11
25-29	69658	0.40	27863	8.54
30-34	65791	0.38	25001	7.66
35-39	62566	0.36	22524	6.90
40-44	60334	0.34	20514	6.29
45-49	66961	0.33	22097	6.77
50-59	57170	0.31	17723	5.43
55-59	53321	0.29	15463	4.74
60-64	33912	0.27	9156	2.81
65-69	41314	0.25	10329	3.17
≥ 70	90966	0.22	20013	6.14
Total	901232	0.36	326290	100

Table 3.23

Structure of allocations for the ninth year of the program implementation defined by potentially underutilized life resource

Age	Number of group, people	Lost average life expectancy, years old	Total underutilized resource, man-years	Share of allocations, %
x	P_x	Δe_x	ΔT_x	R_x
0	9934	0.51	5066	1.57
1	9997	0.50	4999	1.55
2	9743	0.50	4872	1.51
3	9568	0.48	4593	1.42
4	8960	0.48	4301	1.33
5	8839	0.47	4154	1.28
6	8734	0.47	4105	1.27
7	9395	0.47	4416	1.36
8	9594	0.47	4509	1.39

Continuation of the Table 3.23				
x	P_x	Δe_x	ΔT_x	R_x
9	10294	0.46	4735	1.46
10	10352	0.45	4658	1.44
11	11199	0.45	5040	1.56
12	11586	0.44	5098	1.58
13	11750	0.44	5170	1.60
14	11857	0.44	5217	1.61
15	12967	0.43	5576	1.72
16	13272	0.43	5707	1.76
17	13945	0.43	5996	1.85
18	13851	0.42	5817	1.80
19	14875	0.42	6248	1.93
20-24	78527	0.42	32981	10.19
25-29	69658	0.40	27863	8.61
30-34	65791	0.38	25001	7.73
35-39	62566	0.37	23149	7.15
40-44	60334	0.34	20514	6.34
45-49	66961	0.32	21428	6.52
50-59	57170	0.31	17723	5.48
55-59	53321	0.29	15463	4.78
60-64	33912	0.26	8817	2.73
65-69	41314	0.25	10329	3.19
≥ 70	90966	0.22	20013	6.19
Итого	901232	0.36	323558	100

In these structures the main share of the allocations accounts for the age group 20-24 years old. Consequently, they are the most suitable for the development of the targeted prevention programs and planning of appropriate activities, focus will be on the citizens of infant, adolescent and working ages.

Using mortality tables you can define similar structures based on vital resource, relatively underutilized in the current year. These structures are represented in Tables 3.24-3.26.

Table 3.24

Structure of allocations for the first year of the program implementation defined by vital resource, relatively underutilized in the current year

Age	Number of group, people	Lost average life expectancy, years old	Total underutilized resource, man-years	Share of allocations, %
x	P_x	$\Delta \tau_x$	ΔT_x	R_x
0	9934	$1.300 \cdot 10^{-4}$	1.291	0.20
1	9997	$7.138 \cdot 10^{-5}$	0.714	0.11
2	9743	$6.195 \cdot 10^{-5}$	0.604	0.09
3	9568	$6.251 \cdot 10^{-5}$	0.598	0.09

Continuation of the Table 3.24				
x	P_x	$\Delta\tau_x$	ΔT_x	R_x
4	8960	$6.302 \cdot 10^{-5}$	0.565	0.09
5	8839	$6.350 \cdot 10^{-5}$	0.561	0.09
6	8734	$5.361 \cdot 10^{-5}$	0.468	0.07
7	9395	$4.363 \cdot 10^{-5}$	0.410	0.06
8	9594	$5.443 \cdot 10^{-5}$	0.522	0.08
9	10294	$4.437 \cdot 10^{-5}$	0.457	0.07
10	10352	$4.473 \cdot 10^{-5}$	0.463	0.07
11	11199	$5.567 \cdot 10^{-5}$	0.623	0.10
12	11586	$5.609 \cdot 10^{-5}$	0.650	0.10
13	11750	$4.583 \cdot 10^{-5}$	0.538	0.08
14	11857	$4.622 \cdot 10^{-5}$	0.548	0.08
15	12967	$4.662 \cdot 10^{-5}$	0.604	0.09
16	13272	$4.701 \cdot 10^{-5}$	0.624	0.10
17	13945	$4.743 \cdot 10^{-5}$	0.661	0.10
18	13851	$4.783 \cdot 10^{-5}$	0.662	0.10
19	14875	$3.733 \cdot 10^{-5}$	0.555	0.09
20-24	78527	$2.482 \cdot 10^{-4}$	19.49	3.02
25-29	69658	$2.763 \cdot 10^{-4}$	18.62	2.88
30-34	65791	$2.891 \cdot 10^{-4}$	19.02	2.85
35-39	62566	$3.191 \cdot 10^{-4}$	19.97	3.09
40-44	60334	$3.470 \cdot 10^{-4}$	20.94	3.24
45-49	66961	$3.813 \cdot 10^{-4}$	25.53	3.96
50-59	57170	$4.399 \cdot 10^{-4}$	25.15	3.90
55-59	53321	$5.123 \cdot 10^{-4}$	27.32	4.23
60-64	33912	$5.910 \cdot 10^{-4}$	20.04	3.11
65-69	41314	$6.924 \cdot 10^{-4}$	28.60	4.43
≥ 70	90966	$4.492 \cdot 10^{-3}$	408.60	63.33
Total	901232	$7.161 \cdot 10^{-4}$	645.39	100

Table 3.25

Structure of allocations for the fifth year of the program implementation defined by vital resource, relatively underutilized in the current year

Age	Number of group, people	Lost average life expectancy, years old	Total underutilized resource, man-years	Share of allocations, %
x	P_x	$\Delta\tau_x$	ΔT_x	R_x
0	9934	$1.200 \cdot 10^{-4}$	1.192	0.19
1	9997	$6.111 \cdot 10^{-5}$	0.611	0.10
2	9743	$6.170 \cdot 10^{-5}$	0.601	0.10
3	9568	$5.200 \cdot 10^{-5}$	0.498	0.08
4	8960	5.23910^{-5}	0.469	0.08
5	8839	$4.251 \cdot 10^{-5}$	0.376	0.06
6	8734	$6.346 \cdot 10^{-5}$	0.554	0.09
7	9395	$4.315 \cdot 10^{-5}$	0.405	0.06
8	9594	$4.345 \cdot 10^{-5}$	0.417	0.07
9	10294	$3.334 \cdot 10^{-5}$	0.343	0.05

Continuation of the Table 3.25				
x	P_x	$\Delta\tau_x$	ΔT_x	R_x
10	10352	$3.361 \cdot 10^{-5}$	0.348	0.06
11	11199	$3.388 \cdot 10^{-5}$	0.379	0.06
12	11586	$4.473 \cdot 10^{-5}$	0.518	0.08
13	11750	$5.565 \cdot 10^{-5}$	0.654	0.10
14	11857	$4.538 \cdot 10^{-5}$	0.538	0.09
15	12967	$4.572 \cdot 10^{-5}$	0.593	0.09
16	13272	$4.607 \cdot 10^{-5}$	0.611	0.10
17	13945	$3.566 \cdot 10^{-5}$	0.497	0.08
18	13851	$4.678 \cdot 10^{-5}$	0.648	0.10
19	14875	$4.716 \cdot 10^{-5}$	0.702	0.11
20-24	78527	$2.334 \cdot 10^{-4}$	18.331	2.94
25-29	69658	$2.418 \cdot 10^{-4}$	16.840	2.70
30-34	65791	$2.609 \cdot 10^{-4}$	17.166	2.75
35-39	62566	$2.808 \cdot 10^{-4}$	17.570	2.81
40-44	60334	$3.140 \cdot 10^{-4}$	18.948	3.04
45-49	66961	$3.531 \cdot 10^{-4}$	23.646	3.79
50-59	57170	$4.052 \cdot 10^{-4}$	23.168	3.71
55-59	53321	$4.639 \cdot 10^{-4}$	24.734	3.96
60-64	33912	$5.443 \cdot 10^{-4}$	18.458	2.96
65-69	41314	$6.442 \cdot 10^{-4}$	26.616	4.26
≥ 70	90966	$4.484 \cdot 10^{-3}$	407.846	65.33
Total	901232	$6.927 \cdot 10^{-4}$	624.277	100

Table 3.26

Structure of allocations for the ninth year of the program implementation defined by vital resource, relatively underutilized in the current year

Age	Number of group, people	Lost average life expectancy, years old	Total underutilized resource, man-years	Share of allocations, %
x	P_x	$\Delta\tau_x$	ΔT_x	R_x
0	9934	$1.100 \cdot 10^{-4}$	1.093	0.18
1	9997	$5.090 \cdot 10^{-5}$	0.509	0.08
2	9743	$5.134 \cdot 10^{-5}$	0.500	0.08
3	9568	$5.173 \cdot 10^{-5}$	0.495	0.08
4	8960	$5.207 \cdot 10^{-5}$	0.467	0.08
5	8839	$3.192 \cdot 10^{-5}$	0.282	0.05
6	8734	$3.216 \cdot 10^{-5}$	0.281	0.05
7	9395	$3.240 \cdot 10^{-5}$	0.304	0.05
8	9594	$3.265 \cdot 10^{-5}$	0.313	0.05
9	10294	$4.328 \cdot 10^{-5}$	0.446	0.07
10	10352	$3.311 \cdot 10^{-5}$	0.343	0.06
11	11199	$3.334 \cdot 10^{-5}$	0.373	0.06
12	11586	$4.409 \cdot 10^{-5}$	0.511	0.08
13	11750	$4.438 \cdot 10^{-5}$	0.521	0.09
14	11857	$3.409 \cdot 10^{-5}$	0.404	0.07
15	12967	$4.496 \cdot 10^{-5}$	0.583	0.10

Continuation of the Table 3.26				
x	P_x	$\Delta\tau_x$	ΔT_x	R_x
16	13272	$4.526\cdot10^{-5}$	0.600	0.10
17	13945	$3.486\cdot10^{-5}$	0.486	0.08
18	13851	$3.512\cdot10^{-5}$	0.487	0.08
19	14875	$3.543\cdot10^{-5}$	0.527	0.09
20-24	78527	$2.111\cdot10^{-4}$	16.580	2.75
25-29	69658	$2.199\cdot10^{-4}$	15.316	2.54
30-34	65791	$2.325\cdot10^{-4}$	15.295	2.54
35-39	62566	$2.656\cdot10^{-4}$	16.615	2.76
40-44	60334	$2.887\cdot10^{-4}$	17.418	2.89
45-49	66961	$3.331\cdot10^{-4}$	22.303	3.70
50-54	57170	$3.652\cdot10^{-4}$	20.878	3.47
55-59	53321	$4.189\cdot10^{-4}$	22.335	3.71
60-64	33912	$4.892\cdot10^{-4}$	16.588	2.75
65-69	41314	$5.777\cdot10^{-4}$	23.869	3.96
≥ 70	90966	$4.460\cdot10^{-3}$	405.741	67.35
Total	901232	$6.685\cdot10^{-4}$	602.462	100

The main share of allocations in these structures, as can be seen, accounts for people older than 70, since the diseases, not timely detected and cured in their youth, take considerable efforts and money.

As a result of the program implementation 1279 people are preserved, including 57 people aged 0-4, 18 of which at the age of 0-1, 83 people aged 5-14, 32 people aged 15-17, 695 people aged 18-64 and 412 people aged 65 and older. In this case the adaptation period will be reduced from 15.83 to 15.23 years, and the period of mass extinction will be postponed from 102.21 to 105.42 years old. Alongside mortality under the age of 1 year old will decrease from 9.6 to 7.79 per 1000 births, and average life expectancy will increase from 72.95 to 77.66 years old.

§ 3.9. The method of prognosticating the dynamic structure of the necessary means for leveling risks to population health according to the integral parameters of its resistance to diseases (IPRD)

Let us consider the example of the morbidity of chronic diseases of the circulatory system for the population of Chernovtsy Region. Suppose that the morbidity of these diseases together with mortality from other causes force elimination of the state "alive and healthy" (concerning the circulatory system diseases) under the age of 1 in the amount of 15 people per 1,000 and the average duration of the forthcoming "healthy" life expectancy at birth is 50 years old. At the age limit of health preservation regarding diseases of the circulatory system, equal to 116 years old, assume that the initial parameters of the population "curve of health" with respect to cardiovascular diseases according to the tables TAGOR-B make up $\alpha_h = 0.821465, \gamma_h = 1.344345$. Then, when changing integral indicators in the traditional ones, primary combined morbidity-mortality table (under these conditions) will be as follows:

Table 3.27

Combined morbidity-mortality table corresponding to the initial integral parameters of population health in Chernovtsy Region regarding diseases of the circulatory system (at the beginning of 2012)

Age	Number of remaining alive and healthy at this age	Chance to survive and stay healthy until the next age range	Chance to die or get ill in this age range	Number of retiring from the state of "alive and healthy" in this age range	Steady-state number of healthy and living in this age range	Number of man-years of healthy life at the older age than this one	Average healthy life expectancy after this age
x	l_{xh}	p_{xh}	q_{xh}	d_{xh}	L_{xh}	T_{xh}	$e_{xh}^{(0)}$
0	100000	0.98499	0.01501	1501	99177	4999977	50.00
1	98499	0.98824	0.01176	1158	97910	490080	49.75
2	97341	0.98908	0.01092	1063	96804	4802890	49.34
3	96278	0.98952	0.01048	1009	95770	4706086	48.88
4	95269	0.98978	0.01022	974	94780	4610316	48.39
5	94295	0.98994	0.01006	949	93819	4515536	47.89
6	93346	0.99004	0.00996	930	92880	4421717	47.37
7	92416	0.99010	0.00990	915	91958	4328837	46.84
8	91501	0.99011	0.00989	905	91048	4236879	46.30

Continuation of the Table 3.27							
x	l_{xh}	p_{xh}	q_{xh}	d_{xh}	L_{xh}	T_{xh}	$e_{xh}^{(0)}$
9	90596	0.99011	0.00989	896	90148	4145831	45.76
10	89700	0.99007	0.00993	891	89255	4055683	45.21
11	88809	0.99004	0.00996	885	88367	3966428	44.66
12	87924	0.98997	0.01003	882	87484	3878061	44.11
13	87042	0.98990	0.01010	879	86603	3790577	43.55
14	86163	0.98981	0.01019	878	85724	3703974	42.99
15	85285	0.98971	0.001029	878	84846	3618250	42.43
16	84407	0.98960	0.01040	878	83968	3533404	41.86
17	83529	0.98948	0.01052	879	83090	3449436	41.30
18	82650	0.98935	0.01065	880	82211	3366346	40.73
19	81770	0.98921	0.01079	882	81329	3284135	40.16
20-24	80888	0.94490	0.05510	4457	393336	3202806	39.60
25-29	76431	0.94029	0.05971	4564	370801	2809470	36.76
30-34	71867	0.93450	0.06550	4707	347634	2438669	33.93
35-39	67160	0.92738	0.07262	4877	323685	2091035	31.14
40-44	62283	0.91868	0.08132	5065	298838	1767350	28.38
45-49	57218	0.90791	0.09209	5269	273007	1468512	25.67
50-54	51949	0.89461	0.10539	5475	246146	1195505	23.01
55-59	46474	0.87787	0.12213	5676	218260	949359	20.43
60-64	40798	0.85659	0.14341	5851	189427	731099	17.92
65-69	34947	0.82906	0.17094	5974	159837	541672	15.50
70^{+}	28793	0	1	28973	381835	381835	13.18

Since reduction of inborn potential life and health regarding diseases of the circulatory system is undesirable, we assume that while implementing of the program the parameter α_h does not change and the parameter γ_h increases from 2012 to 2020 annually by 1% in comparison with the previous year. The graph of the parameter γ_h in accordance with such scenario is shown in Figure 3.3.

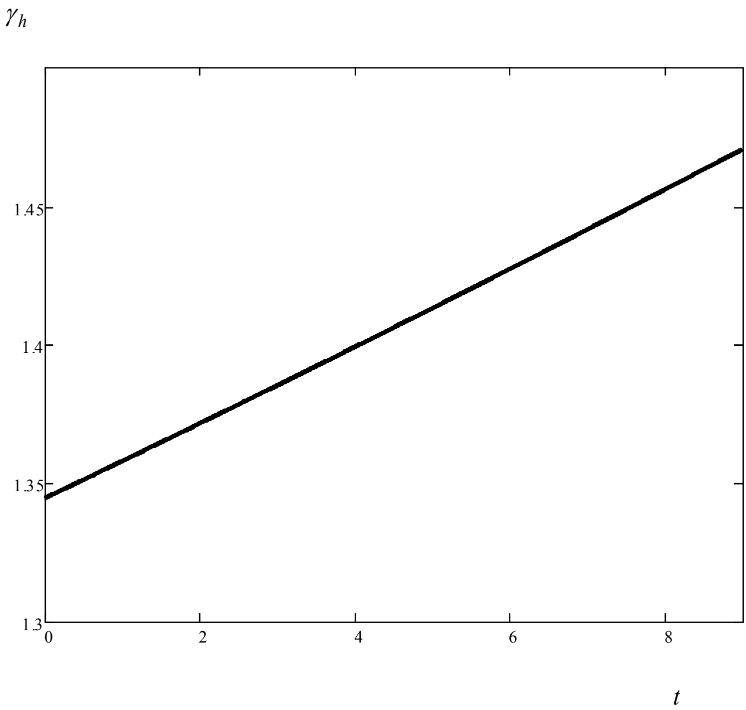

Figure 3.3. The time dependence of the parameter γ_h

Then when implementing such program the final state of public health meets the target integral parameters: $\alpha_h = 0.821465, \gamma_h = 1.47029$. Health curves corresponding to the initial and final states of health with respect to diseases of the circulatory system are shown in Figure 3.4.

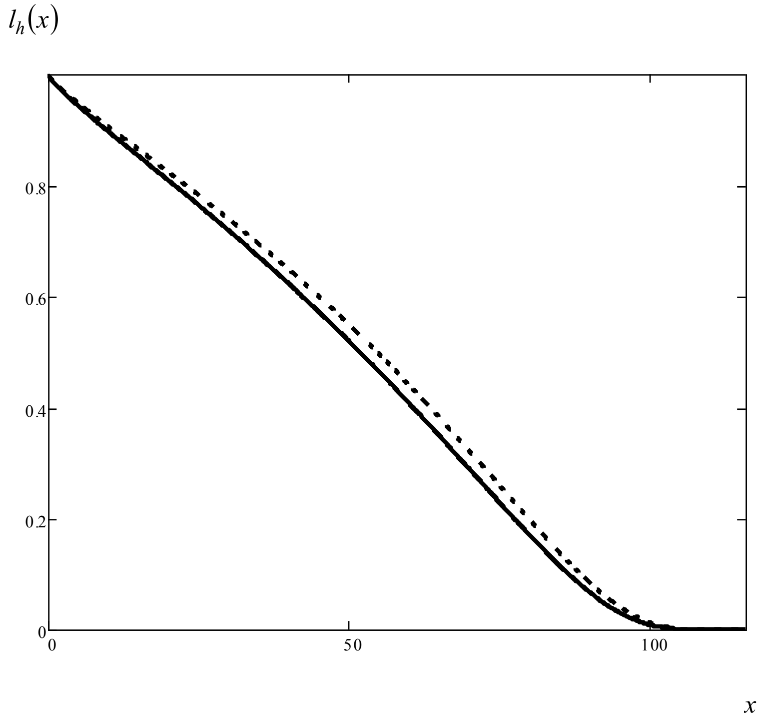

Figure 3.4. The curves of population health in Chernovtsy Region concerning diseases of the circulatory system: solid curve - the initial state, the dotted curve –the final one

The final curve of population health concerning diseases of the circulatory system corresponds to the following combined table of morbidity – mortality.

Table 3.28

Combined table of morbidity-mortality corresponding to finite integral parameters of population health in Chernovtsy Region regarding diseases of the circulatory system (at the end of 2020)

Age	Number of remaining alive and healthy at this	Chance to survive and stay healthy until the next age range	Chance to die or get ill in this age range	Number of retiring from the state of "alive and healthy" in this age	Steady-state number of healthy and living in	Number of man-years of healthy life at the older age than this	Average healthy life expectancy after this age

	age			range	this age range	one	
x	l_{xh}	p_{xh}	q_{xh}	d_{xh}	L_{xh}	T_{xh}	$e_{xh}^{(0)}$
0	100000	0.98627	0.01373	1373	99247	5215260	52.15
1	98627	0.98924	0.01076	1061	98087	5116013	51.87
2	97566	0.99001	0.00999	975	97074	5017926	51.43
3	96591	0.99041	0.00959	926	96125	4920852	50.95
4	95655	0.99064	0.00936	895	95216	4824727	50.43
5	94770	0.99080	0.00920	872	94333	4729511	49.91
6	93898	0.99089	0.00911	855	93470	4635178	49.36
7	93043	0.99094	0.00906	843	92621	4541708	48.81
8	92200	0.99095	0.00905	834	91782	4449087	48.25
9	91366	0.99095	0.00905	827	90952	4357305	47.69
10	90539	0.99092	0.00908	822	90128	4266353	47.12
11	89717	0.99088	0.00912	818	89308	4176225	46.55
12	88899	0.99082	0.00918	816	88491	4086917	45.97
13	88083	0.99076	0.00924	814	87677	3998426	45.39
14	87269	0.99067	0.00933	814	86863	3910749	44.81
15	86455	0.99059	0.00941	814	86049	3823886	44.23
16	85641	0.99050	0.00950	814	85235	3737837	43.65
17	84827	0.99037	0.00963	817	84419	3652602	43.06
18	84010	0.99026	0.00974	818	83602	3568183	42.47
19	83192	0.99013	0.00987	821	82782	3484581	41.89
20-24	82371	0.94950	0.05050	4160	401500	3401799	41.30
25-29	78211	0.94526	0.05474	4281	380414	3000299	38.36
30-34	73930	0.93993	0.06007	4441	358622	2619885	35.44
35-39	69489	0.93340	0.06660	4628	335963	2261263	32.54
40-44	64861	0.92538	0.07462	4840	312301	1925300	29.68
45-49	60021	0.91546	0.08454	5074	287522	1612999	26.87
50-54	54947	0.90316	0.09684	5321	261541	1325477	24.12
55-59	49626	0.88772	0.11228	5572	234308	1063936	21.44
60-64	44054	0.86803	0.13197	5814	205834	829628	18.83
65-69	38240	0.84250	0.15750	6023	176220	623794	16.31
70^+	32217	0	1	32217	447574	447574	13.89

If now, in a similar way as it was done for all-cause mortality, we want to present the table of allocations structures for the first, fifth and ninth years of the targeted program to restore the capacity of population health potential concerning diseases of the circulatory system, we have to build a combined morbidity-mortality tables at the end of the first, fourth, fifth and eighth years of this program implementation. They are listed below (Tables 3.29 - 3.32).

Table 3.29

Combined morbidity-mortality table corresponding to integral parameters of population health in Chernovtsy Region regarding diseases of the circulatory system by the end of 2012

Age	Number of remaining alive and healthy at this age	Chance to survive and stay healthy until the next age range	Chance to die or get ill in this age range	Number of retiring from the state of "alive and healthy" in this age range	Steady-state number of healthy and living in this age range	Number of man-years of healthy life at the older age than this one	Average healthy life expectancy after this age
x	l_{xh}	p_{xh}	q_{xh}	d_{xh}	L_{xh}	T_{xh}	$e_{xh}^{(0)}$
0	100000	0.98514	0.01486	1486	99185	5023877	50.24
1	98514	0.98836	0.01164	1147	97930	4924692	49.99
2	97367	0.98919	0.01081	1053	96836	4826762	49.57
3	96314	0.98962	0.01038	1000	95811	4729926	49.11
4	95314	0.98989	0.01011	964	94830	4634115	48.62
5	94350	0.99004	0.00996	940	93879	4539285	48.11
6	93410	0.99014	0.00986	921	92948	4445406	47.59
7	92489	0.99018	0.00982	908	92034	4354580	47.06
8	91581	0.99022	0.00978	896	91133	4260424	46.52
9	90685	0.99020	0.00980	889	90240	4169291	45.98
10	89796	0.99018	0.00982	882	89355	4079051	45.43
11	88914	0.99013	0.00987	878	88475	3989696	44.87
12	88036	0.99007	0.00993	874	87599	3901221	44.31
13	87162	0.99000	0.01000	872	86726	3813622	43.75
14	86290	0.98991	0.01009	871	85855	3726896	43.19
15	85419	0.98982	0.01018	870	84984	3641041	42.63
16	84549	0.98970	0.01030	871	84114	3556057	42.06
17	83678	0.98958	0.01042	872	83243	3471943	41.49
18	82806	0.98946	0.01054	873	82370	3388700	40.92
19	81933	0.98933	0.01068	875	81496	3306330	40.35
20-24	81058	0.94543	0.05457	4423	394271	3224834	39.78
25-29	76635	0.94085	0.05915	4533	371899	2830563	36.94
30-34	72102	0.93513	0.06487	4677	348887	2458664	34.10
35-39	67425	0.92808	0.07192	4849	325081	2109777	31.29
40-44	62576	0.91944	0.08056	5041	300364	1784696	28.52
45-49	57535	0.90879	0.09121	5248	274646	1484332	25.80
50-54	52287	0.89560	0.10440	5459	247878	1209686	23.14
55-59	46828	0.87898	0.12102	5667	220057	961808	20.54
60-64	41161	0.85790	0.14210	5849	191254	741751	18.02
65-69	35312	0.83062	0.16938	5981	161650	550497	15.59
70^{+}	29331	0	1	29331	388847	388847	13.26

Table 3.30

Combined morbidity-mortality table corresponding to integral parameters of population health in Chernovtsy Region regarding diseases of the circulatory system by the end of 2015

Age	Number of remaining alive and healthy at this age	Chance to survive and stay healthy until the next age range	Chance to die or get ill in this age range	Number of retiring from the state of "alive and healthy" in this age range	Steady-state number of healthy and living in this age range	Number of man-years of healthy life at the older age than this one	Average healthy life expectancy after this age
x	l_{xh}	p_{xh}	q_{xh}	d_{xh}	L_{xh}	T_{xh}	$e_{xh}^{(0)}$
0	100000	0.98572	0.01442	1442	99209	5095620	50.96
1	98558	0.98870	0.01130	1114	97990	4996411	50.70
2	97444	0.98950	0.01050	1023	96927	4898421	50.27
3	96421	0.98992	0.01008	972	95932	4801494	49.80
4	95449	0.99017	0.00983	938	94978	4705562	49.30
5	94511	0.99033	0.00967	914	94053	4610584	48.78
6	93597	0.99043	0.00957	896	93149	4516531	48.26
7	92701	0.99048	0.00952	883	92259	4423382	47.72
8	91818	0.99050	0.00950	872	91382	4331123	47.17
9	90946	0.99049	0.00951	865	90513	4239741	46.62
10	90081	0.99046	0.00954	859	89651	4149228	46.06
11	89222	0.99042	0.00958	855	88794	4059577	45.50
12	88367	0.99036	0.00964	852	87941	3970783	44.94
13	87515	0.99029	0.00971	850	87090	3882842	44.37
14	86665	0.99020	0.00980	849	86241	3795752	43.80
15	85816	0.99011	0.00989	849	85392	3709511	43.23
16	84967	0.99001	0.00999	849	84543	3624119	42.65
17	84118	0.98988	0.01012	851	83693	3539576	42.08
18	83267	0.98977	0.01023	852	82841	3455883	41.50
19	82415	0.98963	0.01037	855	81988	3373042	40.93
20-24	81560	0.94700	0.05300	4323	397034	3291054	40.35
25-29	77237	0.94254	0.05746	4438	375149	2894020	37.47
30-34	72799	0.93698	0.06302	4588	352597	2518871	34.60
35-39	68211	0.93013	0.06987	4766	329221	2166274	31.76
40-44	63445	0.92171	0.07829	4967	304897	1837053	28.96
45-49	58478	0.91135	0.08865	5184	279526	1532156	26.20
50-54	53294	0.89849	0.10151	5410	253043	1252630	23.50
55-59	47884	0.88234	0.11766	5634	225429	999587	20.88
60-64	42250	0.86178	0.13822	5840	196731	774158	18.32
65-69	36410	0.83516	0.16484	6002	167102	577427	15.86
70^{+}	30408	0	1	30408	410425	410325	13.49

Table 3.31

Combined morbidity-mortality table corresponding to integral parameters of population health in Chernovtsy Region regarding diseases of the circulatory system by the end of 2016

Age	Number of remaining alive and healthy at this age	Chance to survive and stay healthy until the next age range	Chance to die or get ill in this age range	Number of retiring from the state of "alive and healthy" in this age range	Steady-state number of healthy and living in this age range	Number of man-years of healthy life at the older age than this one	Average healthy life expectancy after this age
x	l_{xh}	p_{xh}	q_{xh}	d_{xh}	L_{xh}	T_{xh}	$e_{xh}^{(0)}$
0	100000	0.98572	0.01482	1428	99217	5119547	51.20
1	98572	0.98881	0.01119	1103	98010	5020330	50.93
2	97469	0.98960	0.01040	1014	96957	492232	50.50
3	96455	0.99003	0.00997	962	95971	4825363	50.03
4	95493	0.99027	0.00973	929	95027	4729392	49.53
5	94564	0.99043	0.00957	905	94110	4634365	49.01
6	93569	0.99052	0.00948	888	93214	4540255	48.48
7	92771	0.99057	0.00943	875	92333	4447041	47.94
8	91896	0.99059	0.00941	865	91463	4354708	47.39
9	91031	0.99059	0.00941	857	90603	4263245	46.83
10	90174	0.99055	0.00945	852	89748	4172642	46.27
11	89322	0.99052	0.00948	847	88899	4082894	45.71
12	88475	0.99046	0.00954	844	88053	3993995	45.14
13	87631	0.99038	0.00962	843	87210	3905942	44.57
14	86788	0.99030	0.00970	842	86367	3818732	44.00
15	85946	0.99020	0.00980	842	85526	3732365	43.43
16	85104	0.99011	0.00989	842	84684	3646839	42.85
17	84262	0.98998	0.01002	844	83841	3562155	42.27
18	83418	0.98987	0.01013	845	82996	3478314	41.70
19	82573	0.98973	0.01027	848	82149	3395318	41.12
20-24	81725	0.94751	0.05249	4290	397941	3313169	40.54
25-29	77435	0.94309	0.05691	4407	376217	2915228	37.65
30-34	73028	0.93759	0.06241	4558	353818	2539011	34.77
35-39	68470	0.93079	0.06931	4739	330586	2185193	31.91
40-44	63731	0.92246	0.07754	4942	306393	1854607	29.10
45-49	58789	0.91219	0.08781	5162	281139	1548214	26.34
50-54	53627	0.89945	0.10055	5392	254754	1267075	23.63
55-59	48235	0.88343	0.11657	5623	227213	1012321	20.99
60-64	42612	0.86304	0.13696	5836	198555	785108	18.42
65-69	36776	0.83666	0.16334	6007	168923	586553	15.95
70^{+}	30769	0	1	30769	41763	41763	13.57

Table 3.32

Combined morbidity-mortality table corresponding to integral parameters of population health in Chernovtsy Region regarding diseases of the circulatory system by the end of 2019

Age	Number of remaining alive and healthy at this age	Chance to survive and stay healthy until the next age range	Chance to die or get ill in this age range	Number of retiring from the state of "alive and healthy" in this age range	Steady-state number of healthy and living in this age range	Number of man-years of healthy life at the older age than this one	Average healthy life expectancy after this age
x	l_{xh}	p_{xh}	q_{xh}	d_{xh}	L_{xh}	T_{xh}	$e_{xh}^{(0)}$
0	100000	0.98613	0.01387	1387	9924	5191327	51.91
1	98613	0.98914	0.01086	1071	98068	5092087	51.64
2	97542	0.98991	0.01009	984	97045	4994019	51.20
3	96558	0.99032	0.00968	935	96087	4896974	50.72
4	95623	0.99056	0.00944	903	95169	4800887	50.21
5	94720	0.99070	0.00930	881	94278	4705718	49.68
6	93839	0.99080	0.00920	863	93407	4611440	49.14
7	92976	0.99085	0.00915	851	92550	4518033	48.59
8	92125	0.99086	0.00914	842	91704	4425483	48.04
9	91283	0.99086	0.00914	834	90866	4333779	47.48
10	90449	0.99084	0.00916	829	90034	4242913	46.91
11	89620	0.99078	0.00922	826	89207	4152879	46.34
12	88794	0.99073	0.00927	823	88383	4063672	45.77
13	87971	0.99067	0.00933	821	87561	3975289	45.19
14	87150	0.99059	0.00941	820	86740	3887728	44.61
15	86330	0.99049	0.00951	821	85920	3800988	44.03
16	85509	0.99039	0.00961	822	85099	3715068	43.45
17	84687	0.99028	0.00972	823	84276	3629969	42.86
18	83864	0.99016	0.00984	825	83452	3545693	42.28
19	83039	0.99003	0.00997	828	82626	3462241	41.69
20-24	82211	0.94901	0.05099	4192	400620	3379615	41.11
25-29	78019	0.94473	0.05527	4312	379376	2978995	38.18
30-34	73707	0.93935	0.06065	4470	357433	2599619	35.27
35-39	69237	0.93275	0.06725	4656	334631	2242186	32.38
40-44	64581	0.92465	0.07535	4866	310835	1907555	29.54
45-49	59715	0.91466	0.08534	5096	285937	1596720	26.74
50-54	54619	0.90225	0.09775	5339	259853	1310783	24.00
55-59	49280	0.88665	0.11335	5586	232540	1050930	21.33
60-64	43964	0.86680	0.13320	5820	204016	818390	18.73
65-69	37874	0.84105	0.15895	6020	174394	614374	16.22
70^{+}	31854	0	1	31854	43998	43998	13.81

Expected results of the target program of preserving and promoting population health in Chernovtsy region concerning diseases of the circulatory system, which can be determined on the basis of the forecast mortality tables and combined morbidity-mortality tables rates are given in Table 3.33.

Table 3.33

Summary table of expected results of the target program of preserving and promoting population health in Chernovtsy region concerning diseases of the circulatory system

Age	Group size, number of people	Reduction of quotient of dropping out of the state of "alive and healthy"	Number of people who preserved alive and healthy as a result of program implementation	Morbidity of circulatory system diseases per 100000 people		Quality quotient of forthcoming life for those who remained alive and healthy till the given age, %	
				At the beginning of 2012	By the end of 2020	At the beginning of 2012	At the end of 2020
x	P_x	Δm_{xh}	ΔD_{xh}	S_{ix}	S_{fx}	K_{ix}	K_{fx}
0	9934	$3.6936\cdot10^{-5}$	0	0	0	68.54	67.15
1	9997	$2.8900\cdot10^{-5}$	0	546	599	68.48	67.14
2	9743	$2.7022\cdot10^{-5}$	0	1100	1169	68.43	67.10
3	9568	$2.6224\cdot10^{-5}$	0	1645	1723	68.36	67.05
4	8960	$2.5763\cdot10^{-5}$	0	2184	2267	68.29	66.97
5	8839	$2.5789\cdot10^{-5}$	0	2720	2805	68.23	66.91
6	8734	$2.5867\cdot10^{-5}$	0	3255	3339	68.15	68.06
7	9395	$2.5760\cdot10^{-5}$	0	3789	3871	68.06	66.74
8	9594	$2.6146\cdot10^{-5}$	0	4324	4403	67.97	66.65
9	10294	$2.6325\cdot10^{-5}$	0	4860	4936	67.87	66.57
10	10352	$2.7021\cdot10^{-5}$	0	5398	5470	67.78	66.47
11	11199	$2.7252\cdot10^{-5}$	0	5941	6006	67.69	66.38
12	11586	$2.7772\cdot10^{-5}$	0	6484	6544	67.59	66.27
13	11750	$2.8311\cdot10^{-5}$	0	7032	7085	67.49	66.16
14	11857	$2.8900\cdot10^{-5}$	0	7583	7630	67.38	66.05
15	12967	$2.9786\cdot10^{-5}$	0	8139	8179	67.27	65.95
16	13272	$3.0713\cdot10^{-5}$	0	8700	8731	67.16	65.84
17	13945	$3.1148\cdot10^{-5}$	0	9266	9288	67.05	65.72
18	13851	$3.2163\cdot10^{-5}$	0	9837	9850	66.92	65.59
19	14875	$3.2954\cdot10^{-5}$	0	10413	10416	66.80	65.48
20-24	78527	$1.6871\cdot10^{-4}$	13	10995	10989	66.69	65.35
25-29	69658	$1.9765\cdot10^{-4}$	14	14003	13942	66.04	64.69
30-34	65791	$2.3504\cdot10^{-4}$	15	17193	17070	65.33	63.96
35-39	62566	$2.8569\cdot10^{-4}$	18	20601	20409	64.58	63.16
40-44	60334	$3.5198\cdot10^{-4}$	21	24258	23991	63.73	62.27
45-49	66961	$4.4229\cdot10^{-4}$	30	28201	27852	62.81	61.32
50-54	57170	$5.6525\cdot10^{-4}$	32	32472	32034	61.77	60.28
55-59	53321	$7.4161\cdot10^{-4}$	40	37111	36583	60.68	59.13
60-64	33912	$9.9506\cdot10^{-4}$	34	42167	41543	59.44	57.85
65-69	41314	$1.3734\cdot10^{-3}$	57	47686	46965	58.05	56.44
70^{+}	90966	$3.8969\cdot10^{-3}$	354	53712	52897	56.52	54.84
Total	901232	$6.9682\cdot10^{-4}$	628	23273	23061	63.79	62.35

In this table the totals of the morbidity of diseases of the circulatory system and the quality quotients of life expectancy concerning these diseases were obtained by averaging of the age structure of the population. The table shows that the bulk of individuals preserved alive and healthy accounts for the age group over 70 years. It is natural, if raising "friendliness" of environment in relation to patients with circulatory system diseases (γ_h), we do not change the innate "potential health" of generation in relation to these diseases (α_h). Moreover, with the slow growth of "friendliness" of environment the quality quotient of living falls, although in absolute (time) dimension both life expectancy in general and the duration of "healthy" life in relation to diseases of the circulatory system increases. However, life expectancy in general is increasing faster than in its "healthy" part as to keep a person alive and healthy is harder than just alive. This circumstance causes a relatively small (0.91%) reduction in the morbidity of diseases of the circulatory system as a result of the program implementation, because in the considered variant it is mainly oriented to the preservation and extension of patients' life. In fact, a comprehensive program should be focused on broad prevention, early detection of disease and, therefore, perhaps more complete recovery of patients. Moreover, the preservation of a human alive and healthy depends on the effectiveness of the society and health care system resistance to other causes of death, not only diseases of the circulatory system.

Structure of allocations for the preservation and strengthening of public health in Chernivtsi region as for diseases of circulatory system may be determined either by potentially underutilized resource of healthy life, or by resource of healthy life, relatively underutilized in the current year. Examples of calculations of such structures are shown in Tables 3.34-3.39.

Table 3.34

Structure of allocations for the first year of implementing of the target program to preserve and strengthen population health in Chernovtsy Region regarding circulatory system diseases determined by potentially underutilized resource of healthy life

Age	Group size, number of people	Lost healthy life expectancy, years	Health resource subject to restoration, in man-years	Share of allocations, %
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	$R_x^{(h)}$
0	9934	0.24	2384	1.72
1	9997	0.24	2399	1.73
2	9743	0.23	2241	1.62
3	9568	0.23	2201	1.59
4	8960	0.23	2061	1.49
5	8839	0.22	1945	1.40
6	8734	0.22	1921	1.39
7	9395	0.22	2067	1.49
8	9594	0.22	2111	1.52
9	10294	0.22	2265	1.63
10	10352	0.22	2277	1.64
11	11199	0.21	2352	1.70
12	11586	0.20	2317	1.67
13	11750	0.20	2350	1.69
14	11857	0.20	2371	1.71
15	12967	0.20	2593	1.87
16	13272	0.20	2654	1.91
17	13945	0.19	2650	1.91
18	13581	0.19	2632	1.90
19	14875	0.19	2826	2.04
20-24	78527	0.18	14135	10.19
25-29	69658	0.18	12538	9.04
30-34	65791	0.17	11184	8.06
35-39	62566	0.15	9385	6.77
40-44	60334	0.14	8447	6.09
45-49	66961	0.13	8705	6.28
50-54	5717	0.13	7432	5.36
55-59	53321	0.11	5865	4.23
60-64	33912	0.10	3391	2.44
65-69	41314	0.09	3718	2.68
70^{+}	90966	0.08	7277	5.24
Total	901232	0.15	138694	100

Table 3.35

Structure of allocations for the fifth year of implementing of the target program to preserve and strengthen population health in Chernovtsy Region regarding circulatory system diseases determined by potentially underutilized resource of healthy life

Age	Group size, number of people	Lost healthy life expectancy, years	Health resource subject to restoration, in man-years	Share of allocations, %
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	$R_x^{(h)}$
0	9934	0.24	2384	1.70
1	9997	0.23	2299	1.64
2	9743	0.23	2241	1.60
3	9568	0.23	2201	1.57
4	8960	0.23	2061	1.47
5	8839	0.23	2033	1.45
6	8734	0.22	1921	1.37
7	9395	0.22	2067	1.48
8	9594	0.22	2111	1.51
9	10294	0.21	2162	1.54
10	10352	0.21	2174	1.55
11	11199	0.21	2352	1.68
12	11586	0.20	2317	1.65
13	11750	0.20	2350	1.68
14	11857	0.20	2371	1.69
15	12967	0.20	2593	1.85
16	13272	0.20	2654	1.89
17	13945	0.19	2650	1.89
18	13581	0.20	2770	1.98
19	14875	0.19	2826	2.02
20-24	78527	0.19	14920	10.65
25-29	69658	0.18	12538	8.95
30-34	65791	0.17	11184	7.98
35-39	62566	0.15	9385	6.70
40-44	60334	0.14	8447	6.03
45-49	66961	0.14	9375	6.69
50-54	5717	0.13	7432	5.31
55-59	53321	0.11	5865	4.19
60-64	33912	0.10	3391	2.42
65-69	41314	0.09	3718	2.65
70^+	90966	0.08	7277	5.22
Total	901232	0.16	140069	100

Table 3.36

Structure of allocations for the ninth year of implementing of the target program to preserve and strengthen population health in Chernovtsy Region regarding circulatory system diseases determined by potentially underutilized resource of healthy life

Age	Group size, number of people	Lost healthy life expectancy, years	Health resource subject to restoration, in man-years	Share of allocations, %
x	P_x	$\Delta e_x^{(h)}$	$\Delta T_x^{(h)}$	$R_x^{(h)}$
0	9934	0.24	2384	1.71
1	9997	0.23	2299	1.65
2	9743	0.23	2241	1.61
3	9568	0.23	2201	1.58
4	8960	0.22	1971	1.41
5	8839	0.23	2033	1.46
6	8734	0.22	1921	1.38
7	9395	0.22	2067	1.48
8	9594	0.21	2015	1.45
9	10294	0.21	2162	1.55
10	10352	0.21	2174	1.56
11	11199	0.21	2352	1.69
12	11586	0.20	2317	1.66
13	11750	0.20	2350	1.69
14	11857	0.20	2371	1.70
15	12967	0.20	2593	1.86
16	13272	0.20	2654	1.90
17	13945	0.20	2789	2.00
18	13581	0.19	2632	1.89
19	14875	0.20	2975	2.13
20-24	78527	0.19	14920	10.70
25-29	69658	0.18	12538	8.99
30-34	65791	0.17	11184	8.02
35-39	62566	0.16	10011	7.18
40-44	60334	0.14	8447	6.06
45-49	66961	0.13	8705	6.24
50-54	5717	0.12	6860	4.92
55-59	53321	0.11	5865	4.21
60-64	33912	0.1	3391	2.43
65-69	41314	0.09	3718	2.67
70^+	90966	0.08	7277	5.22
Total	901232	0.15	139417	100

Table 3.37

Structure of allocations for the first year of implementing of the target program to preserve and strengthen population health in Chernovtsy Region regarding circulatory system diseases determined by relatively underutilized resource of healthy life in current year

Age	Group size, number of people	Lost healthy life expectancy, years	Health resource subject to restoration, in man-years	Share of allocations, %
x	P_x	$\Delta\tau_x^{(h)}$	$\Delta T_x'^{(h)}$	$R_x'^{(h)}$
0	9934	$8.000\cdot10^{-5}$	0.7947	0.20
1	9997	$5.166\cdot10^{-5}$	0.5165	0.13
2	9743	$6.310\cdot10^{-5}$	0.6147	0.15
3	9568	$5.389\cdot10^{-5}$	0.5156	0.13
4	8960	$5.488\cdot10^{-5}$	0.4917	0.12
5	8839	$5.594\cdot10^{-5}$	0.4944	0.12
6	8734	$4.624\cdot10^{-5}$	0.4039	0.10
7	9395	$3.635\cdot10^{-5}$	0.3415	0.08
8	9594	$5.892\cdot10^{-5}$	0.5653	0.14
9	10294	$3.793\cdot10^{-5}$	0.3905	0.10
10	10352	$4.985\cdot10^{-5}$	0.5160	0.13
11	11199	$3.962\cdot10^{-5}$	0.4437	0.11
12	11586	$4.044\cdot10^{-5}$	0.4686	0.12
13	11750	$4.136\cdot10^{-5}$	0.4860	0.12
14	11857	$5.385\cdot10^{-5}$	0.6385	0.16
15	12967	$5.490\cdot10^{-5}$	0.7119	0.18
16	13272	$5.604\cdot10^{-5}$	0.7438	0.18
17	13945	$5.716\cdot10^{-5}$	0.7971	0.20
18	13581	$4.624\cdot10^{-5}$	0.6404	0.16
19	14875	$5.955\cdot10^{-5}$	0.8858	0.22
20-24	78527	$2.673\cdot10^{-4}$	20.991	5.17
25-29	69658	$2.827\cdot10^{-4}$	19.689	4.84
30-34	65791	$3.225\cdot10^{-4}$	21.217	5.22
35-39	62566	$3.524\cdot10^{-4}$	22.048	5.43
40-44	60334	$3.841\cdot10^{-4}$	23.172	5.70
45-49	66961	$4.397\cdot10^{-4}$	29.441	7.24
50-54	5717	$4.991\cdot10^{-4}$	28.533	7.02
55-59	53321	$5.743\cdot10^{-4}$	30.625	7.54
60-64	33912	$6.879\cdot10^{-4}$	23.329	5.74
65-69	41314	$8.133\cdot10^{-4}$	33.602	8.27
70^+	90966	$1.564\cdot10^{-3}$	142.286	34.98
Total	901232	$4.509\cdot10^{-4}$	406.392	100

Table 3.38

Structure of allocations for the fifth year of implementing of the target program to preserve and strengthen population health in Chernovtsy Region regarding circulatory system diseases determined by relatively underutilized resource of healthy life in current year

Age	Group size, number of people	Lost healthy life expectancy, years	Health resource subject to restoration, in man-years	Share of allocations, %
x	P_x	$\Delta\tau_x^{(h)}$	$\Delta T_x'^{(h)}$	$R_x'^{(h)}$
0	9934	$8.000\cdot10^{-5}$	0.7947	0.20
1	9997	$6.168\cdot10^{-5}$	0.6169	0.15
2	9743	$5.265\cdot10^{-5}$	0.5131	0.13
3	9568	$5.363\cdot10^{-5}$	0.5131	0.13
4	8960	$5.463\cdot10^{-5}$	0.4895	0.12
5	8839	$4.502\cdot10^{-5}$	0.3979	0.10
6	8734	$3.520\cdot10^{-5}$	0.3074	0.08
7	9395	$4.671\cdot10^{-5}$	0.4389	0.11
8	9594	$3.668\cdot10^{-5}$	0.3519	0.09
9	10294	$5.937\cdot10^{-5}$	0.6112	0.15
10	10352	$4.928\cdot10^{-5}$	0.5101	0.13
11	11199	$6.135\cdot10^{-5}$	0.6870	0.17
12	11586	$5.110\cdot10^{-5}$	0.5920	0.15
13	11750	$5.207\cdot10^{-5}$	0.6119	0.15
14	11857	$4.150\cdot10^{-5}$	0.4921	0.12
15	12967	$5.401\cdot10^{-5}$	0.7004	0.18
16	13272	$5.503\cdot10^{-5}$	0.7304	0.18
17	13945	$5.611\cdot10^{-5}$	0.7824	0.20
18	13581	$5.721\cdot10^{-5}$	0.7924	0.20
19	14875	$4.625\cdot10^{-5}$	0.6879	0.17
20-24	78527	$2.540\cdot10^{-4}$	19.943	5.01
25-29	69658	$2.745\cdot10^{-4}$	19.123	4.80
30-34	65791	$3.063\cdot10^{-4}$	20.154	5.06
35-39	62566	$3.357\cdot10^{-4}$	21.005	5.28
40-44	60334	$3.815\cdot10^{-4}$	23.019	5.78
45-49	66961	$4.301\cdot10^{-4}$	28.797	7.23
50-54	5717	$4.844\cdot10^{-4}$	27.696	6.96
55-59	53321	$5.455\cdot10^{-4}$	29.086	7.31
60-64	33912	$6.496\cdot10^{-4}$	22.029	5.53
65-69	41314	$7.682\cdot10^{-4}$	31.738	7.97
70^+	90966	$1.582\cdot10^{-3}$	143.899	36.16
Total	901232	$4.417\cdot10^{-4}$	398.110	100

Table 3.39

Structure of allocations for the ninth year of implementing of the target program to preserve and strengthen population health in Chernovtsy Region regarding circulatory system diseases determined by relatively underutilized resource of healthy life in current year

Age	Group size, number of people	Lost healthy life expectancy, years	Health resource subject to restoration, in man-years	Share of allocations, %
x	P_x	$\Delta\tau_x^{(h)}$	$\Delta T_x'^{(h)}$	$R_x'^{(h)}$
0	9934	$7.000\cdot10^{-5}$	0.6954	0.18
1	9997	$5.148\cdot10^{-5}$	0.5147	0.13
2	9743	$5.250\cdot10^{-5}$	0.5115	0.13
3	9568	$5.343\cdot10^{-5}$	0.5112	0.13
4	8960	$5.435\cdot10^{-5}$	0.4870	0.12
5	8839	$5.522\cdot10^{-5}$	0.4881	0.13
6	8734	$4.549\cdot10^{-5}$	0.3973	0.10
7	9395	$4.629\cdot10^{-5}$	0.4349	0.11
8	9594	$3.626\cdot10^{-5}$	0.3478	0.09
9	10294	$3.698\cdot10^{-5}$	0.3807	0.10
10	10352	$4.874\cdot10^{-5}$	0.5046	0.13
11	11199	$4.957\cdot10^{-5}$	0.5551	0.14
12	11586	$3.921\cdot10^{-5}$	0.4543	0.12
13	11750	$5.134\cdot10^{-5}$	0.6032	0.15
14	11857	$5.225\cdot10^{-5}$	0.6195	0.16
15	12967	$5.313\cdot10^{-5}$	0.6890	0.18
16	13272	$5.410\cdot10^{-5}$	0.7180	0.18
17	13945	$4.338\cdot10^{-5}$	0.6049	0.16
18	13581	$5.615\cdot10^{-5}$	0.7777	0.20
19	14875	$4.521\cdot10^{-5}$	0.6725	0.17
20-24	78527	$2.436\cdot10^{-4}$	19.126	4.90
25-29	69658	$2.669\cdot10^{-4}$	18.593	4.77
30-34	65791	$2.911\cdot10^{-4}$	19.149	4.91
35-39	62566	$3.283\cdot10^{-4}$	20.538	5.27
40-44	60334	$3.649\cdot10^{-4}$	22.014	5.65
45-49	66961	$3.991\cdot10^{-4}$	26.722	6.85
50-54	5717	$4.642\cdot10^{-4}$	26.536	6.81
55-59	53321	$5.453\cdot10^{-4}$	29.077	7.46
60-64	33912	$6.224\cdot10^{-4}$	21.106	5.41
65-69	41314	$7.360\cdot10^{-4}$	30.407	7.80
70^{+}	90966	$1.602\cdot10^{-3}$	145.700	37.36
Total	901232	$4.327\cdot10^{-4}$	389.935	100

Thus (as seen from the comparative analysis in presented tables), in the case of construction of structures of allocations by health curves there are the same patterns as in the construction of these structures by the mortality data. In the structures built by potentially underutilized resource of healthy life the largest share of the allocation accounts for the age group of 20-24 years old. In the structures built by the resource of healthy life, relatively underutilized in the current year, the largest share of the allocations accounts for people older than 70 years old. Therefore, **the first structures are useful in planning targeted prevention programs, and the second ones are useful in planning of the therapeutic measures**.

§ 3.10 The methodological basis for implementing complex health improvement programs in the regions within the framework of the WHO policy "Health for all" based on the principles of equality, partnership and solidarity

The indicators of quality of medical care and stages of their development in the traditional sense of the word are considered in the works [20, 26]. But they, as well as algorithms for their development, are oriented to indicators of health "manifestations" and are of purely "technological"="clinical" nature. This approach has the right to exist, and is certainly true when it comes to the individual's health. However, it is little acceptable, if it comes to survival and health of the population. Thus, along with the "individual" indicators of quality of medical care, which depend not only on the disease, but also on the stage of each individual's development, at the level of health care management it is necessary to have "population" indicators, which may be integrated indicators of population health, i.e. parameters of the law of survival α and γ. These indicators can be applied in the analysis and prognosticating of morbidity of, for example, diseases of the circulatory system, discussed in §1.11. Concerning survival as the main indicator of population health, the steps to the desired parameters of these indicators are the following:

1) determination of the actual parameters of the law of survival α_r and γ_r directly from the data on life expectancy and infant mortality in the present or any other time;

2) making actual table (tables) of mortality (survival) by the set α_r and γ_r;

3) conversion of the real table (tables) to the desired (one (s) based on the rates of reduction in mortality, which is also to be achieved by means of improving of medical care quality;

4) determination of the desired integral indicators of population health α_d and γ_d by the desired mortality tables.

Let us explain this with a concrete example. Suppose that there is a task to reduce population mortality by 40% in the range of 0-65 years old compared to mortality rates determined in 1998 for Ukraine, which accounted for $\alpha_r = 0.675, \gamma_r = 2.964$. It can be shown that mortality reduction by 33%in the range of 0-65 years old from all causes, including cardiovascular diseases, and by 17% at the age above 65 years old, correspond to the desired integral health indicators $\alpha_d = 0.420, \gamma_d = 5.582$. But since $\alpha_r > \alpha_d$, we will take $\alpha_d = 0.675$ for the final value. At the same time, average life expectancy population will generally increase from 68.10 to 83.28 years old, and the mortality rate in the range of 0-1 years old will fall from 14.0 to 6.8 per 1000 births.

These figures are very close to the normative and even reference, they correspond to the level of developed countries in the world and could be achieved in Ukraine, for example, in 2020, if it could be possible to provide, since 1999, the annual growth of γ at unchanged α by 3.14%. But to achieve this, both national and regional programs for the conservation and promotion of population health must be comprehensive, all-encompassing and implemented not only and not so much by the medical industry, but by the society as a whole on the basis of the relations of solidarity, partnership and balance of rightly understood economic interests as well.

Particular for the population of Ukraine and constructive, from the standpoint of compliance with the realities of Ukrainians' health, example of the WHO quality indicators of health and preventive care, with in-depth calculations of realization of the program "Health 21" [62] in Ukraine until 2020 to comply with the WHO policies for European Region - using the aforementioned indicators of population health given by the author in the works [50, 51]. The ideology and methodological approaches to the implementation of the health improvement programs within the framework of the WHO policy are given in more detail below.

At the present stage of development of health care (with any form of financing) a significant improvement of population health by improving the activity of just health care system is impossible - population health directly and indirectly depends on many other factors. In order to harmonize the positive aspects of these factors for persistent improvement of human health and, therefore, increase of their vitality, viability and, ultimately, increase of life expectancy and its healthy part it is necessary to ensure relationship of solidarity and partnership in health development and equality of health issues in the society [36, 80, 90].

The importance of such an approach significantly increases with the transition to the market forms of health care, including one of them – insurance medicine (which is much spoken about in Ukraine), although the latter does not exist in a pure form in developed countries – other, complementary forms eliminate disadvantages of purely insurance medicine, namely – the negative consequences of narrowing of funding resource base and logistical support of the health care branch.

Dramatic stratification of the population by income level in most countries stipulates that not everybody is able to afford an adequate level of the health care services. That is why the implementation of the principles of equality, partnership and solidarity in the issues of human health protection requires determining of the level of responsibility of each of the areas of activity for the state/dynamics of health, vitality and viability of each of its members throughout their lives.

Primary basis for determining of such liability are usually traditional manifestations of health indicators: birth rate, level of physical development, morbidity, disability and mortality. These indicators are multi-faceted and derived from a large number of factors: level of socio-economic development and income of its members, their opportunities for self-realization, cultural, domestic, moral and religious traditions, etc. They certainly affect the activities and the health care branch, in particular the indicators quality and availability of medical care. At the same time they are significantly dependent on sex-age structure of the population in certain areas and the state of socio-ecological environment of its residence.

Taking into consideration that each of these factors is described by many mutually independent parameters to define the responsibilities of certain areas of activity for the health of society and, therefore, to provide a real relationship of equality, partnership and solidarity in these matters, **it is necessary to have a universal integral meter for status/health dynamics** [49, 50].

Such meter can be expressed in man-years of **potential life resource** R_x, which certain sex and age group of the population survived from birth to age x has.

It can be measured as follows. If, say, the number of members of such group in the age range $[x, x+1]$ equals P_x, then potential vital resource R_x, which it owns at this age is:

$$R_x = P_x e_x^{(0)} \tag{3.2}$$

where $e_x^{(0)}$- the average duration of follow-up (expected) life of this group after reaching the age x by its members. (In traditional approaches estimated duration of expected life can be found from life tables constructed on the basis of actual life expectancy of dead in each age interval [44, 46, 47]). It is known that changes in the socio-economic situation of society, socio-ecological well-being of people's living environment, including the quality and accessibility of health care have a significant effect on mortality and, consequently, on the values $e_x^{(0)}$. If these changes are positive, then the values $e_x^{(0)}$ increase, if they are negative, then the values decrease.

In addition, using specific guidelines for the desired public health (such as infant mortality rate and average life expectancy at birth) **you can accurately determine that vital resource that should be subject to recovery in a particular area**. It can be expressed in the form of a certain (concrete) material (and/or money) equivalent. Taking it into account the level of necessary costs to achieve the objectives, as well as the level of responsibility of each of the partners should be determined.

The documents of the WHO "Health – 21" [62] and "Health – 2020" [32] determine the tasks of achieving "health for all" by 2020 in the desired and potentially possible traditional health indicators (for evaluating the efficiency of the public health care system): infant mortality, mortality from leading diseases –

causes of death in specific age groups, the morbidity of diseases that are the immediate causes of death, etc.

The task of the health care system of any country of the European region (including Ukraine) is the "translation" of the levels of these indicators as benchmarks, into the language of the desired and potentially achievable integral characteristics of public health in the country. This **"translation" will provide an opportunity to evaluate life (health) resource of residents of all regions of the country, which requires recovery, and will assist in determining the necessary level of expenditures on health improvement (medical and preventive) measures.**

The law of survival of populations ([40], §1.5), for its individual age groups (actually living) – law of survival of the real generations ([41], B_1), and for groups of patients with chronic diseases that lead to death - the law of preservation of health (see §1.11) and, respectively, elemental indicators of given laws formulas may act as a system-content and calculation-mathematical basis for obtaining current and desired numerical values life (health) resource of the population at a given time at the national or regional level. In general terms, all these laws are mathematical-analytical expression for the relative number of individuals who survive from birth to age x and live to this age, staying healthy as for the n_{th} chronic disease; at the same time the number of newborns is conventionally taken as a unity and they are assumed to be healthy.

Again, mathematical and analytical expression of the law of survival of populations (see 1.1 in §1.5) has the form:

$$l(x) = \exp\left\{-\frac{(x/x_0)^{\alpha}}{\gamma[1-(x/x_0)]}\right\}$$

where $l(x)$ – the function of survival for the generation of a certain age x or the relative proportion of individuals surviving from birth to given age (x), and in the system analysis it is an integral functional characteristic of dynamics of changes in health status and quality of life in a particular environment and, at the same time, the rate of preservation (loss) of the resource of population health;

x_0 - maximum life expectancy of a generation, maximum age, and, at the same time, species (biological) resource of health and life;

α - internal, innate vitality (biological aspect) or internal resilience (social aspect) of generation; innate ability to preservation (to maintain health, not to die, to survive), mostly in childhood and adolescence;

- innate health resource;

- index of the ability to adapt to the living environment throughout the individual and the population life cycle or the quality of the population gene pool;

γ - external viability of the population;

- the degree of stability of its generations to preserve species, natural parameters of survival to any age x in a changing environment;

- index (speed) of loss of species (biological) resource of health and life depending on the quality of the living environment;

- index of the public ability to adapt the environment of existence to the internal needs (as the intensity of interaction);

- indicator of “benevolence” of environment (environment quality) in terms of preserving health and life (congenital resource) in adulthood - middle and senior age groups.

$(-)$ - digit “minus” indicates that the function of survival (conservation of health and life resource) is always less than unity (1.0) and its values are reduced over time – increasing age and years of life.

In accordance with the systemic nature of this law, on its basis it is possible to determine the potential vital resource, which has a group of people which reached a certain age at the time of the study:

$$R_x = \frac{P_x}{l(x)} \int_x^{x_0} l(y)dy \qquad (3.3)$$

where dy – the infinitely small time interval of (age), $l(y)$ - the corresponding function of survival.

It should be noted that the law of survival of populations (like the other two above-mentioned laws) can also be obtained using a variety of age-specific life expectancies indicators. The formula is as follows:

$$l(x) = \frac{e_x^{(0)}}{e_0^{(0)}} \exp\left(-\int_0^x \frac{dx}{e_x^{(0)}} \right). \tag{3.4}$$

At the same time, there is a one to one correspondence between the desired values of traditional health and demographic indicators (as well as purely medical, e.g., morbidity), parameters of the above-mentioned laws (in formulas of which their elemental indicators are presented by direct integral indicators of public health), as well as a life resource, requiring restoration, conservation and protection.

This gives reason to believe that the use of laws and their parameters can be a scientific, methodical and informational basis for the formation of the resource strategy and as well as a resource policy of the health care system in general and health agencies, in particular, at both the national and territorial levels [54].

Under this approach, equality in the health matters means that every member of the society (a group of people) owns a certain range of opportunities to maximize the use of his own vital resource. This thesis can be formulated in terms of integral indicators of population health - the parameters of the law of survival: the internal α and external γ viability or parameters of the law of preservation of health - inner α_h and outer γ_h viability and disease resistance in relation to the certain chronic pathology (usually leading to death).

Thus, the law of survival of populations implies that if any of the above parameters α or γ becomes infinitely large, and the other, at the same time, will remain unchanged, the function of survival - $l(x)$ becomes equal to unity in the range $[0; x_0]$ and has a limit during lifetime. If both indicators become infinitely large, then such fact reflects the genetic uniformity of the population under study and, at the same time, ideal predisposing (to preserve the health, life and livelihood) conditions of the living environment. If α is limited and γ is infinitely large then the population exists in perfectly conducive environment for saving life and health. Noted above suggests that discovered laws reveal the impact of both congenital factors and quality of the living environment (including the health care industry as its elemental component) on the health, as well as the distinctive characteristics of their influence (action) at different stages of life. According to (3.3) the *maximum* vital resource equals the product of the number P_x of people surviving to certain age (x) and the difference between this and the age limit of life (x_0) - the value of the latter, based on the 2001 census, was 119 years old for the Ukrainians [51]:

$$R_{x\max} = P_x(x_0 - x) \tag{3.5}$$

This fact indicates that in the environment ideally conducive to preserving of health and life every individual owns opportunities to make full use of their own life resource. (“Favorable” environment is implied not only as a complex of its eco-physical characteristics, but also as presence of the totality of economic, social, moral, psychological and other prerequisites for maximum recovery and use of the own life resource by society as a whole and by each of its members).

At the same time, on the basis of purely formal (mathematical) point of view, it is not necessary that a correlation between the parameters of the internal (innate) and external (obtained) viability should be always direct. It can be also indirect, but in this case it is necessary to satisfy the condition: characteristics of the external viability of the population, or in the reverse system analysis - while studying of “boomerang” due to the actions of the people themselves - the characteristics of quality of socio-ecological living environment (γ) should gradually increase and the characteristics of an indicator of internal vitality and resilience (“biological” and “social” aspects of the index) - α if γ tends to infinity, must always remain significantly positive:

$$\lim_{\gamma \to \infty} \alpha > 0 . \tag{3.6}$$

According to the results of years of research, at the present stage the evolution of the viability and vitality of the Ukrainian population is implemented as follows: parameter α increases and parameter γ decreases (see §1.7), indicating that there is a potential possibility for a change in the course of time evolution of integrated indicators of public health in Ukraine, namely the creation of conditions in the country in which they will grow simultaneously and consistently.

The essence of the problem is that the parameter α is dependent and, at the same time, determines the part of infant mortality in the overall mortality: the smaller this part is, the larger the parameter α (see §§1.7 and 1.8). The parameter γ in its turn, determines the level of mortality in all age groups and the corresponding (age) value of the average life expectancy (see §§1.7 - 1.10). Since nowadays in Ukraine the average life expectancy in almost all age groups is less, and the infant mortality rate is more than in the leading developed countries, reaching the same levels of indicators in Ukraine is associated with simultaneous increasing of α and γ.

To realize this it is necessary to implement measures to ensure both individual and public health at all stages of the life cycle (of an individual and populations), that is, in all sex and age groups.

The vital resource (ΔR_x) of the age group x to be recovered may be determined by the formula:

$$\Delta R_x = P_x\left(l_d(x)^{-1}\int_x^{x_0} l_d(y)dy - l_r(x)^{-1}\int_x^{x_0} l_r(y)dy \right) \qquad (3.7)$$

where, respectively, $l_d(y)$ – the desired (planned) for the age x survival curve constructed from by the desired (planned) parameters of internal (α_d) and external (γ_d) viability that reflect the conditions of the desired processes of public health, $l_r(y)$ – the actual (real) characteristic of the survival curve constructed with using parameter values of α_r and γ_r which show actually observed (and recorded) condition/dynamics of population health and environment of its residence.

Parameters α_r and γ_r can be found by processing the mortality tables, made on real demographic data [35] or by the method, which uses the official statistics on the levels of infant mortality and average life expectancy (at birth) (§3.8), or, finally, using the latest data, but without calculations - on the basis of prognosticating tables TAGOR-A or TAGOR-B (see Addendums A and B), that is, taking into account both innate factors and quality of the environment in the territories of residence (A), and with regard to the prevalence of chronic diseases in them (B).

Desired (planned) values α_d and γ_d can be determined from the considerations based on mathematical statistics [42], including using TAGOR tables applying the desired (planned) traditional values of infant mortality and life expectancy (at birth) while searching and coordinating them with other desirable goals of joint activity of the health care system and the real events taking place in the country. In the latter case, the desired from the standpoint of achieving a result, structure of the distribution of society's resources and industry to preserve and restore vital resource (health resource) for x of the age group D_x can be determined by the formula:

$$D_x = \frac{\Delta R_x}{R_x} \cdot 100\% \qquad (3.8)$$

In the dynamic planning of health indicators - for the next year on the basis of this year data, to form the short- , medium- and long-term plans by the desired guidelines (including WHO ones based on the program "Health-2020") it is more correct to make calculations based on the resource that is potentially not fully used by the age group x in the current year - $\Delta\widetilde{R}_x$:

$$\Delta\widetilde{R}_x = P_x\left(\widetilde{l}_d(x)^{-1}\int_x^{x+1}\widetilde{l}_d(y)dy - \widetilde{l}_r(x)^{-1}\int_x^{x+1}\widetilde{l}_r(y)dy\right) \qquad (3.9)$$

where $\widetilde{l}_d(z)$– the desired (at end of year) survival curve/dynamics of population health, $\widetilde{l}_r(z)$– the current (at the beginning of the year) survival curve/dynamics of population health.

In this case, in terms of achieving a result, the desired (planned) structure of the distribution of society's resources and industry to save and restore vital resource (health resource) for the age group x of the population ($\widetilde{D}_x$) is calculated as follows:

$$\widetilde{D}_x = \frac{\Delta\widetilde{R}_x}{\widetilde{R}_x} \cdot 100\% . \qquad (3.10)$$

The benefits of using outlined methods for dynamic planning of health care programs until 2020 and in subsequent years are that vital resource/health resource that must be restored is determined separately for each year of population (group of people) life. This resource for each sex-age group and all groups (in general) determines the amount of the additional funds that should involve the society and the health care industry, in particular, to achieve the desired targets of public health. The accumulation of these funds as well as their effective use is possible only on the basis of forming relationships of equality, solidarity and partnership in health care issues in the society.

All sectors of society and all actors of economic and political activities in accordance with their own resource potential, functional possibilities, interests and a measure of responsibility for the final result should participate in creating of such a resource fund ("fund of life potential/health potential reproduction").

Distribution of accumulated funds should take place in accordance with existing needs of society and each of its group in the preservation and reproduction of their own life resource. This approach is possible only on the basis of social partnership and the balance of interests, that is today's WHO requirements for the development and formation of the national health care systems [80, 90].

Summing up, we note: *methodological and systematic basis for determining the conditions and possibilities of implementing WHO policy in public health care, as well as in monitoring the effectiveness of implementation of planned and existing national and regional programs with highly accurate forecast and phase control of their achievability in any territories* may include the following **model of laws:**

• survival of populations;

• survival of real generations;

• population health preservation together with the derivatives of these methods and techniques:

• control of the health dynamics;

• calculation of risks to people life and health;

• structuring of congenital and acquired factors in health and life preservation;

• planning and cost efficiency of various resources for these purposes on the basis of equality, solidarity and partnership.

The proposed approach will always be in demand in the framework of unabated health care restructuring, refocusing and revaluation of factors affecting preservation of people’s lives and health implemented in Ukraine and other countries.

§3.11. The advantages of the use of the laws of survival and preservation of population health for the analysis of dynamics of the corresponding processes and efficiency of the territorial systems of health care

Trying to find the integral parameters of population survival and health by the law of Gompertz-Makeham [81, 84] the power of death due to "natural aging" of body basically increases with age by geometric sequence (Gompertz law) and the background constant (Makeham constant) describes, as the vast majority of national experts of social medicine still believe, based on the work [84], the "social" component of mortality also caused by factors associated with the "friendliness" or "favorableness" of environment conditions of the population residence, in particular with the work of local systems of health care. Thus, "social" and "genetic" components of mortality are considered additive and therefore independent. This means that the overall death rate, in principle, can be divided into "removable" and "non-removable" components. Based on this assumption the author of the work [12] analyzed the mortality tables of Sweden population for long period of time and treated them using the law of Gompertz-Makeham, concluded that background "removable" component significantly decreased for the research period, while the "genetic" or "non-removable" virtually remained unchanged. On this basis, by equating "background component" to zero there was estimated upper limit of the average life expectancy. At the same time, V.P.Voytenko [9] proved that the law of Gompertz-Makeham not always adequately describes the determination of the selective action of certain diseases on the population adaptation to environment, mortality in infancy and complemented it with Weibull law. At the same time there were attempts to describe the influence of various factors, including environmental, on population survival and without the laws of survival. For example, the known attempts[+] of assessment of selective action of respiratory diseases, cardiovascular diseases and tumors on the relative

+) Хуснутдинова К. Генетико-демографические характеристики населения городов в условиях интенсивного промышленного развития/Э.К. Хуснутдинова, И.Н. Шашкова, Х.С. Рафиков/Социально-экологические проблемы управления здоровьем. – Горький. ГГМИ, 1989. – С.34-39.

adaptation of population of two industrialized cities with the population over 1 million and over 200 thousand residents. The assessment of the degree of relative adaptation of each city population was made on the basis of the methods of Cavalli - Stozza++. This technique, the authors say, takes into account the effect of all factors that affect the reproductive performance and mortality of the population.

The degree of selective action of the circulatory system diseases and neoplasms of the relative adaptation of the population is estimated by the formula:

$$S = \sum_{x=0}^{m} \frac{I_x b_x \delta_x}{R_0}. \qquad (3.11)$$

In this formula: I_x – probability of survival to age; x, b_x – the so-called "age specific" rate; δ_x – probability of dying from the disease until the age x; R_0 – net reproductive rate.

The net reproductive rate was calculated by the following formula:

$$R_0 = \sum_{x=0}^{m} I_x b_x . \qquad (3.12)$$

In addition, to describe the dynamics of the increase (or decrease) of the size of population there was used the factor of internal rate of natural increase - r which is calculated by the equation:

$$\sum_{x=0}^{m} \exp(-rx) I_x b_x = 1 . \qquad (3.13)$$

Based on this approach the authors found that if there is a hard pressure of the environment the population responds by an increase of the internal rate of natural increase and net reproductive rate, due to the need to stabilize the structure of the population

+ + Cavalli - Stozza. The genetics of human population. / Cavalli - Stozza, W.T. Bodmer - San Francisco, 1971. - P.965.

The results of the study allowed the authors to identify the highest level of selective pressure on genotypes with cardiovascular and pulmonary pathology in the area of petrochemical complexes.

However, this assessment does not seem quite correct, at least from logical and mathematical points of view, because the same high level of selective pressure will be, for example, in case of high probability of survival and low probability of death, and vice versa .

V.N.Lekhan and colleagues[+] developed a methodology for evaluating the structural efficiency of local health care systems. The integral indicator of structural efficiency, which is calculated by the below formula, is selected as an evaluation criteria:

$$S = \sum_{k=1}^{n} r_k \Big/ \sum_{k=1}^{n} g_k \,. \qquad (3.14)$$

In this formula, r_k – assessment of the contribution of an individual indicator, g_k – weight of indicator, n – a number of indicators. Structural efficiency index is constructed so that it changes from zero to one. For local systems with low efficiency it is close to zero, and with high efficiency it is close to unity. However, the disadvantage of this indicator is that it is based on a rather arbitrary choice of indicators and the collective expert opinion as to their importance, that is it contains a substantial portion of subjectivity.

According to the laws of survival of populations and population health preservation we introduced indicators, which on the one hand, are more meaningful and mathematically justified, on the other hand, are more objective.

[+] Лехан В.М. Методика оцінки структурної ефективності територіальних систем охорони здоров'я/Лехан В.М., Крячкова Л.В., Борвінко Е.В. – Кривий Ріг: Діопіс, 2013. – 36с.

In particular, in the formula of survival of populations (§1.5)

$$l(x) = \exp\left[-\frac{(x/x_0)^{\alpha}}{\gamma(1 - x/x_0)} \right]$$

x_0 – maximum age of a person's life, which must exist, since "all men are mortal", α – internal rate of vitality and viability of the population, γ – external-internal rate of vitality and viability of the population. The first index, as we have noted, reflects the ability of people to *adapt* to the environmental conditions of residence, and the second one reflects the ability of people to *adapt* the environment to their needs. Both of these indices characterize both biological and social components of the process of survival. In fact, index α, describing primarily the ability to survive in the younger age groups and at the same time is a kind of "function" of health and lifestyle of parents of these groups representatives and therefore carries also a social component. On the other hand, the index γ mainly characterizes the survival of middle-aged and senior aged groups and, therefore, a way of life in the broadest sense, in other words is the most "social" factor. However, this way of life is also largely regulated by the "potential health", laid in the representatives of each age group by their parents or by the older generations. Hence, the index γ also contains a biological component. Thus, biological (genetic) and social components of the survival process are not independent, i.e. additive as Gompertz-Makeham law claims, but closely related.

The law of preservation of population health also indicates it quite similarly. Its mathematical expression is similar to the formula of the law of survival of populations and differs from it (§1.11) only by the choice of notation options, their "meaningful load" and numeric values:

$$l_h(x) = \exp\left[-\frac{(x/x_{0h})^{\alpha_h}}{\gamma_h(1 - x/x_{0h})} \right]$$

where $l_h(x)$ – relative number of persons, who being born alive and healthy as for specific disease (class of diseases), full recovery from which is currently impossible, remain in this state, having reached the age x; x_{0h} – age limit that can be achieved, staying relatively healthy as for particular disease (class of diseases); α_h – index of "genetic assistance" to health as for a particular disease (class of diseases); γ_h – index of "social assistance" with respect to certain health diseases (class of diseases). As absolutely healthy people do not die, it is clear that between integral parameters of the law of survival and the law of the preservation of health, there are relations expressed by the following inequalities $\alpha_h \le \alpha, \gamma_h \le \gamma, x_{0h} \le x_0$. However, these indices, particularly index γ_h is substantially dependent upon the effectiveness of national and regional health care systems.

Using these laws and on their basis processing combined morbidity-mortality tables with the method of least squares can determine the impact of certain diseases and the parameters α and γ of the law of survival, or the parameters α_h and γ_h of the law of preservation of health in relation to a specific disease (class of diseases). If it turns out that a particular disease significantly reduces the parameter α in the law of survival or parameter α_h in the law of preservation of health, then it means that the disease has a biosocial nature with dominance of the biogenetic component, and increasing or maintaining the values of these parameters will indicate the absolute dominance of social ecological component in diseases spreading.

Approaches based on the laws of survival and the preservation of health, also allow calculating potential life and health of population in man-years, which is recoverable in the country as a whole and in each specific area and, therefore, to develop target renewable program with calculating the amount and optimal structure of funds allocation for their recovery. In addition, they can predict the prevalence of chronic diseases under study.

Table 1.22 (§1.11) shows (as noted above) the performance of inequalities $\alpha_h \le \alpha, \gamma_h \le \gamma, x_{0h} \le x_0$. This means that based on the values of the parameters of the laws of survival of populations and preservation of population health it is possible to estimate biosocial and socio-biological components of the selective pressure of certain diseases (class of diseases) on both the population as a whole and its individual regions more objective than using previous approaches of researchers. Biosocial component of selective pressure of chronic cardiovascular diseases on the health and survival of population in per cent equals to:

$$p_{bs} = 100(\alpha - \alpha_h)/\alpha . \qquad (3.15)$$

Socio-biological component of selective pressure of chronic circulatory system diseases on health and survival of population is:

$$p_{sb} = 100(\gamma - \gamma_h)/\gamma . \qquad (3.16)$$

The results of the calculation of these components are given in Table 3.40.

Table 3.40

Indices of selective pressure (in percent) of chronic cardiovascular system diseases on health and survival of the population of Kitsman District, Chernovtsy Region

Parameter	All population	Men	Women	The urban population as a whole	The urban population, men	The urban population, women	The rural population as a whole	The rural population, men	The rural population, women
p_{bs}	35.7	36.3	39.5	42.6	46.8	48.1	34.3	32.7	34.5
p_{sb}	49.2	20.9	71.3	44.9	17.1	51.8	49.2	23.7	74.8

The table shows that the largest component of biosocial selective pressure of chronic cardiovascular diseases on health and survival is observed among urban women, and the lowest - among rural men. Although in general this difference can be explained by the fact that according to the observations made by V.P.Voytenko [9] and V.O.Heodakyan [12] positive genetic changes, including a kind of “biosocial resistance” to diseases of the circulatory system are accumulated and transferred to the “general population boiler” by men, causes of this difference require special study.

However, since the parameters of the law of preservation of health obtained from processing combined morbidity - mortality table, it is necessary to examine what caused these differences: increased mortality of girls in the younger age associated with birth defects, or increased incidence of the diseases of the circulatory system and in accordance with this to plan treatment and preventive measures.

It should be also noted that due to non-additiveness of parameters α and α_h the index of biosocial component of selective pressure of chronic cardiovascular diseases on health and survival of the population in general is not always between “masculine” and “feminine” characteristics.

So the table shows that the value of socio-biological component of selective pressure of chronic cardiovascular diseases on the health and survival of the general population is between “masculine” and “feminine” characteristics. This occurs because the index p_{sb} is much more driven by the living environment and consequently the efficiency of the functioning of the territorial health care system than the index p_{bs}. In this case, “male” index of socio-biological component of selective pressure of chronic cardiovascular diseases on the health and survival is significantly less than the “female”. This difference is due to the fact that the proportion of these diseases among female mortality factors is significantly higher than that of male mortality factors. Reducing the proportion of chronic cardiovascular diseases among male mortality factors is explained by a significant role of injuries, poisoning and accidents in it.

The approach based on the laws of survival and the preservation of public health can also predict the prevalence of selected disease (class of diseases) among the general population and in its individual categories, sex and age groups. Thus, the last row of Table 3.40 shows that the estimated prevalence of cardiovascular diseases among the population of Kitsman District makes up more than 50,000 per 100,000 of population. This is a rather high index, which shows the urgent need to develop and implement a targeted comprehensive program of conservation and restoration of the "health potential" of the population. However, comparing the "forecast" values of data of prevalence of these or other diseases with the observable based on consultations and checkups in the practice of public health care, we can estimate the completeness of identification of patients and the effectiveness of treatment and prevention measures, which is essential for every manager and every region.

The results of applying proposed approach to prognosticate the prevalence of chronic diseases of the circulatory system in some sex-age groups of Kitzman District are given in Table 3.41 (1.23).

Table 3.41 (1.23)

The prevalence of chronic diseases of the circulatory system in Kitsman District per 100,000 people in different age groups in accordance with combined morbidity-mortality tables

Age group	The prevalence of chronic diseases of the circulatory system per 100,000 population								
	Population in general			Urban population			Rural population		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
0-6	1481	1092	1925	499	798	106	1685	1151	2290
7-14	4080	3569	4601	3672	4176	2292	4149	3364	5017
15-17	7206	6208	8233	7320	9096	4246	7121	5403	9001
18-60	22900	21540	24320	23270	24110	21390	22660	20690	24810
Older than 60	65460	61820	68290	70690	68760	71500	63930	59650	67410

According to this table of working age (18-60 years old) prevalence of chronic diseases of the circulatory system is about 20-25 thousand per 100 thousand people. This is quite a high index that requires special attention to this category of population.

In addition, the Table 3.41 shows that a fairly high prevalence of chronic diseases of the circulatory system occurs even in the youngest age group, and in the working age a fifth or even a fourth resident of Kitsman District suffers from this disease in one way or another. It is quite alarming signal that suggests that it is required to pay increased attention to the issues of early detection, treatment and prevention of chronic diseases in childhood and in working age. On the other hand, it is no surprise that the greatest incidence of cardiovascular diseases occurs over the age of 60, as these diseases are the leading factors of death and shortening of the duration of the next life. However, it should be mentioned, that at the age of 17 there is no sustained dominance of “female” incidence over “male”. This means that their prevalence at this age is mostly influenced by congenital malformations of the circulatory system. In working age and older age groups there is a steady prevalence of “female” incidence over “male”. This can be explained by the fact that due to the contribution of other causes of men’s death the proportion of chronic diseases of the circulatory system is less than that of women. In addition, the table shows that with the age increasing the prevalence of cardiovascular diseases also increases, which is an evidence of the overwhelming role of social factors in shaping the incidence of these illnesses and deaths of them.

The proposed approach is based on the laws of survival and conservation of the health of the population and their use in the processing of combined morbidity-mortality tables allows you:

1) to objectively assess the impact of various chronic diseases (class of diseases), full recovery from which is impossible, on the integrated indicators of health and survival of the population.

2) to prognosticate the prevalence of certain chronic diseases (class of diseases), full recovery from which is impossible, both as a whole and for individual sex and age groups, and thus control the authenticity of completeness of identification of patients and the effectiveness of appropriate treatment and preventive measures.

3) to objectively evaluate the effectiveness of the functioning of local health care systems based on the final result of their work, which is expressed quantitatively in the values of integrated indicators of health and survival of the population, which are the parameters of applicable laws and totally devoid of the subjective component, as obtained on the basis of real data on morbidity and mortality in a particular area.

4) to implement structural information support of the development of targeted comprehensive health improvement programs and to calculate the volume and structure of society and industry resources necessary for their implementation, based on an objective assessment (in man- years) of population potential life and health, which is recoverable.

§3.12 The new technology as an element of the evidence-based medicine in the practice of public health care

Evidence-based medicine as an ideology and a new style of health care activity began in the early 90s of XX century in Canada and once widespread throughout the world, moreover, primarily, in the clinical medicine. We did not find any source in the literature, where there were examples of real applications of evidence-based medicine in the organization and management of health care, both in our country and abroad.

Taking into account that evidence-based medicine is an information technology of selection of optimal activity options in medicine and health care, based on a comprehensive analysis of the majority of national and foreign government programs in the field of medicine, as well as a number of regional ones (such as "Health of the Bukovynians") we made the following conclusions:

- in national programs there are no elements of evidence-based medicine, which seriously hampers opportunities of joint innovation activity with western countries in the matters of preservation and strengthening of population health;

- population aspects of population health and health care management while taking management decisions should be based only on the principles of evidence-based medicine.

The last conclusion is based on a set of probable events in the activities of the industry and physicians, the impact of an infinite number of accidents on population health, as well as bias, inconsistency and inaccuracy of the management decisions in health care.

The above assumes that the decision-making in the management of both health and health care should primarily include technologies of diagnosis, prognosis and selection strategy, which are most accessible in terms of cost, the most effective and the results are taken from many years socio-medical research.

All this fully corresponds to the results presented in this monograph, namely:

- data of population health of many-millioned European country, Ukraine from 1976 to 2011;

- collection and processing of materials are available in terms of their value;

- any new data search is not required - data having binding regular state (and not just a departmental!) record keeping are used;

- effectiveness of the results is proven in comprehensive retro- and prospective intensive studies [39, 44, 47, 50, 51, 53], where there was used the latest information technologies [40, 43, 45], modern computing equipment and methods of data processing [46], meeting modern WHO requirements (§2.3) and standardization of medical technologies (see Addendum: - reference tables TAGOR).

It is the latter that determines the quality of diagnosis, prognosis, strategies selection, i.e. the quality of decisions in the management of population health and health care.

Before this development work there were nopeople in the system of managementof integral quality of population health, health care and areas of residence. They were also absent in the appropriate private development works, and particularly in complex system of representation and decisions (we note that the separateness of these developments is not compatible with the concept of systemic population health in general!).

Of course, standardization of given new social and medical technology requires creating unique “programs-protocols” for each territory suggesting their mandatory use in planning and carrying out of any health-improving activities. Such protocols can be focused on the implementation of general and targeted (by pathology types) health improvement programs. At the same time, taking into account the ideology of the laws of populations survival and health preservation, such programs will always be complex, both horizontally - interagency and inter-sectoral, and vertically - from the perspective of accounting internal and external factors that affect public health and health care activities, and from this point of view they will always be carriers of a systematic approach.

This monograph is not intended to form the development of the protocol. However, we note a recommendation that such a protocol must include three groups of data: input, intermidiate and final. The data presented in §3.4 can serve as input, the data shown in the examples on the implementation of general and targeted health improvement programs listed in §§3.6 - 3.9 can be intermediate and final.

These data blocks of **unique** (for the territory, groups of population and time) **protocol** are required and must be created on any areas where new technology will be applied. In this case, the data set will always be unique based on the characteristics of the population groups, territories of their residence, terms and goals of social and medical programs, the initial (real) and desired (forecast) indicators, including reference tables TAGOR. Its uniqueness will be also determined by the choice of the model for achieving the objectives in time and resources available to achieve them. In its turn, the **typicality of protocol** will be expressed by typicality of tasks, indicators, methods and technology of goals achieving.

§3.13. The potential possibilities of population health prognosticating based on the new systematic approaches and methods

We are introducing other possible kinds of making prognosticating of population health in the implementation of various types of social and health improvement programs for the control of their current and ultimate efficiency and they are suitable for estimation of all programs operating in the country today, including programs within the Ministry of Health of Ukraine.

Kinds of prognosticating are as follows:

1. Dynamics of population health (in general) in a particular area:

1.1. dynamics of population health throughout the life cycle of the real (distributed by age) characteristics of its resources by gender, by area of residence and the country in general;

1.2. by a changed (fixed) and composition of the population, accordingly, its health resource;

1.3. by the regulated (given) reducing of infant mortality;

1.4. by controlled (regulated) reducing of specific classes of pathology - causes of death owing to a combination of factors;

1.5. taking into consideration multi-vector fluctuations of dynamics of prevalence of specific classes of diseases (injuries) - causes of death due to a combination of factors;

1.6. due to the preventive medicine activities;

1.7. due to the specific socio-preventive measures (lifestyle correction. specifically its quality as a part of life quality);

1.8. by changing the ratio of shares of biological and social factors in the causes of survival (cost of health resources);

1.9. by changing of (regulated and controlled) quality of living environment;

1.10. by control parameters of the law of survival of populations;

1.11. dynamics of the health of people not suffering from the N-th class of diseases(healthy ones as for target or common or endemic disease).

2. Dynamics of patients' health in a particular area:

2.1. dynamics of the health of people throughout the life cycle, fallen ill with N-th disease (including by gender, territories, country in general);

2.2. at a controlled efficiency of specified therapeutic measures;

2.3. by changing the composition of patients by age and sex (including by territories);

2.4. at a controlled (planned) change of the quality of life in the territory of residence (for the whole population);

2.5. at a controlled change in the quality parameters of the living environment;

2.6. when the control (desired) quality indicators of living conditions are achieved.

3. Dynamics of risks to health and life of all people living in a particular area:

3.1. dynamics of risks to health and life throughout all the life cycle by real (distributed by age) characteristics of its resources taking into consideration gender, area of residence and in the country in general (by 1.1);

3.2. by a changed (fixed) population structure (its health resource) (by 1.2);

3.3. at a regulated (given) reduction of infant mortality (by 1.3);

3.4. at a controlled (regulated) reduction of specific classes of pathology - causes of death due to a complex of factors (at 1.4);

3.5. taking into account the dynamics of multi-vector fluctuations of prevalence of specific classes of diseases (injuries) - causes of death (n) due to a combination of factors (by 1.5);

3.6. (by 3.5.) due to conducting preventive medicine activities (by 1.6);

3.7. due to the specific socio-preventive measures (lifestyle correction. specifically its quality as a part of life quality) (by 1.7);

3.8. (by 3.5.) by changing the ratio of shares of biological and social factors in the causes of survival (cost of health resources) (by 1.8);

3.9. (by 3.5.) by changing of (regulated and controlled) quality of living environment (by 1.9);

3.10. (by 3.5.) by control parameters of the law of survival of populations (by 1.10);

3.11. (by 3.5.) for people who are not ill with N-th class of diseases (healthy ones as for target or common or endemic disease) (by 2.1).

4. Dynamics of risks to patients' health and life:

4.1. for people throughout the life cycle, fallen ill with N-th disease (including by gender, territories, country in general) (by 2.1);

4.2. at a controlled efficiency of specified therapeutic measures (by 2.2);

4.3. by changing the composition of patients by age and sex (including by territories) (by 2.3);

4.4. at a controlled (planned) change of the quality of life in the territory of residence (for the whole population) (by 2.4);

4.5. at a controlled change in the quality parameters of the living environment (2.5);

4.6. when the control (desired) quality indicators of living conditions are achieved (by 2.6).

5. Structure of resources allocation for the recovery of all the population at the initial stage of health-improving activities (taking into consideration sex, area of residence in the country):

5.1. throughout the life cycle of the real(distributed by age) characteristics of its resources by gender, by area of residence and the country in general (by 1.1):

5.2. at a changed (fixed) and composition of the population, accordingly, its health resource (by 1.2);

5.3. by the regulated (given) reduction of infant mortality (by 1.3);

5.4. at a controlled (regulated) reducing of specific classes of pathology - causes of death due to a complex of factors (by 1.4);

5.5. taking into consideration multi vector fluctuations of dynamics of prevalence of specific classes of diseases (injuries) - causes of death due to a combination of factors (by 1.5);

5.6. (by 5.5.) due to the preventive medicine activities (by 1.6);

5.7. (by 5.5.) due to the specific socio-preventive measures (lifestyle correction, specifically its quality as a part of life quality) (by 1.7);

5.8. by changing the ratio of shares of biological and social factors in the causes of survival (cost of health resources) (to 1.8);

5.9. (by 5.5.) - by changing of (regulated and controlled) quality of living environment (by 1.9);

5.10. (by 5.5.) -by control parameters of the law of survival of populations (by 1.10);

5.11. for people not suffering from the N-th class of diseases (healthy ones as for target or common or endemic pathology) (by 1.11).

6. Structure of resources allocation for patients:

6.1. for people fallen ill with N-th disease (including by gender, territories, country in general) (2.1);

6.2. at a controlled efficiency of specified therapeutic measures (by 2.2);

6.3. by changing the composition of patients by age and sex (including by territories) (by 2.3);

6.4. at a controlled (planned) change of the quality of life in the territory of residence (for the whole population) (by 2.4);

6.5. at a controlled change in the quality parameters of the living environment (2.5);

6.6. when the control (desired) quality indicators of living conditions are achieved(by 2.6).

7. Structure of resources allocation (for the recovery of all the population) in stages - before reaching the targets:

7.1. by gender, area of residence, around the country throughout the whole life cycle by real (distributed by age) characteristics of its resource (at 1.1);

7.2. by a changed (fixed) and composition of the population, accordingly, its health resource (by 1.2);

7.3. by the regulated (given) reducing of infant mortality (by 1.3);

7.4. by controlled (regulated) reducing of specific classes of pathology - causes of death owing to a combination of factors (by 1.4);

7.5. taking into consideration multi vector fluctuations of dynamics of prevalence of specific classes of diseases (injuries) - causes of death due to a combination of factors (by 1.5);

7.6. (by 7.5.) - due to the preventive medicine activities (by 1.6);

7.7. (by 7.5.) - due to the specific socio-preventive measures (lifestyle correction, specifically its quality as a part of life quality) (by 1.7);

7.8. (by 7.5.) - by changing the ratio of shares of biological and social factors in the causes of survival (cost of health resources) (by 1.8);

7.9. (by 7.5.) - by changing of (regulated and controlled) quality of living environment (by 1.9);

7.10. (by 7.5.) – by control parameters of the law of survival of populations (by 1.10);

7.11. for people not suffering from the N-th class of diseases (healthy ones as for target or common or endemic disease) (at 1.11).

8. Resources allocation in stages - till achieving targets for patients.

8.1. for people fallen ill with N-th disease (including by gender, territories, country in general) (by 2.1);

8.2. at a controlled efficiency of specified therapeutic measures (by 2.2);

8.3. by changing the composition of patients by age and sex (including by territories) (by 2.3);

8.4. at a controlled (planned) change of the quality of life in the territory of residence (for the whole population) (by 2.4);

8.5. at a controlled change in the quality parameters of the living environment (2.5);

8.6. when the control (desired) quality indicators of living conditions are achieved (by 2.6).

9. Habitability of areas for population living (according to set parameters of population health).

The above mentioned potential possibilities of health forecast based on the use of the law of survival of populations encompass various components of medical and social programs including their countless aspects.

It is impossible to bring such a large number of examples in the monograph. This is a subject of the targeted guidelines. However, a careful reading of the monograph contents, its figures and tables will allow any professional to calculate in advance and implement any of the above-mentioned prognosticating[+)].

+) The author can assist in making relevant calculations.

§3.14 Reference Tables TAGOR: descriptive notes to the Reference Tables

Tables TAGOR [+)] is a table reference book on converting traditional indicators - infant mortality (including by different reasons), infant morbidity and life expectancy at birth - in integral indicators (indices) - internal and external disease resistance to diseases and viability of the laws of preservation of population health (LPH) and survival of populations (LSP), respectively, which allow providing "initial conditions", dynamics and prognosticating of population health and/or patients with chronic diseases, habitability of territories of their residence, conducting comparative calculations of health and life quality by the stages of their lives, age and sex and other health risks and on this basis they give opportunity to single out the desired direction of social and health improvement programs in the regions, to calculate the amount and structure of the necessary funds for their implementation by years and in dynamics, as well as conduct other calculations – by the content of health improvement models.

Benchmarks for assessing the real situation in health of the group of people under study and its proximity to the best international standards in this technology are normative or standard benchmarks of internal and external viability of population overall and by gender (given in §1.8), as well as by territories when assessing the extent of their "benevolence" (for preserving health and life) that are listed in the "Table of evaluation criteria of territories habitability" (§§1.8, 1.10).

The content of the tables TAGOR is a methodological, informational, methodological and technological basis for selection of rational decisions, reasoned actions and professional execution of programs for protection and promotion of public health. Before such opportunities of social physicians, clinicians, ecologists, hygienists and health system organizers were limited. The Tables allow taking the right decisions for socio-ecological adaptation,

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+) The copyright is used in their name - the first two syllables of the names: Tarallo-Gorsky.

conservation and promotion of population health in different environmental conditions, improving the quality of the environment, including the health care system, "calculating" quality of the relevant laws, regulations, projects and individual activities to achieve the desired result within the managed and resource-saving health and social programs. In this study clinicians, in addition to general tables, received a powerful support system for their prevention and treatment programs in the form of morbidity/mortality tables (§1.11) and target tables TAGOR ("TAGOR-B").

Set of health and life potentials (α and γ) values of which depend on some tasks appearing at a certain stage of development of the population and territory of residence serves as a marker of specific facts that establish the possibility of preserving the health, life, adaptation to the environment (α), as well as the conditions of this medium (γ) as an extent of favoring this possibility, that is unique specificity of relations and interactions in the system of "population - environment of existence", the ability to manage these relationships by the profile of their interaction with the scale of longevity.

In social medicine and general hygiene it is well known what individual's health is. It is estimated, as a rule, by the anthropometric parameters (height, weight, chest circumference, vital capacity, etc.), the presence or absence of diseases and (or) congenital malformations, the level of physical fitness, mental development, and the like. At the same time, the boundaries between the concepts of "norm" and "pathologies" are often very tentative, since it is well known that, for example, at the Paralympics disable people show such results that not every conventionally "healthy" person can achieve.

Therefore, it seems that presence of such component as "social welfare" in the WHO definition of "health" is important. On its basis the conclusion that a "healthy person" can only be in a "healthy society" is unambiguous. Because of this, the question arises whether it is possible to approach the assessment of population health with equally accurate (or at least it seems so) measures as to the individual's health.

Usually in social medicine in the evaluation of population health one operates with statistically averaged characteristics of the individual's health given to any base – per "100, 1000 people" etc. (for example, characteristics of morbidity and (or) the prevalence of certain diseases, including those lead to disability and death). Furthermore, both in social medicine and demographics the concepts and indicators of mortality of children under 1 year old and the average life expectancy (at birth) are used to assess the level of development of a country or territory. At first glance, these indices seem to be insufficiently informative and characterizing mainly the level of health care development. To some extent it is true: for example in Cuba, which today is not considered an advanced country; these figures are "good enough" and indicate a relatively high level of health care. However the information value of these indicators and their "capacity" in terms of inclusion many aspects of life of society, but not only health increases sharply if mathematical model of the law of survival of populations (population) is known, i.e. the function l (x, $a_{1,}$ $a_2 \ldots a_n$), which describes the relative number of individuals surviving from birth to the fixed age x, where $a_1 \ldots a_n$ are model parameters, which can be called integral parameters of population health (IPPH). It turns out that in the model of law of survival of populations, which the author of this monograph discovered, there is one to one correspondence between integral parameters of population health and traditional demographic indicators. And it allows completely restoring the function l (x, $a_1 \ldots a_n$) – a number of people surviving to a certain age in each age group, that is, in fact, the mortality table. And it, as shown in the book can serve as an effective tool for prognosticating health, development of programs for its protection and strengthening with the definition of the desired structure of allocations for these programs.

Moreover, the author established the law of preservation of population health, which also allows simulating a function $l_h(x)$ with a reasonable degree of accuracy. The function describes the relative number of people reaching the age x alive and, at the same time, healthy as for any particular (h) disease or class (h) of diseases (see §1.11). Then, with the help of functions $l(x)$ and $l_h(x)$ we can predict the prevalence of *S(x)* of that or another class of diseases. In health care practice, comparing the predicted values of *S(x)* with the observed, we can estimate the accuracy and completeness of detection of these diseases (class of diseases). Accordingly, we can evaluate the effectiveness of specific therapeutic and preventive measures and, if necessary, make adjustments to the prevention, diagnosis and treatment of these diseases.

However, to apply this approach to forecasting the dynamics of population health preservation with concerning specific diseases, it is necessary to have data on relevant morbidity at the age under 1 year old and the average expectancy of "healthy" part of life expectancy (at birth). Getting them is possible without too much difficulty, as our experience showed (in target studies!).

Here we should note that in demographic and socio-medical scientific journals the ongoing discussion about which of the laws of survival is better: the Gompertz-Makeham law or ours - the law of survival of populations which was specially discussed in §1.5. But the main thing should be emphasized: the author of this monograph is not aware of any other researchers' works in which their models of survival law would be offered as a tool for constructive solutions to improve population health, its prognosticating with the development of programs for their protection and promotion, defining the scope and structure of allocations for this purpose, etc., that is to solve the problems in medicine and health care as well as ecology. Using one reference table you can get data both the quality of population health and the quality of its living environment (including the quality of the protection system, strengthening and development of people health) in the definite territory, at the definite time (in the definite year). Moreover, development of target social and ecological, social and medical health improvement programs became available on the same basis – with the use of the same parameters of the Table (as shown in monograph) – for different groups of population (taking into account sex, age, their residence), these programs control both by quality and expenses

Addendums to the monograph - reference tables TAGOR, just allow determining the integral parameters of public health as a whole, that is, in terms of survival (RT “TAGOR-A”), and from the point of view of preserving the health as for relatively common chronic diseases (RT “TAGOR-B”).

As noted above, the essence of TAGOR tables is that in accessible for specialists of healthcare way they reflect one-to-one correspondence between the set of traditional medical and demographic indicators and integral parameters of health – internal (α_h, α) and external (γ_h, γ) viability and disease resistance indices of the population to disease allowing to identify the latter quickly.

Tables consist of 2 parts. Part A (TAGOR-A) shows the internal (α) and external (γ) indices of population viability based on values m_0- infant mortality rate per 1,000 live births, and e_0 - the average life expectancy (at birth). The parameters α and γ determined by the tables TAGOR-A simultaneously characterize, respectively, the quality of the gene pool and the degree of suitability of living environment for the people residence in it and health preservation in the broadest sense. Indicators of tables TAGOR-A are calculated from considerations that the age limit of human life is 119 years old.

Tables TAGOR-B show the internal (α_h) and external (γ_h) viability and disease resistance indices of the population with respect to diseases of the circulatory system, depending on the number of people dropping out of the condition “safe and sound” at the age before 1 year old (with respect to these diseases) per 1000 people and average expectancy of a “healthy” (concerning this pathology) part of life. Indicators of tables TAGOR-B are calculated from the consideration that the age limit of maintaining people’s health regarding chronic diseases of the circulatory system, as established (see §1.11), equals to 116 years old.

All calculations of tables TAGOR are made for infant mortality rates (m_0) ranging from 1.0 to 15.0 per 1000 live births (incremental step of 0,1%) and average life expectancy of population (e_0) - ranging from 50.0 to 85.0 years old (incremental step of 0,1 year).

In tables TAGOR-A the margins of fluctuations of indicators of internal viability of population (α), derived from them, make up 0.4677 - 1.5241, and indicators of external viability (γ) - 0.6919 - 7.1369. In tables TAGOR-B the margins of fluctuations of indicators of internal viability of population (α_h) make up 0.4420 - 1.5170, and indicators of external viability and disease resistance (γ_h) are 0.7438 - 8.0799.

These margins of fluctuations of table indicators allow making evaluation of population health, its control and carrying out the forecast for any wellness programs in all developed countries (for countries with large margins of fluctuations of parameters m_0 and e_0 there were composed additional tables, they are not shown in this monograph).

Planning activities to improve and preserve health of the population using tables TAGOR-A starts with the setting of the desired (d) levels of average life expectancy ($e^{(d)}_0$) and mortality up to 1 year old per 1,000 live births ($m^{(d)}_0$). Taking into consideration the current practice of "planning from the achieved" basic indicators for planning are real (r) values $e^{(r)}_0$ and $m^{(r)}_0$ existing for some moment. Therefore, at first glance, it may seem that it is easy enough to randomly select the desired (d) values of average life expectancy and infant mortality, satisfying conditions $e^{(d)}_0 > e^{(r)}_0$ and $m^{(d)}_0 > m^{(r)}_0$. But this is only apparent conclusion. If we assume that the parameters ($e^{(d)}_0$, $m^{(d)}_0$) correspond to the set of ($\alpha^{(d)}$, $\gamma^{(d)}$), and indicators ($e^{(r)}_0$, $m^{(r)}_0$) correspond to the set of ($\alpha^{(r)}$,$\gamma^{(r)}$) then the desired values can be considered correctly identified if $\alpha^{(d)}>\alpha^{(r)}$ and $\gamma^{(d)}>\gamma^{(r)}$. However, it may happen that $\gamma^{(d)}>\gamma^{(r)}$, but in this case, $\alpha^{(d)}<\alpha^{(r)}$. In this case, the desired and actual curves will have the intersection point on the interval (0, x_0) in the diagram of the curve (scale) of survival. This means that the welfare of the older age groups will be achieved at the expense of the interests of the younger age groups. But it is against the principles of social justice and equal access to health care services. Therefore planned figures should be adjusted, i.e. $\gamma\ (^{d})>\gamma\ (^{r})$ should be made basic and, thus, $\alpha\ (^{r}) = \alpha\ (^{d})$ must be left.

Once the desired values α and γ indicators are defined, a dynamic model of their changes over time is made. In accordance with this model set of mortality tables is constructed and the desired dynamic structure of allocations for the appropriate target program of health preservation and improvement is defined.

In its turn, the reference tables “TAGOR-B” contain integrated health indicators concerning the prevalence of chronic diseases of the circulatory system. With their use the “curve of health”, which characterizes the relative number of persons reaching age *x* alive and, thus, relatively healthy as for these diseases is constructed and described.

The initial data for the definition of these indicators, as noted above, are (in accordance with the example in §1.11) the incidence of chronic diseases of the circulatory system at the age under 1 year per 1,000 live births and the expected average healthy life expectancy in relation to these diseases at birth. In the official demographic statistics such parameters do not appear so far, but if they are known (in the monograph the results of the target study are presented), then it is possible to determine α_{h} – a parameter of the gene pool resistance to the diseases of the circulatory system and γ_{h} – a factor of environmental favoring to health regarding diseases of the circulatory system. Calculations and planning of allocations structure for strengthening and preserving their health by reference tables “TAGOR-B” are made in the same way as under RT “TAGOR-A” (see examples in §3.8-3.9).

Having a survival curve and a curve of dynamics of health preservation as regards chronic diseases of the circulatory system, we can prognosticate the prevalence of these diseases and in accordance with it plan, implement, monitor expenditures and implement plans for any health-care activities (particularly medical), as well as any relevant national and/or regional target socio-environmental programs.

Of course, you cannot make just the analysis of "abilities" and the factors due to which global challenges and problems to ensure health of people and their environment are solved (and now using tables TAGOR can be resolved constructively). It is required a deep study of the tasks themselves and the totality of the factors necessary to deal with them, that is, to perform any tasks for the health conservation and promotion simultaneous participation of many different, usually specific factors-conditions is important. Besides, we must remember that formation of each of them is not just individual; it is unique (status of groups of people, their territories, the nature of their interaction and mutual influence, etc.).

This explains the need to continuously improve the information database for decision-making, the search of criteria for evaluation (testing) an infinite set of factors that determine the quality characteristics of population health and their living environment, identifying patterns of their relations with the subsequent converting of these criteria in the units of the scale of evaluation of population health parameters (see [54]).

When using tables it should also be understood that there is no sharp demarcation lines of "good" α and "bad" γ. These two parameters are deeply linked and interdependent: good health can be observed (planned) with high value of α and low value of γ, and vice versa (the solution to any wellness problem for any population, any territory is unique!).

At the same time, the general principles are established in solving of all such tasks: increasing the value of any of these parameters naturally leads to an improvement of the situation, namely, improving of the quality of living conditions of the population and parameters of its health. Details for actions direction are set out in definite paragraphs of the monograph, the examples are also given in the relevant sections, including the resource provision of general social wellness and medical programs implementation. In addition, §3.11 presents the main possible options for practical realization of both general social and targeted health improvement programs.

Consequently, by using some (actual and desired) values of traditional indicators - mortality and life expectancy, the Reference Tables reflect these indicators mirror images in the values of integral indicators: internal and external viability of the population (at the same time, in the same area!).

The latter represent coordinates of actual and desired dynamics of population health in all years of life (from the point of view of preserving and loss of its resource) in any area under study.

These coordinates allow defining the content and direction of health measures, force and location of influence, the amount of certain actions as well as monitoring their effectiveness.

That is, Reference Tables created an opportunity to simulate the desired age dynamics of processes of health and survival of the population throughout the life cycle by the desirable health forecast (in particular, in terms of mortality and life expectancy) at any point, in any territory. In addition, the effects of all known death factors, specific disease, injuries, poisonings etc. are taken into account. (Incidentally, mortality and life expectancy are currently recognized by the WHO in its own development of the European Policy "Health – 21" to be top for assessing the quality of any national health programs).

The actual and desired sex and age risks to health and life for all ages, for certain areas as well as resource conditions to implement these measures, namely the structure and scope of the resources required for eliminating or reducing the risks to health are defined (in terms of integrated indicators) by the model of the dynamics of the population health.

Below there is a general sequence (algorithm) of determining the parameters of health programs (in any areas, at any moment):

1. Defining traditional actual and desired (by the territorial health improvement program) statistical indicators of mortality and life expectancy (at birth);

2. Defining actual and desired integral indicators: internal (innate) and external (acquired) vitality/viability of the population by the Reference Tables TAGOR (paragraph 1);

3. Making actual and desired curve of survival of population (total, by gender) by the specified coordinates (values for indicators paragraph 2);

4. Calculation of gender and age indicators of under-utilized resource of health and life;

5. Determining (by the paragraph 4) risks of under-utilized resource of health and life (by age, sex, in some areas);

6. Determining (by the structure of health risks) desired distribution of the resources for their elimination;

7. Current control of the efficiency of the resources use (by the curve of health and life - in a year, half a year, a quarter of a year);

8. Adjustment of programs (resources use) towards achieving of the desired landmarks of population health, - in a year, half a year, a quarter of a year, etc.

Conclusion

The description of the basic block of a new information technology was completed; it is aimed at constructive solutions of the problems of improving population health and territories of its living in any region of the world.

For over a century there existed and developed a technology of evaluation and prognosticating of population health based on traditional indicators, mainly birth rate, morbidity and mortality - both at the level of WHO and individual countries. However, for many reasons (§1.1) there were no developments, dedicated to the integral evaluation of population health, as well as the integral evaluation of the territories of its living in the same “human” units of health. This fact significantly limited the ability of planning and evaluation of the effectiveness of implementation of various health improvement programs.

The theoretical solution to this problem was found by the author in the decipherment of the systemic coherence of the concept “population health” with the concepts “individual health”, “family health”, “lifestyle”, “illness”, “prevention”, “quality of living environment” and others often attributable to different spheres of society functioning, and traditionally having their own methods of calculation and evaluation, far from the public health [36].

Feasibility of substantive harmonization and unification of these concepts and calculations appeared with the discovery of the law of survival of populations, singling out and system decoding of direct integrated indicators of public health while determining their relationship with traditional (usual for physicians, demographers, sociologists and other specialists) indicators.

The latter were not direct, but indirect parameters, indicators of population health “manifestations”. When interpreting the relations between them and integral indicators, these relations and their measurement, i.e. transition from new methods and approaches of health measurement to the former, known ones, there was observed “correspondence principle”, and there was used information base and documents familiar to practitioners and researchers while calculating for obtaining necessary data.

We emphasize that the problem of finding patterns in the dynamics of population health in technology and techniques has been solved by means of regularizing algorithms resistant to perturbation of the initial data (population structure, birth rate, morbidity and mortality by sex and age). At the same time, it was necessary to move away from traditional management to a very different one, expressing the laws of nature. Of course, the question arose: Do not we lose anything essential in this transition? Moving gradually (through pilot studies) from mathematical images to deciphering of semantics of medical values of element indicators used in the formulas we were able to look into the depths of population health, through the looking glass of life expectancy, the impact of people's living environment, their illnesses, way and quality of life, availability of medical services and other things on life expectancy, and thereby remove asked question from the agenda.

At the same time, a sense of powerlessness in front of the originally unsolvable problem (determining the construction and dynamics of population health) required to reject determinism as a universal method of the nature cognition and use of bifurcation, the use of which has led to new solutions. The meaning of the latter was hidden in the very nature of bifurcations, namely the possibility of conscious initiation of those fluctuations, the practical application of models of which gives the desired direction of future developments - in our case leads to the development of public health, increases its life expectancy and improves its quality.

Chosen approach has identified the need to establish a formalized (managed and controlled) basis for purposes of social control of reducing risks to people's health and life, due to which the mechanism of stress relaxation is triggered at all age stages of their lives in the living environment created by the people, in the relationship of “biological” and “social” in their life, life activity, existence (necessary laws, socio-medical and socio-environmental programs, individual activities, etc. are adopted and enforced).

At the same time, this approach has generated conditions to seize the nature's initiative in planning of the regime for the preservation of health and life and its transfer, if new information technology of management of people health and territories of their living, as well as health care, is implemented, to territorial authorities.

Systematization of the identified relations of "biological" and "social" in people's lives through dynamic health development model (according to the law of survival of populations) allowed transforming of a collection of isolated facts into a coherent system of beliefs and thereby constructively complemented the theory of aging and survival by Strehler-Mildvan, and of course the health theory, made it possible to single out a particular model – a model of the law of preservation of health (LPH) of the population in general model of the law of survival of populations (LSP). LPH opened up the possibility of more deep and comprehensive transcription of development stages of population health - not only by sex, age and area of residence, but also for reasons of death, as well as effectiveness (efficacy) of preventive and curative work of individual health care services.

Simultaneously, integral assessment of living conditions of the population, its "goodwill" for preserving its health and life with calculations of relevant forecasts, resource conditions of their support and development has become inseparable from the integral health assessment.

Accumulated reliable information on health indicators of many territories, including Ukraine and all its regions since 1976, as well as confirmed forecasts of public health development (by different landscape-geochemical zones of Chernovtsy region of Ukraine since 1979) led to singling out of appropriate unique, group and regular integral parameters, suitable for any areas, and which became the basis for creating reference tables of health (RT "TAGOR").

The latter are divided into two types of tables: for planning, forecasting and monitoring the effectiveness of the implementation of targeted social and health programs ("TAGOR-A") and targeted medical and social (by kinds of chronic pathology) programs ("TAGOR-B"). There are also examples of calculations of different types of such programs (§§3.6-3.11).

Developing this direction the author plans, taking into account sex, age and territory, to further highlight the main population factors determining prevalence of chronic pathologies, to stratify its role in population health vibrations of different age and sex, territorial and professional groups, to calculate the risks of these groups' contacts with distinguished factors, methods and tools necessary to reduce them, to determine the place and role of health and other social institutions in these processes, regularity of the relation of their health-improving events (programs) with the observed phenomena, to develop the necessary information base (documents with registration signs, indicators, their reference values), methods and technology of work with it - algorithms for the evaluation indicators, the definition of prognosticating trends in their dynamics, more perfect system of planning necessary resources to improve health and prolong its life expectancy.

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ADDENDUMS

REFERENCE TABLES
TAGOR

ADDENDUM A

TAGOR Tables
for the targeted general social health improvement programs
(RT TAGOR-A)

Addendum

A_1

Parameters of internal viability of population

(α)

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
50	1,5241	1,4998	1,4776	1,4572	1,4383	1,4207	1,4042	1,3887	1,3741	1,3603	1,3472	1,3347	1,3228	1,3115	1,3006	1,2902	1,2801	1,2705	1,2612
50,1	1,5228	1,4985	1,4763	1,4559	1,437	1,4194	1,4029	1,3874	1,3729	1,359	1,3459	1,3335	1,3216	1,3102	1,2994	1,2889	1,2789	1,2693	1,26
50,2	1,5215	1,4972	1,475	1,4546	1,4357	1,4181	1,4017	1,3862	1,3716	1,3578	1,3447	1,3322	1,3204	1,309	1,2981	1,2877	1,2777	1,268	1,2587
50,3	1,5202	1,4959	1,4737	1,4533	1,4344	1,4169	1,4004	1,3849	1,3704	1,3566	1,3435	1,331	1,3191	1,3078	1,2969	1,2865	1,2765	1,2668	1,2575
50,4	1,5189	1,4946	1,4724	1,4521	1,4332	1,4156	1,3991	1,3837	1,3691	1,3553	1,3422	1,3298	1,3179	1,3066	1,2957	1,2853	1,2753	1,2656	1,2563
50,5	1,5176	1,4933	1,4712	1,4508	1,4319	1,4143	1,3979	1,3824	1,3679	1,3541	1,341	1,3286	1,3167	1,3053	1,2945	1,2841	1,2741	1,2644	1,2551
50,6	1,5163	1,492	1,4699	1,4495	1,4306	1,4131	1,3966	1,3812	1,3666	1,3528	1,3398	1,3273	1,3155	1,3041	1,2933	1,2829	1,2729	1,2632	1,2539
50,7	1,515	1,4907	1,4686	1,4482	1,4294	1,4118	1,3954	1,3799	1,3654	1,3516	1,3385	1,3261	1,3142	1,3029	1,2921	1,2816	1,2716	1,262	1,2527
50,8	1,5137	1,4894	1,4673	1,4469	1,4281	1,4105	1,3941	1,3787	1,3641	1,3504	1,3373	1,3249	1,313	1,3017	1,2908	1,2804	1,2704	1,2608	1,2515
50,9	1,5124	1,4881	1,466	1,4457	1,4268	1,4093	1,3929	1,3774	1,3629	1,3491	1,3361	1,3236	1,3118	1,3005	1,2896	1,2792	1,2692	1,2596	1,2503
51	1,5111	1,4869	1,4647	1,4444	1,4256	1,408	1,3916	1,3762	1,3616	1,3479	1,3348	1,3224	1,3106	1,2993	1,2884	1,278	1,268	1,2584	1,2491
51,1	1,5098	1,4856	1,4635	1,4431	1,4243	1,4068	1,3904	1,3749	1,3604	1,3467	1,3336	1,3212	1,3094	1,298	1,2872	1,2768	1,2668	1,2572	1,248
51,2	1,5085	1,4843	1,4622	1,4419	1,423	1,4055	1,3891	1,3737	1,3592	1,3454	1,3324	1,32	1,3081	1,2968	1,286	1,2756	1,2656	1,256	1,2468
51,3	1,5072	1,483	1,4609	1,4406	1,4218	1,4043	1,3879	1,3725	1,3579	1,3442	1,3312	1,3188	1,3069	1,2956	1,2848	1,2744	1,2644	1,2548	1,2456
51,4	1,5059	1,4817	1,4596	1,4393	1,4205	1,403	1,3866	1,3712	1,3567	1,343	1,3299	1,3175	1,3057	1,2944	1,2836	1,2732	1,2632	1,2536	1,2444
51,5	1,5046	1,4804	1,4584	1,4381	1,4193	1,4018	1,3854	1,37	1,3555	1,3417	1,3287	1,3163	1,3045	1,2932	1,2824	1,272	1,262	1,2524	1,2432
51,6	1,5033	1,4792	1,4571	1,4368	1,418	1,4005	1,3841	1,3688	1,3542	1,3405	1,3275	1,3151	1,3033	1,292	1,2812	1,2708	1,2608	1,2513	1,242
51,7	1,502	1,4779	1,4558	1,4356	1,4168	1,3993	1,3829	1,3675	1,353	1,3393	1,3263	1,3139	1,3021	1,2908	1,28	1,2696	1,2597	1,2501	1,2408
51,8	1,5008	1,4766	1,4546	1,4343	1,4155	1,398	1,3817	1,3663	1,3518	1,3381	1,3251	1,3127	1,3009	1,2896	1,2788	1,2684	1,2585	1,2489	1,2396
51,9	1,4995	1,4753	1,4533	1,433	1,4143	1,3968	1,3804	1,3651	1,3506	1,3369	1,3239	1,3115	1,2997	1,2884	1,2776	1,2672	1,2573	1,2477	1,2385
52	1,4982	1,4741	1,452	1,4318	1,413	1,3955	1,3792	1,3638	1,3493	1,3356	1,3226	1,3103	1,2985	1,2872	1,2764	1,266	1,2561	1,2465	1,2373
52,1	1,4969	1,4728	1,4508	1,4305	1,4118	1,3943	1,378	1,3626	1,3481	1,3344	1,3214	1,3091	1,2973	1,286	1,2752	1,2648	1,2549	1,2453	1,2361
52,2	1,4956	1,4715	1,4495	1,4293	1,4105	1,3931	1,3767	1,3614	1,3469	1,3332	1,3202	1,3079	1,2961	1,2848	1,274	1,2637	1,2537	1,2441	1,2349
52,3	1,4944	1,4703	1,4483	1,428	1,4093	1,3918	1,3755	1,3602	1,3457	1,332	1,319	1,3066	1,2949	1,2836	1,2728	1,2625	1,2525	1,243	1,2337
52,4	1,4931	1,469	1,447	1,4268	1,408	1,3906	1,3743	1,3589	1,3445	1,3308	1,3178	1,3054	1,2937	1,2824	1,2716	1,2613	1,2513	1,2418	1,2326
52,5	1,4918	1,4677	1,4458	1,4255	1,4068	1,3894	1,373	1,3577	1,3432	1,3296	1,3166	1,3042	1,2925	1,2812	1,2704	1,2601	1,2502	1,2406	1,2314
52,6	1,4905	1,4665	1,4445	1,4243	1,4056	1,3881	1,3718	1,3565	1,342	1,3284	1,3154	1,303	1,2913	1,28	1,2692	1,2589	1,249	1,2394	1,2302
52,7	1,4893	1,4652	1,4432	1,423	1,4043	1,3869	1,3706	1,3553	1,3408	1,3272	1,3142	1,3018	1,2901	1,2788	1,2681	1,2577	1,2478	1,2382	1,229
52,8	1,488	1,464	1,442	1,4218	1,4031	1,3857	1,3694	1,3541	1,3396	1,3259	1,313	1,3006	1,2889	1,2776	1,2669	1,2565	1,2466	1,2371	1,2279
52,9	1,4867	1,4627	1,4408	1,4206	1,4019	1,3844	1,3681	1,3528	1,3384	1,3247	1,3118	1,2994	1,2877	1,2764	1,2657	1,2554	1,2454	1,2359	1,2267
53	1,4855	1,4614	1,4395	1,4193	1,4006	1,3832	1,3669	1,3516	1,3372	1,3235	1,3106	1,2983	1,2865	1,2753	1,2645	1,2542	1,2443	1,2347	1,2255
53,1	1,4842	1,4602	1,4383	1,4181	1,3994	1,382	1,3657	1,3504	1,336	1,3223	1,3094	1,2971	1,2853	1,2741	1,2633	1,253	1,2431	1,2335	1,2243
53,2	1,4829	1,4589	1,437	1,4168	1,3982	1,3808	1,3645	1,3492	1,3348	1,3211	1,3082	1,2959	1,2841	1,2729	1,2621	1,2518	1,2419	1,2324	1,2232
53,3	1,4817	1,4577	1,4358	1,4156	1,3969	1,3795	1,3633	1,348	1,3336	1,3199	1,307	1,2947	1,2829	1,2717	1,261	1,2506	1,2407	1,2312	1,222
53,4	1,4804	1,4564	1,4345	1,4144	1,3957	1,3783	1,3621	1,3468	1,3324	1,3187	1,3058	1,2935	1,2817	1,2705	1,2598	1,2495	1,2396	1,23	1,2209

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
50	1,2522	1,2435	1,2351	1,227	1,2191	1,2115	1,2041	1,1968	1,1898	1,183	1,1763	1,1698	1,1635	1,1573	1,1513	1,1454	1,1397	1,134	1,1285
50,1	1,251	1,2423	1,2339	1,2258	1,2179	1,2103	1,2029	1,1957	1,1886	1,1818	1,1752	1,1687	1,1623	1,1562	1,1501	1,1443	1,1385	1,1329	1,1273
50,2	1,2498	1,2411	1,2327	1,2246	1,2167	1,2091	1,2017	1,1945	1,1875	1,1806	1,174	1,1675	1,1612	1,155	1,149	1,1431	1,1373	1,1317	1,1262
50,3	1,2486	1,2399	1,2315	1,2234	1,2155	1,2079	1,2005	1,1933	1,1863	1,1795	1,1728	1,1663	1,16	1,1538	1,1478	1,1419	1,1362	1,1305	1,125
50,4	1,2474	1,2387	1,2303	1,2222	1,2144	1,2067	1,1993	1,1921	1,1851	1,1783	1,1716	1,1652	1,1588	1,1527	1,1467	1,1408	1,135	1,1294	1,1239
50,5	1,2462	1,2375	1,2291	1,221	1,2132	1,2055	1,1981	1,1909	1,1839	1,1771	1,1705	1,164	1,1577	1,1515	1,1455	1,1396	1,1339	1,1282	1,1227
50,6	1,245	1,2363	1,228	1,2198	1,212	1,2044	1,197	1,1898	1,1828	1,1759	1,1693	1,1628	1,1565	1,1504	1,1443	1,1385	1,1327	1,1271	1,1216
50,7	1,2438	1,2351	1,2268	1,2187	1,2108	1,2032	1,1958	1,1886	1,1816	1,1748	1,1681	1,1617	1,1554	1,1492	1,1432	1,1373	1,1316	1,1259	1,1204
50,8	1,2426	1,2339	1,2256	1,2175	1,2096	1,202	1,1946	1,1874	1,1804	1,1736	1,167	1,1605	1,1542	1,148	1,142	1,1361	1,1304	1,1248	1,1193
50,9	1,2414	1,2328	1,2244	1,2163	1,2084	1,2008	1,1934	1,1862	1,1792	1,1724	1,1658	1,1593	1,153	1,1469	1,1409	1,135	1,1292	1,1236	1,1181
51	1,2402	1,2316	1,2232	1,2151	1,2073	1,1996	1,1923	1,1851	1,1781	1,1713	1,1646	1,1582	1,1519	1,1457	1,1397	1,1338	1,1281	1,1225	1,117
51,1	1,239	1,2304	1,222	1,2139	1,2061	1,1985	1,1911	1,1839	1,1769	1,1701	1,1635	1,157	1,1507	1,1446	1,1386	1,1327	1,1269	1,1213	1,1158
51,2	1,2378	1,2292	1,2208	1,2127	1,2049	1,1973	1,1899	1,1827	1,1757	1,1689	1,1623	1,1559	1,1496	1,1434	1,1374	1,1315	1,1258	1,1202	1,1147
51,3	1,2366	1,228	1,2197	1,2116	1,2037	1,1961	1,1887	1,1816	1,1746	1,1678	1,1612	1,1547	1,1484	1,1423	1,1363	1,1304	1,1247	1,119	1,1136
51,4	1,2355	1,2268	1,2185	1,2104	1,2026	1,195	1,1876	1,1804	1,1734	1,1666	1,16	1,1535	1,1472	1,1411	1,1351	1,1292	1,1235	1,1179	1,1124
51,5	1,2343	1,2256	1,2173	1,2092	1,2014	1,1938	1,1864	1,1792	1,1723	1,1655	1,1588	1,1524	1,1461	1,14	1,134	1,1281	1,1224	1,1168	1,1113
51,6	1,2331	1,2245	1,2161	1,208	1,2002	1,1926	1,1852	1,1781	1,1711	1,1643	1,1577	1,1512	1,1449	1,1388	1,1328	1,127	1,1212	1,1156	1,1101
51,7	1,2319	1,2233	1,2149	1,2069	1,199	1,1914	1,1841	1,1769	1,1699	1,1631	1,1565	1,1501	1,1438	1,1377	1,1317	1,1258	1,1201	1,1145	1,109
51,8	1,2307	1,2221	1,2138	1,2057	1,1979	1,1903	1,1829	1,1757	1,1688	1,162	1,1554	1,1489	1,1426	1,1365	1,1305	1,1247	1,1189	1,1133	1,1079
51,9	1,2295	1,2209	1,2126	1,2045	1,1967	1,1891	1,1817	1,1746	1,1676	1,1608	1,1542	1,1478	1,1415	1,1354	1,1294	1,1235	1,1178	1,1122	1,1067
52	1,2284	1,2197	1,2114	1,2034	1,1955	1,188	1,1806	1,1734	1,1665	1,1597	1,1531	1,1466	1,1404	1,1342	1,1282	1,1224	1,1167	1,1111	1,1056
52,1	1,2272	1,2186	1,2103	1,2022	1,1944	1,1868	1,1794	1,1723	1,1653	1,1585	1,1519	1,1455	1,1392	1,1331	1,1271	1,1212	1,1155	1,1099	1,1045
52,2	1,226	1,2174	1,2091	1,201	1,1932	1,1856	1,1783	1,1711	1,1641	1,1574	1,1508	1,1443	1,1381	1,1319	1,126	1,1201	1,1144	1,1088	1,1033
52,3	1,2248	1,2162	1,2079	1,1999	1,192	1,1845	1,1771	1,17	1,163	1,1562	1,1496	1,1432	1,1369	1,1308	1,1248	1,119	1,1133	1,1077	1,1022
52,4	1,2237	1,2151	1,2067	1,1987	1,1909	1,1833	1,176	1,1688	1,1618	1,1551	1,1485	1,142	1,1358	1,1297	1,1237	1,1178	1,1121	1,1065	1,1011
52,5	1,2225	1,2139	1,2056	1,1975	1,1897	1,1821	1,1748	1,1676	1,1607	1,1539	1,1473	1,1409	1,1346	1,1285	1,1225	1,1167	1,111	1,1054	1,0999
52,6	1,2213	1,2127	1,2044	1,1964	1,1886	1,181	1,1736	1,1665	1,1595	1,1528	1,1462	1,1398	1,1335	1,1274	1,1214	1,1156	1,1099	1,1043	1,0988
52,7	1,2201	1,2116	1,2032	1,1952	1,1874	1,1798	1,1725	1,1653	1,1584	1,1516	1,145	1,1386	1,1324	1,1262	1,1203	1,1144	1,1087	1,1031	1,0977
52,8	1,219	1,2104	1,2021	1,194	1,1862	1,1787	1,1713	1,1642	1,1573	1,1505	1,1439	1,1375	1,1312	1,1251	1,1191	1,1133	1,1076	1,102	1,0966
52,9	1,2178	1,2092	1,2009	1,1929	1,1851	1,1775	1,1702	1,163	1,1561	1,1493	1,1428	1,1363	1,1301	1,124	1,118	1,1122	1,1065	1,1009	1,0954
53	1,2166	1,2081	1,1998	1,1917	1,1839	1,1764	1,169	1,1619	1,155	1,1482	1,1416	1,1352	1,1289	1,1228	1,1169	1,111	1,1053	1,0998	1,0943
53,1	1,2155	1,2069	1,1986	1,1906	1,1828	1,1752	1,1679	1,1608	1,1538	1,1471	1,1405	1,1341	1,1278	1,1217	1,1157	1,1099	1,1042	1,0986	1,0932
53,2	1,2143	1,2057	1,1974	1,1894	1,1816	1,1741	1,1667	1,1596	1,1527	1,1459	1,1393	1,1329	1,1267	1,1206	1,1146	1,1088	1,1031	1,0975	1,0921
53,3	1,2131	1,2046	1,1963	1,1883	1,1805	1,1729	1,1656	1,1585	1,1515	1,1448	1,1382	1,1318	1,1255	1,1194	1,1135	1,1077	1,102	1,0964	1,0909
53,4	1,212	1,2034	1,1951	1,1871	1,1793	1,1718	1,1645	1,1573	1,1504	1,1436	1,1371	1,1307	1,1244	1,1183	1,1124	1,1065	1,1008	1,0953	1,0898

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
50	1,1231	1,1178	1,1126	1,1076	1,1026	1,0977	1,0929	1,0882	1,0835	1,079	1,0745	1,0701	1,0658	1,0616	1,0574	1,0533	1,0492	1,0453	1,0413
50,1	1,1219	1,1167	1,1115	1,1064	1,1014	1,0965	1,0917	1,087	1,0824	1,0779	1,0734	1,069	1,0647	1,0605	1,0563	1,0522	1,0481	1,0441	1,0402
50,2	1,1208	1,1155	1,1103	1,1053	1,1003	1,0954	1,0906	1,0859	1,0813	1,0767	1,0723	1,0679	1,0636	1,0593	1,0551	1,051	1,047	1,043	1,0391
50,3	1,1196	1,1144	1,1092	1,1041	1,0991	1,0942	1,0895	1,0847	1,0801	1,0756	1,0711	1,0667	1,0624	1,0582	1,054	1,0499	1,0459	1,0419	1,038
50,4	1,1185	1,1132	1,108	1,103	1,098	1,0931	1,0883	1,0836	1,079	1,0745	1,07	1,0656	1,0613	1,0571	1,0529	1,0488	1,0447	1,0408	1,0368
50,5	1,1173	1,1121	1,1069	1,1018	1,0968	1,092	1,0872	1,0825	1,0779	1,0733	1,0689	1,0645	1,0602	1,0559	1,0518	1,0477	1,0436	1,0396	1,0357
50,6	1,1162	1,1109	1,1057	1,1007	1,0957	1,0908	1,086	1,0813	1,0767	1,0722	1,0677	1,0634	1,059	1,0548	1,0506	1,0465	1,0425	1,0385	1,0346
50,7	1,115	1,1098	1,1046	1,0995	1,0946	1,0897	1,0849	1,0802	1,0756	1,0711	1,0666	1,0622	1,0579	1,0537	1,0495	1,0454	1,0414	1,0374	1,0335
50,8	1,1139	1,1086	1,1035	1,0984	1,0934	1,0885	1,0838	1,0791	1,0745	1,0699	1,0655	1,0611	1,0568	1,0526	1,0484	1,0443	1,0403	1,0363	1,0324
50,9	1,1128	1,1075	1,1023	1,0973	1,0923	1,0874	1,0826	1,0779	1,0733	1,0688	1,0643	1,06	1,0557	1,0514	1,0473	1,0432	1,0391	1,0352	1,0313
51	1,1116	1,1063	1,1012	1,0961	1,0911	1,0863	1,0815	1,0768	1,0722	1,0677	1,0632	1,0588	1,0545	1,0503	1,0462	1,0421	1,038	1,0341	1,0301
51,1	1,1105	1,1052	1,1	1,095	1,09	1,0851	1,0804	1,0757	1,0711	1,0665	1,0621	1,0577	1,0534	1,0492	1,045	1,0409	1,0369	1,0329	1,029
51,2	1,1093	1,1041	1,0989	1,0938	1,0889	1,084	1,0792	1,0745	1,0699	1,0654	1,061	1,0566	1,0523	1,0481	1,0439	1,0398	1,0358	1,0318	1,0279
51,3	1,1082	1,1029	1,0978	1,0927	1,0877	1,0829	1,0781	1,0734	1,0688	1,0643	1,0598	1,0555	1,0512	1,047	1,0428	1,0387	1,0347	1,0307	1,0268
51,4	1,107	1,1018	1,0966	1,0916	1,0866	1,0818	1,077	1,0723	1,0677	1,0632	1,0587	1,0544	1,0501	1,0458	1,0417	1,0376	1,0336	1,0296	1,0257
51,5	1,1059	1,1006	1,0955	1,0904	1,0855	1,0806	1,0759	1,0712	1,0666	1,062	1,0576	1,0532	1,0489	1,0447	1,0406	1,0365	1,0325	1,0285	1,0246
51,6	1,1048	1,0995	1,0944	1,0893	1,0844	1,0795	1,0747	1,07	1,0654	1,0609	1,0565	1,0521	1,0478	1,0436	1,0395	1,0354	1,0313	1,0274	1,0235
51,7	1,1036	1,0984	1,0932	1,0882	1,0832	1,0784	1,0736	1,0689	1,0643	1,0598	1,0554	1,051	1,0467	1,0425	1,0383	1,0343	1,0302	1,0263	1,0224
51,8	1,1025	1,0972	1,0921	1,087	1,0821	1,0772	1,0725	1,0678	1,0632	1,0587	1,0542	1,0499	1,0456	1,0414	1,0372	1,0331	1,0291	1,0252	1,0213
51,9	1,1014	1,0961	1,091	1,0859	1,081	1,0761	1,0714	1,0667	1,0621	1,0576	1,0531	1,0488	1,0445	1,0403	1,0361	1,032	1,028	1,0241	1,0202
52	1,1002	1,095	1,0898	1,0848	1,0798	1,075	1,0702	1,0656	1,061	1,0565	1,052	1,0477	1,0434	1,0392	1,035	1,0309	1,0269	1,023	1,0191
52,1	1,0991	1,0939	1,0887	1,0837	1,0787	1,0739	1,0691	1,0644	1,0598	1,0553	1,0509	1,0465	1,0423	1,038	1,0339	1,0298	1,0258	1,0219	1,018
52,2	1,098	1,0927	1,0876	1,0825	1,0776	1,0728	1,068	1,0633	1,0587	1,0542	1,0498	1,0454	1,0412	1,0369	1,0328	1,0287	1,0247	1,0207	1,0169
52,3	1,0968	1,0916	1,0865	1,0814	1,0765	1,0716	1,0669	1,0622	1,0576	1,0531	1,0487	1,0443	1,04	1,0358	1,0317	1,0276	1,0236	1,0196	1,0158
52,4	1,0957	1,0905	1,0853	1,0803	1,0754	1,0705	1,0658	1,0611	1,0565	1,052	1,0476	1,0432	1,0389	1,0347	1,0306	1,0265	1,0225	1,0185	1,0147
52,5	1,0946	1,0893	1,0842	1,0792	1,0742	1,0694	1,0646	1,06	1,0554	1,0509	1,0465	1,0421	1,0378	1,0336	1,0295	1,0254	1,0214	1,0174	1,0136
52,6	1,0935	1,0882	1,0831	1,0781	1,0731	1,0683	1,0635	1,0589	1,0543	1,0498	1,0453	1,041	1,0367	1,0325	1,0284	1,0243	1,0203	1,0163	1,0125
52,7	1,0923	1,0871	1,082	1,0769	1,072	1,0672	1,0624	1,0577	1,0532	1,0487	1,0442	1,0399	1,0356	1,0314	1,0273	1,0232	1,0192	1,0152	1,0114
52,8	1,0912	1,086	1,0808	1,0758	1,0709	1,066	1,0613	1,0566	1,0521	1,0476	1,0431	1,0388	1,0345	1,0303	1,0262	1,0221	1,0181	1,0142	1,0103
52,9	1,0901	1,0849	1,0797	1,0747	1,0698	1,0649	1,0602	1,0555	1,0509	1,0464	1,042	1,0377	1,0334	1,0292	1,0251	1,021	1,017	1,0131	1,0092
53	1,089	1,0837	1,0786	1,0736	1,0687	1,0638	1,0591	1,0544	1,0498	1,0453	1,0409	1,0366	1,0323	1,0281	1,024	1,0199	1,0159	1,012	1,0081
53,1	1,0879	1,0826	1,0775	1,0725	1,0675	1,0627	1,058	1,0533	1,0487	1,0442	1,0398	1,0355	1,0312	1,027	1,0229	1,0188	1,0148	1,0109	1,007
53,2	1,0867	1,0815	1,0764	1,0714	1,0664	1,0616	1,0569	1,0522	1,0476	1,0431	1,0387	1,0344	1,0301	1,0259	1,0218	1,0177	1,0137	1,0098	1,0059
53,3	1,0856	1,0804	1,0753	1,0702	1,0653	1,0605	1,0557	1,0511	1,0465	1,042	1,0376	1,0333	1,029	1,0248	1,0207	1,0166	1,0126	1,0087	1,0048
53,4	1,0845	1,0793	1,0741	1,0691	1,0642	1,0594	1,0546	1,05	1,0454	1,0409	1,0365	1,0322	1,0279	1,0237	1,0196	1,0155	1,0115	1,0076	1,0037

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
50	1,0375	1,0337	1,0299	1,0262	1,0226	1,019	1,0154	1,0119	1,0085	1,0051	1,0017	0,9984	0,9951	0,9919	0,9887	0,9855	0,9824	0,9793	0,9762
50,1	1,0363	1,0325	1,0288	1,0251	1,0214	1,0178	1,0143	1,0108	1,0074	1,0039	1,0006	0,9973	0,994	0,9907	0,9875	0,9844	0,9813	0,9782	0,9751
50,2	1,0352	1,0314	1,0277	1,024	1,0203	1,0167	1,0132	1,0097	1,0062	1,0028	0,9995	0,9962	0,9929	0,9896	0,9864	0,9833	0,9802	0,9771	0,974
50,3	1,0341	1,0303	1,0266	1,0229	1,0192	1,0156	1,0121	1,0086	1,0051	1,0017	0,9984	0,995	0,9918	0,9885	0,9853	0,9822	0,9791	0,976	0,9729
50,4	1,033	1,0292	1,0254	1,0217	1,0181	1,0145	1,011	1,0075	1,004	1,0006	0,9973	0,9939	0,9907	0,9874	0,9842	0,9811	0,978	0,9749	0,9718
50,5	1,0319	1,0281	1,0243	1,0206	1,017	1,0134	1,0099	1,0064	1,0029	0,9995	0,9962	0,9928	0,9896	0,9863	0,9831	0,98	0,9769	0,9738	0,9708
50,6	1,0307	1,027	1,0232	1,0195	1,0159	1,0123	1,0087	1,0053	1,0018	0,9984	0,995	0,9917	0,9885	0,9852	0,982	0,9789	0,9758	0,9727	0,9697
50,7	1,0296	1,0258	1,0221	1,0184	1,0148	1,0112	1,0076	1,0041	1,0007	0,9973	0,9939	0,9906	0,9874	0,9841	0,9809	0,9778	0,9747	0,9716	0,9686
50,8	1,0285	1,0247	1,021	1,0173	1,0137	1,0101	1,0065	1,003	0,9996	0,9962	0,9928	0,9895	0,9863	0,983	0,9798	0,9767	0,9736	0,9705	0,9675
50,9	1,0274	1,0236	1,0199	1,0162	1,0125	1,009	1,0054	1,0019	0,9985	0,9951	0,9917	0,9884	0,9852	0,9819	0,9787	0,9756	0,9725	0,9694	0,9664
51	1,0263	1,0225	1,0188	1,0151	1,0114	1,0079	1,0043	1,0008	0,9974	0,994	0,9906	0,9873	0,9841	0,9808	0,9777	0,9745	0,9714	0,9683	0,9653
51,1	1,0252	1,0214	1,0176	1,014	1,0103	1,0067	1,0032	0,9997	0,9963	0,9929	0,9895	0,9862	0,983	0,9797	0,9766	0,9734	0,9703	0,9672	0,9642
51,2	1,0241	1,0203	1,0165	1,0129	1,0092	1,0056	1,0021	0,9986	0,9952	0,9918	0,9884	0,9851	0,9819	0,9786	0,9755	0,9723	0,9692	0,9661	0,9631
51,3	1,023	1,0192	1,0154	1,0118	1,0081	1,0045	1,001	0,9975	0,9941	0,9907	0,9873	0,984	0,9808	0,9776	0,9744	0,9712	0,9681	0,965	0,962
51,4	1,0219	1,0181	1,0143	1,0106	1,007	1,0034	0,9999	0,9964	0,993	0,9896	0,9863	0,9829	0,9797	0,9765	0,9733	0,9701	0,967	0,964	0,9609
51,5	1,0207	1,017	1,0132	1,0095	1,0059	1,0023	0,9988	0,9953	0,9919	0,9885	0,9852	0,9819	0,9786	0,9754	0,9722	0,969	0,9659	0,9629	0,9598
51,6	1,0196	1,0158	1,0121	1,0084	1,0048	1,0012	0,9977	0,9942	0,9908	0,9874	0,9841	0,9808	0,9775	0,9743	0,9711	0,968	0,9649	0,9618	0,9588
51,7	1,0185	1,0147	1,011	1,0073	1,0037	1,0001	0,9966	0,9931	0,9897	0,9863	0,983	0,9797	0,9764	0,9732	0,97	0,9669	0,9638	0,9607	0,9577
51,8	1,0174	1,0136	1,0099	1,0062	1,0026	0,999	0,9955	0,992	0,9886	0,9852	0,9819	0,9786	0,9753	0,9721	0,9689	0,9658	0,9627	0,9596	0,9566
51,9	1,0163	1,0125	1,0088	1,0051	1,0015	0,9979	0,9944	0,9909	0,9875	0,9841	0,9808	0,9775	0,9742	0,971	0,9678	0,9647	0,9616	0,9585	0,9555
52	1,0152	1,0114	1,0077	1,004	1,0004	0,9968	0,9933	0,9898	0,9864	0,983	0,9797	0,9764	0,9731	0,9699	0,9668	0,9636	0,9605	0,9575	0,9544
52,1	1,0141	1,0103	1,0066	1,0029	0,9993	0,9958	0,9922	0,9888	0,9853	0,9819	0,9786	0,9753	0,9721	0,9688	0,9657	0,9625	0,9594	0,9564	0,9533
52,2	1,013	1,0092	1,0055	1,0018	0,9982	0,9947	0,9911	0,9877	0,9842	0,9809	0,9775	0,9742	0,971	0,9678	0,9646	0,9615	0,9584	0,9553	0,9523
52,3	1,0119	1,0081	1,0044	1,0008	0,9971	0,9936	0,99	0,9866	0,9831	0,9798	0,9764	0,9731	0,9699	0,9667	0,9635	0,9604	0,9573	0,9542	0,9512
52,4	1,0108	1,007	1,0033	0,9997	0,996	0,9925	0,989	0,9855	0,9821	0,9787	0,9753	0,9721	0,9688	0,9656	0,9624	0,9593	0,9562	0,9531	0,9501
52,5	1,0097	1,006	1,0022	0,9986	0,9949	0,9914	0,9879	0,9844	0,981	0,9776	0,9743	0,971	0,9677	0,9645	0,9613	0,9582	0,9551	0,9521	0,949
52,6	1,0086	1,0049	1,0011	0,9975	0,9939	0,9903	0,9868	0,9833	0,9799	0,9765	0,9732	0,9699	0,9666	0,9634	0,9603	0,9571	0,954	0,951	0,948
52,7	1,0075	1,0038	1	0,9964	0,9928	0,9892	0,9857	0,9822	0,9788	0,9754	0,9721	0,9688	0,9656	0,9624	0,9592	0,9561	0,953	0,9499	0,9469
52,8	1,0064	1,0027	0,999	0,9953	0,9917	0,9881	0,9846	0,9811	0,9777	0,9743	0,971	0,9677	0,9645	0,9613	0,9581	0,955	0,9519	0,9488	0,9458
52,9	1,0053	1,0016	0,9979	0,9942	0,9906	0,987	0,9835	0,9801	0,9766	0,9733	0,9699	0,9666	0,9634	0,9602	0,957	0,9539	0,9508	0,9478	0,9447
53	1,0043	1,0005	0,9968	0,9931	0,9895	0,9859	0,9824	0,979	0,9756	0,9722	0,9689	0,9656	0,9623	0,9591	0,956	0,9528	0,9497	0,9467	0,9437
53,1	1,0032	0,9994	0,9957	0,992	0,9884	0,9849	0,9813	0,9779	0,9745	0,9711	0,9678	0,9645	0,9612	0,958	0,9549	0,9517	0,9487	0,9456	0,9426
53,2	1,0021	0,9983	0,9946	0,9909	0,9873	0,9838	0,9803	0,9768	0,9734	0,97	0,9667	0,9634	0,9602	0,957	0,9538	0,9507	0,9476	0,9445	0,9415
53,3	1,001	0,9972	0,9935	0,9899	0,9862	0,9827	0,9792	0,9757	0,9723	0,9689	0,9656	0,9623	0,9591	0,9559	0,9527	0,9496	0,9465	0,9435	0,9405
53,4	0,9999	0,9961	0,9924	0,9888	0,9852	0,9816	0,9781	0,9746	0,9712	0,9679	0,9645	0,9613	0,958	0,9548	0,9517	0,9485	0,9454	0,9424	0,9394

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
50	0,9732	0,9703	0,9673	0,9644	0,9615	0,9587	0,9559	0,9531	0,9503	0,9476	0,9449	0,9422	0,9396	0,9369	0,9344	0,9318	0,9292	0,9267	0,9242
50,1	0,9721	0,9692	0,9662	0,9633	0,9604	0,9576	0,9548	0,952	0,9492	0,9465	0,9438	0,9411	0,9385	0,9359	0,9333	0,9307	0,9282	0,9256	0,9232
50,2	0,971	0,9681	0,9651	0,9622	0,9593	0,9565	0,9537	0,9509	0,9481	0,9454	0,9427	0,94	0,9374	0,9348	0,9322	0,9296	0,9271	0,9246	0,9221
50,3	0,9699	0,967	0,964	0,9611	0,9582	0,9554	0,9526	0,9498	0,947	0,9443	0,9416	0,9389	0,9363	0,9337	0,9311	0,9285	0,926	0,9235	0,921
50,4	0,9688	0,9659	0,9629	0,96	0,9571	0,9543	0,9515	0,9487	0,9459	0,9432	0,9405	0,9379	0,9352	0,9326	0,93	0,9275	0,9249	0,9224	0,9199
50,5	0,9677	0,9648	0,9618	0,9589	0,956	0,9532	0,9504	0,9476	0,9449	0,9421	0,9394	0,9368	0,9341	0,9315	0,9289	0,9264	0,9238	0,9213	0,9188
50,6	0,9666	0,9637	0,9607	0,9578	0,955	0,9521	0,9493	0,9465	0,9438	0,9411	0,9384	0,9357	0,9331	0,9304	0,9279	0,9253	0,9228	0,9202	0,9178
50,7	0,9656	0,9626	0,9596	0,9567	0,9539	0,951	0,9482	0,9454	0,9427	0,94	0,9373	0,9346	0,932	0,9294	0,9268	0,9242	0,9217	0,9192	0,9167
50,8	0,9645	0,9615	0,9586	0,9557	0,9528	0,9499	0,9471	0,9444	0,9416	0,9389	0,9362	0,9335	0,9309	0,9283	0,9257	0,9231	0,9206	0,9181	0,9156
50,9	0,9634	0,9604	0,9575	0,9546	0,9517	0,9489	0,946	0,9433	0,9405	0,9378	0,9351	0,9325	0,9298	0,9272	0,9246	0,9221	0,9195	0,917	0,9145
51	0,9623	0,9593	0,9564	0,9535	0,9506	0,9478	0,945	0,9422	0,9394	0,9367	0,934	0,9314	0,9287	0,9261	0,9235	0,921	0,9185	0,9159	0,9135
51,1	0,9612	0,9582	0,9553	0,9524	0,9495	0,9467	0,9439	0,9411	0,9384	0,9356	0,933	0,9303	0,9277	0,925	0,9225	0,9199	0,9174	0,9149	0,9124
51,2	0,9601	0,9571	0,9542	0,9513	0,9484	0,9456	0,9428	0,94	0,9373	0,9346	0,9319	0,9292	0,9266	0,924	0,9214	0,9188	0,9163	0,9138	0,9113
51,3	0,959	0,9561	0,9531	0,9502	0,9474	0,9445	0,9417	0,9389	0,9362	0,9335	0,9308	0,9281	0,9255	0,9229	0,9203	0,9178	0,9152	0,9127	0,9102
51,4	0,9579	0,955	0,952	0,9491	0,9463	0,9434	0,9406	0,9379	0,9351	0,9324	0,9297	0,9271	0,9244	0,9218	0,9192	0,9167	0,9142	0,9117	0,9092
51,5	0,9568	0,9539	0,951	0,9481	0,9452	0,9424	0,9396	0,9368	0,934	0,9313	0,9286	0,926	0,9234	0,9208	0,9182	0,9156	0,9131	0,9106	0,9081
51,6	0,9558	0,9528	0,9499	0,947	0,9441	0,9413	0,9385	0,9357	0,933	0,9303	0,9276	0,9249	0,9223	0,9197	0,9171	0,9146	0,912	0,9095	0,907
51,7	0,9547	0,9517	0,9488	0,9459	0,943	0,9402	0,9374	0,9346	0,9319	0,9292	0,9265	0,9238	0,9212	0,9186	0,916	0,9135	0,911	0,9085	0,906
51,8	0,9536	0,9506	0,9477	0,9448	0,942	0,9391	0,9363	0,9336	0,9308	0,9281	0,9254	0,9228	0,9201	0,9175	0,915	0,9124	0,9099	0,9074	0,9049
51,9	0,9525	0,9496	0,9466	0,9437	0,9409	0,9381	0,9353	0,9325	0,9297	0,927	0,9244	0,9217	0,9191	0,9165	0,9139	0,9113	0,9088	0,9063	0,9038
52	0,9514	0,9485	0,9456	0,9427	0,9398	0,937	0,9342	0,9314	0,9287	0,926	0,9233	0,9206	0,918	0,9154	0,9128	0,9103	0,9078	0,9053	0,9028
52,1	0,9504	0,9474	0,9445	0,9416	0,9387	0,9359	0,9331	0,9303	0,9276	0,9249	0,9222	0,9196	0,9169	0,9143	0,9118	0,9092	0,9067	0,9042	0,9017
52,2	0,9493	0,9463	0,9434	0,9405	0,9377	0,9348	0,932	0,9293	0,9265	0,9238	0,9211	0,9185	0,9159	0,9133	0,9107	0,9082	0,9056	0,9031	0,9007
52,3	0,9482	0,9452	0,9423	0,9394	0,9366	0,9338	0,931	0,9282	0,9255	0,9228	0,9201	0,9174	0,9148	0,9122	0,9096	0,9071	0,9046	0,9021	0,8996
52,4	0,9471	0,9442	0,9413	0,9384	0,9355	0,9327	0,9299	0,9271	0,9244	0,9217	0,919	0,9164	0,9137	0,9111	0,9086	0,906	0,9035	0,901	0,8985
52,5	0,9461	0,9431	0,9402	0,9373	0,9344	0,9316	0,9288	0,9261	0,9233	0,9206	0,9179	0,9153	0,9127	0,9101	0,9075	0,905	0,9024	0,8999	0,8975
52,6	0,945	0,942	0,9391	0,9362	0,9334	0,9305	0,9278	0,925	0,9223	0,9196	0,9169	0,9142	0,9116	0,909	0,9064	0,9039	0,9014	0,8989	0,8964
52,7	0,9439	0,941	0,938	0,9352	0,9323	0,9295	0,9267	0,9239	0,9212	0,9185	0,9158	0,9132	0,9106	0,908	0,9054	0,9028	0,9003	0,8978	0,8954
52,8	0,9428	0,9399	0,937	0,9341	0,9312	0,9284	0,9256	0,9229	0,9201	0,9174	0,9148	0,9121	0,9095	0,9069	0,9043	0,9018	0,8993	0,8968	0,8943
52,9	0,9418	0,9388	0,9359	0,933	0,9302	0,9273	0,9246	0,9218	0,9191	0,9164	0,9137	0,911	0,9084	0,9058	0,9033	0,9007	0,8982	0,8957	0,8932
53	0,9407	0,9377	0,9348	0,9319	0,9291	0,9263	0,9235	0,9207	0,918	0,9153	0,9126	0,91	0,9074	0,9048	0,9022	0,8997	0,8972	0,8947	0,8922
53,1	0,9396	0,9367	0,9338	0,9309	0,928	0,9252	0,9224	0,9197	0,9169	0,9142	0,9116	0,9089	0,9063	0,9037	0,9012	0,8986	0,8961	0,8936	0,8911
53,2	0,9385	0,9356	0,9327	0,9298	0,927	0,9241	0,9214	0,9186	0,9159	0,9132	0,9105	0,9079	0,9052	0,9027	0,9001	0,8976	0,895	0,8926	0,8901
53,3	0,9375	0,9345	0,9316	0,9287	0,9259	0,9231	0,9203	0,9175	0,9148	0,9121	0,9094	0,9068	0,9042	0,9016	0,899	0,8965	0,894	0,8915	0,889
53,4	0,9364	0,9335	0,9306	0,9277	0,9248	0,922	0,9192	0,9165	0,9138	0,9111	0,9084	0,9057	0,9031	0,9005	0,898	0,8954	0,8929	0,8904	0,888

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
50	0,9218	0,9193	0,9169	0,9145	0,9121	0,9098	0,9074	0,9051	0,9028	0,9005	0,8983	0,896	0,8938	0,8916	0,8894	0,8873	0,8851	0,883	0,8809
50,1	0,9207	0,9182	0,9158	0,9134	0,911	0,9087	0,9063	0,904	0,9017	0,8995	0,8972	0,895	0,8927	0,8905	0,8884	0,8862	0,8841	0,8819	0,8798
50,2	0,9196	0,9172	0,9147	0,9123	0,91	0,9076	0,9053	0,903	0,9007	0,8984	0,8961	0,8939	0,8917	0,8895	0,8873	0,8851	0,883	0,8809	0,8788
50,3	0,9185	0,9161	0,9137	0,9113	0,9089	0,9065	0,9042	0,9019	0,8996	0,8973	0,8951	0,8928	0,8906	0,8884	0,8862	0,8841	0,8819	0,8798	0,8777
50,4	0,9174	0,915	0,9126	0,9102	0,9078	0,9055	0,9031	0,9008	0,8985	0,8962	0,894	0,8918	0,8895	0,8873	0,8852	0,883	0,8809	0,8787	0,8766
50,5	0,9164	0,9139	0,9115	0,9091	0,9067	0,9044	0,902	0,8997	0,8974	0,8952	0,8929	0,8907	0,8885	0,8863	0,8841	0,8819	0,8798	0,8777	0,8756
50,6	0,9153	0,9128	0,9104	0,908	0,9057	0,9033	0,901	0,8987	0,8964	0,8941	0,8919	0,8896	0,8874	0,8852	0,883	0,8809	0,8787	0,8766	0,8745
50,7	0,9142	0,9118	0,9094	0,907	0,9046	0,9022	0,8999	0,8976	0,8953	0,893	0,8908	0,8886	0,8863	0,8841	0,882	0,8798	0,8777	0,8756	0,8734
50,8	0,9131	0,9107	0,9083	0,9059	0,9035	0,9012	0,8988	0,8965	0,8942	0,892	0,8897	0,8875	0,8853	0,8831	0,8809	0,8788	0,8766	0,8745	0,8724
50,9	0,9121	0,9096	0,9072	0,9048	0,9024	0,9001	0,8978	0,8955	0,8932	0,8909	0,8887	0,8864	0,8842	0,882	0,8798	0,8777	0,8756	0,8734	0,8713
51	0,911	0,9086	0,9061	0,9038	0,9014	0,899	0,8967	0,8944	0,8921	0,8898	0,8876	0,8854	0,8832	0,881	0,8788	0,8766	0,8745	0,8724	0,8703
51,1	0,9099	0,9075	0,9051	0,9027	0,9003	0,898	0,8956	0,8933	0,891	0,8888	0,8865	0,8843	0,8821	0,8799	0,8777	0,8756	0,8734	0,8713	0,8692
51,2	0,9089	0,9064	0,904	0,9016	0,8992	0,8969	0,8946	0,8923	0,89	0,8877	0,8855	0,8832	0,881	0,8788	0,8767	0,8745	0,8724	0,8703	0,8682
51,3	0,9078	0,9054	0,9029	0,9005	0,8982	0,8958	0,8935	0,8912	0,8889	0,8867	0,8844	0,8822	0,88	0,8778	0,8756	0,8735	0,8713	0,8692	0,8671
51,4	0,9067	0,9043	0,9019	0,8995	0,8971	0,8948	0,8924	0,8901	0,8879	0,8856	0,8833	0,8811	0,8789	0,8767	0,8746	0,8724	0,8703	0,8681	0,866
51,5	0,9057	0,9032	0,9008	0,8984	0,8961	0,8937	0,8914	0,8891	0,8868	0,8845	0,8823	0,8801	0,8779	0,8757	0,8735	0,8713	0,8692	0,8671	0,865
51,6	0,9046	0,9022	0,8997	0,8974	0,895	0,8926	0,8903	0,888	0,8857	0,8835	0,8812	0,879	0,8768	0,8746	0,8724	0,8703	0,8682	0,866	0,8639
51,7	0,9035	0,9011	0,8987	0,8963	0,8939	0,8916	0,8893	0,887	0,8847	0,8824	0,8802	0,8779	0,8757	0,8736	0,8714	0,8692	0,8671	0,865	0,8629
51,8	0,9025	0,9	0,8976	0,8952	0,8929	0,8905	0,8882	0,8859	0,8836	0,8814	0,8791	0,8769	0,8747	0,8725	0,8703	0,8682	0,8661	0,8639	0,8618
51,9	0,9014	0,899	0,8966	0,8942	0,8918	0,8895	0,8871	0,8848	0,8826	0,8803	0,8781	0,8758	0,8736	0,8714	0,8693	0,8671	0,865	0,8629	0,8608
52	0,9003	0,8979	0,8955	0,8931	0,8907	0,8884	0,8861	0,8838	0,8815	0,8792	0,877	0,8748	0,8726	0,8704	0,8682	0,8661	0,864	0,8618	0,8597
52,1	0,8993	0,8968	0,8944	0,892	0,8897	0,8873	0,885	0,8827	0,8804	0,8782	0,8759	0,8737	0,8715	0,8693	0,8672	0,865	0,8629	0,8608	0,8587
52,2	0,8982	0,8958	0,8934	0,891	0,8886	0,8863	0,884	0,8817	0,8794	0,8771	0,8749	0,8727	0,8705	0,8683	0,8661	0,864	0,8619	0,8597	0,8576
52,3	0,8971	0,8947	0,8923	0,8899	0,8876	0,8852	0,8829	0,8806	0,8783	0,8761	0,8738	0,8716	0,8694	0,8672	0,8651	0,8629	0,8608	0,8587	0,8566
52,4	0,8961	0,8937	0,8913	0,8889	0,8865	0,8842	0,8819	0,8796	0,8773	0,875	0,8728	0,8706	0,8684	0,8662	0,864	0,8619	0,8598	0,8576	0,8556
52,5	0,895	0,8926	0,8902	0,8878	0,8855	0,8831	0,8808	0,8785	0,8762	0,874	0,8717	0,8695	0,8673	0,8651	0,863	0,8608	0,8587	0,8566	0,8545
52,6	0,894	0,8915	0,8891	0,8868	0,8844	0,8821	0,8798	0,8775	0,8752	0,8729	0,8707	0,8685	0,8663	0,8641	0,8619	0,8598	0,8577	0,8556	0,8535
52,7	0,8929	0,8905	0,8881	0,8857	0,8834	0,881	0,8787	0,8764	0,8741	0,8719	0,8696	0,8674	0,8652	0,863	0,8609	0,8587	0,8566	0,8545	0,8524
52,8	0,8919	0,8894	0,887	0,8847	0,8823	0,88	0,8776	0,8754	0,8731	0,8708	0,8686	0,8664	0,8642	0,862	0,8598	0,8577	0,8556	0,8535	0,8514
52,9	0,8908	0,8884	0,886	0,8836	0,8812	0,8789	0,8766	0,8743	0,872	0,8698	0,8675	0,8653	0,8631	0,861	0,8588	0,8567	0,8545	0,8524	0,8503
53	0,8898	0,8873	0,8849	0,8826	0,8802	0,8779	0,8756	0,8733	0,871	0,8687	0,8665	0,8643	0,8621	0,8599	0,8578	0,8556	0,8535	0,8514	0,8493
53,1	0,8887	0,8863	0,8839	0,8815	0,8791	0,8768	0,8745	0,8722	0,8699	0,8677	0,8655	0,8632	0,861	0,8589	0,8567	0,8546	0,8525	0,8503	0,8483
53,2	0,8876	0,8852	0,8828	0,8805	0,8781	0,8758	0,8735	0,8712	0,8689	0,8666	0,8644	0,8622	0,86	0,8578	0,8557	0,8535	0,8514	0,8493	0,8472
53,3	0,8866	0,8842	0,8818	0,8794	0,877	0,8747	0,8724	0,8701	0,8678	0,8656	0,8634	0,8612	0,859	0,8568	0,8546	0,8525	0,8504	0,8483	0,8462
53,4	0,8855	0,8831	0,8807	0,8784	0,876	0,8737	0,8714	0,8691	0,8668	0,8646	0,8623	0,8601	0,8579	0,8557	0,8536	0,8515	0,8493	0,8472	0,8451

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
50	0,8788	0,8767	0,8747	0,8726	0,8706	0,8686	0,8666	0,8646	0,8626	0,8607	0,8587	0,8568	0,8549	0,853	0,8511	0,8493	0,8474	0,8456	0,8437
50,1	0,8777	0,8757	0,8736	0,8716	0,8695	0,8675	0,8655	0,8635	0,8616	0,8596	0,8577	0,8558	0,8538	0,8519	0,8501	0,8482	0,8463	0,8445	0,8427
50,2	0,8767	0,8746	0,8725	0,8705	0,8685	0,8665	0,8645	0,8625	0,8605	0,8586	0,8566	0,8547	0,8528	0,8509	0,849	0,8471	0,8453	0,8434	0,8416
50,3	0,8756	0,8735	0,8715	0,8694	0,8674	0,8654	0,8634	0,8614	0,8595	0,8575	0,8556	0,8536	0,8517	0,8498	0,848	0,8461	0,8442	0,8424	0,8406
50,4	0,8745	0,8725	0,8704	0,8684	0,8663	0,8643	0,8623	0,8604	0,8584	0,8564	0,8545	0,8526	0,8507	0,8488	0,8469	0,845	0,8432	0,8413	0,8395
50,5	0,8735	0,8714	0,8694	0,8673	0,8653	0,8633	0,8613	0,8593	0,8573	0,8554	0,8535	0,8515	0,8496	0,8477	0,8459	0,844	0,8421	0,8403	0,8385
50,6	0,8724	0,8703	0,8683	0,8663	0,8642	0,8622	0,8602	0,8582	0,8563	0,8543	0,8524	0,8505	0,8486	0,8467	0,8448	0,8429	0,8411	0,8392	0,8374
50,7	0,8714	0,8693	0,8672	0,8652	0,8632	0,8612	0,8592	0,8572	0,8552	0,8533	0,8513	0,8494	0,8475	0,8456	0,8437	0,8419	0,84	0,8382	0,8364
50,8	0,8703	0,8682	0,8662	0,8641	0,8621	0,8601	0,8581	0,8561	0,8542	0,8522	0,8503	0,8484	0,8465	0,8446	0,8427	0,8408	0,839	0,8371	0,8353
50,9	0,8692	0,8672	0,8651	0,8631	0,8611	0,8591	0,8571	0,8551	0,8531	0,8512	0,8492	0,8473	0,8454	0,8435	0,8417	0,8398	0,8379	0,8361	0,8343
51	0,8682	0,8661	0,8641	0,862	0,86	0,858	0,856	0,854	0,8521	0,8501	0,8482	0,8463	0,8444	0,8425	0,8406	0,8387	0,8369	0,8351	0,8332
51,1	0,8671	0,8651	0,863	0,861	0,8589	0,8569	0,855	0,853	0,851	0,8491	0,8471	0,8452	0,8433	0,8414	0,8396	0,8377	0,8358	0,834	0,8322
51,2	0,8661	0,864	0,862	0,8599	0,8579	0,8559	0,8539	0,8519	0,85	0,848	0,8461	0,8442	0,8423	0,8404	0,8385	0,8367	0,8348	0,833	0,8311
51,3	0,865	0,863	0,8609	0,8589	0,8568	0,8548	0,8529	0,8509	0,8489	0,847	0,845	0,8431	0,8412	0,8393	0,8375	0,8356	0,8338	0,8319	0,8301
51,4	0,864	0,8619	0,8598	0,8578	0,8558	0,8538	0,8518	0,8498	0,8479	0,8459	0,844	0,8421	0,8402	0,8383	0,8364	0,8346	0,8327	0,8309	0,8291
51,5	0,8629	0,8608	0,8588	0,8568	0,8547	0,8527	0,8508	0,8488	0,8468	0,8449	0,843	0,841	0,8391	0,8373	0,8354	0,8335	0,8317	0,8298	0,828
51,6	0,8619	0,8598	0,8577	0,8557	0,8537	0,8517	0,8497	0,8477	0,8458	0,8438	0,8419	0,84	0,8381	0,8362	0,8343	0,8325	0,8306	0,8288	0,827
51,7	0,8608	0,8587	0,8567	0,8547	0,8526	0,8506	0,8487	0,8467	0,8447	0,8428	0,8409	0,839	0,8371	0,8352	0,8333	0,8314	0,8296	0,8278	0,8259
51,8	0,8598	0,8577	0,8556	0,8536	0,8516	0,8496	0,8476	0,8456	0,8437	0,8417	0,8398	0,8379	0,836	0,8341	0,8323	0,8304	0,8286	0,8267	0,8249
51,9	0,8587	0,8566	0,8546	0,8526	0,8506	0,8486	0,8466	0,8446	0,8426	0,8407	0,8388	0,8369	0,835	0,8331	0,8312	0,8294	0,8275	0,8257	0,8239
52	0,8577	0,8556	0,8536	0,8515	0,8495	0,8475	0,8455	0,8436	0,8416	0,8397	0,8377	0,8358	0,8339	0,832	0,8302	0,8283	0,8265	0,8246	0,8228
52,1	0,8566	0,8546	0,8525	0,8505	0,8485	0,8465	0,8445	0,8425	0,8406	0,8386	0,8367	0,8348	0,8329	0,831	0,8291	0,8273	0,8254	0,8236	0,8218
52,2	0,8556	0,8535	0,8515	0,8494	0,8474	0,8454	0,8434	0,8415	0,8395	0,8376	0,8357	0,8337	0,8318	0,83	0,8281	0,8262	0,8244	0,8226	0,8208
52,3	0,8545	0,8525	0,8504	0,8484	0,8464	0,8444	0,8424	0,8404	0,8385	0,8365	0,8346	0,8327	0,8308	0,8289	0,8271	0,8252	0,8234	0,8215	0,8197
52,4	0,8535	0,8514	0,8494	0,8473	0,8453	0,8433	0,8414	0,8394	0,8374	0,8355	0,8336	0,8317	0,8298	0,8279	0,826	0,8242	0,8223	0,8205	0,8187
52,5	0,8524	0,8504	0,8483	0,8463	0,8443	0,8423	0,8403	0,8383	0,8364	0,8345	0,8325	0,8306	0,8287	0,8269	0,825	0,8231	0,8213	0,8195	0,8177
52,6	0,8514	0,8493	0,8473	0,8453	0,8433	0,8413	0,8393	0,8373	0,8354	0,8334	0,8315	0,8296	0,8277	0,8258	0,824	0,8221	0,8203	0,8184	0,8166
52,7	0,8503	0,8483	0,8462	0,8442	0,8422	0,8402	0,8382	0,8363	0,8343	0,8324	0,8305	0,8286	0,8267	0,8248	0,8229	0,8211	0,8192	0,8174	0,8156
52,8	0,8493	0,8472	0,8452	0,8432	0,8412	0,8392	0,8372	0,8352	0,8333	0,8314	0,8294	0,8275	0,8256	0,8238	0,8219	0,82	0,8182	0,8164	0,8146
52,9	0,8483	0,8462	0,8442	0,8421	0,8401	0,8381	0,8362	0,8342	0,8323	0,8303	0,8284	0,8265	0,8246	0,8227	0,8209	0,819	0,8172	0,8153	0,8135
53	0,8472	0,8452	0,8431	0,8411	0,8391	0,8371	0,8351	0,8332	0,8312	0,8293	0,8274	0,8255	0,8236	0,8217	0,8198	0,818	0,8161	0,8143	0,8125
53,1	0,8462	0,8441	0,8421	0,8401	0,8381	0,8361	0,8341	0,8321	0,8302	0,8282	0,8263	0,8244	0,8225	0,8207	0,8188	0,8169	0,8151	0,8133	0,8115
53,2	0,8451	0,8431	0,8411	0,839	0,837	0,835	0,8331	0,8311	0,8291	0,8272	0,8253	0,8234	0,8215	0,8196	0,8178	0,8159	0,8141	0,8123	0,8104
53,3	0,8441	0,8421	0,84	0,838	0,836	0,834	0,832	0,8301	0,8281	0,8262	0,8243	0,8224	0,8205	0,8186	0,8167	0,8149	0,8131	0,8112	0,8094
53,4	0,8431	0,841	0,839	0,837	0,835	0,833	0,831	0,829	0,8271	0,8252	0,8232	0,8213	0,8194	0,8176	0,8157	0,8139	0,812	0,8102	0,8084

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
50	0,8419	0,8401	0,8383	0,8365	0,8348	0,833	0,8313	0,8295
50,1	0,8409	0,839	0,8373	0,8355	0,8337	0,832	0,8302	0,8285
50,2	0,8398	0,838	0,8362	0,8344	0,8327	0,8309	0,8292	0,8274
50,3	0,8388	0,8369	0,8352	0,8334	0,8316	0,8299	0,8281	0,8264
50,4	0,8377	0,8359	0,8341	0,8323	0,8306	0,8288	0,8271	0,8253
50,5	0,8367	0,8348	0,8331	0,8313	0,8295	0,8278	0,826	0,8243
50,6	0,8356	0,8338	0,832	0,8302	0,8285	0,8267	0,825	0,8232
50,7	0,8346	0,8328	0,831	0,8292	0,8274	0,8257	0,8239	0,8222
50,8	0,8335	0,8317	0,8299	0,8281	0,8264	0,8246	0,8229	0,8212
50,9	0,8325	0,8307	0,8289	0,8271	0,8253	0,8236	0,8218	0,8201
51	0,8314	0,8296	0,8278	0,8261	0,8243	0,8225	0,8208	0,8191
51,1	0,8304	0,8286	0,8268	0,825	0,8233	0,8215	0,8198	0,818
51,2	0,8293	0,8275	0,8258	0,824	0,8222	0,8205	0,8187	0,817
51,3	0,8283	0,8265	0,8247	0,8229	0,8212	0,8194	0,8177	0,816
51,4	0,8273	0,8255	0,8237	0,8219	0,8201	0,8184	0,8167	0,8149
51,5	0,8262	0,8244	0,8226	0,8209	0,8191	0,8174	0,8156	0,8139
51,6	0,8252	0,8234	0,8216	0,8198	0,8181	0,8163	0,8146	0,8129
51,7	0,8241	0,8223	0,8206	0,8188	0,817	0,8153	0,8135	0,8118
51,8	0,8231	0,8213	0,8195	0,8177	0,816	0,8142	0,8125	0,8108
51,9	0,8221	0,8203	0,8185	0,8167	0,815	0,8132	0,8115	0,8098
52	0,821	0,8192	0,8174	0,8157	0,8139	0,8122	0,8104	0,8087
52,1	0,82	0,8182	0,8164	0,8146	0,8129	0,8111	0,8094	0,8077
52,2	0,819	0,8172	0,8154	0,8136	0,8119	0,8101	0,8084	0,8067
52,3	0,8179	0,8161	0,8143	0,8126	0,8108	0,8091	0,8074	0,8056
52,4	0,8169	0,8151	0,8133	0,8116	0,8098	0,8081	0,8063	0,8046
52,5	0,8159	0,8141	0,8123	0,8105	0,8088	0,807	0,8053	0,8036
52,6	0,8148	0,813	0,8113	0,8095	0,8077	0,806	0,8043	0,8025
52,7	0,8138	0,812	0,8102	0,8085	0,8067	0,805	0,8032	0,8015
52,8	0,8128	0,811	0,8092	0,8074	0,8057	0,8039	0,8022	0,8005
52,9	0,8117	0,8099	0,8082	0,8064	0,8047	0,8029	0,8012	0,7995
53	0,8107	0,8089	0,8071	0,8054	0,8036	0,8019	0,8002	0,7984
53,1	0,8097	0,8079	0,8061	0,8044	0,8026	0,8009	0,7991	0,7974
53,2	0,8086	0,8069	0,8051	0,8033	0,8016	0,7998	0,7981	0,7964
53,3	0,8076	0,8058	0,8041	0,8023	0,8006	0,7988	0,7971	0,7954
53,4	0,8066	0,8048	0,803	0,8013	0,7995	0,7978	0,7961	0,7944

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
53,5	1,4792	1,4552	1,4333	1,4131	1,3945	1,3771	1,3608	1,3456	1,3312	1,3175	1,3046	1,2923	1,2806	1,2693	1,2586	1,2483	1,2384	1,2289	1,2197
53,6	1,4779	1,4539	1,432	1,4119	1,3932	1,3759	1,3596	1,3444	1,33	1,3163	1,3034	1,2911	1,2794	1,2682	1,2574	1,2471	1,2372	1,2277	1,2185
53,7	1,4767	1,4527	1,4308	1,4107	1,392	1,3747	1,3584	1,3431	1,3288	1,3151	1,3022	1,2899	1,2782	1,267	1,2562	1,246	1,2361	1,2265	1,2174
53,8	1,4754	1,4514	1,4296	1,4094	1,3908	1,3734	1,3572	1,3419	1,3276	1,3139	1,301	1,2887	1,277	1,2658	1,2551	1,2448	1,2349	1,2254	1,2162
53,9	1,4741	1,4502	1,4283	1,4082	1,3896	1,3722	1,356	1,3407	1,3264	1,3127	1,2998	1,2875	1,2758	1,2646	1,2539	1,2436	1,2337	1,2242	1,215
54	1,4729	1,449	1,4271	1,407	1,3884	1,371	1,3548	1,3395	1,3252	1,3115	1,2986	1,2864	1,2746	1,2635	1,2527	1,2424	1,2326	1,2231	1,2139
54,1	1,4716	1,4477	1,4259	1,4058	1,3871	1,3698	1,3536	1,3383	1,324	1,3104	1,2975	1,2852	1,2735	1,2623	1,2516	1,2413	1,2314	1,2219	1,2127
54,2	1,4704	1,4465	1,4246	1,4045	1,3859	1,3686	1,3524	1,3371	1,3228	1,3092	1,2963	1,284	1,2723	1,2611	1,2504	1,2401	1,2302	1,2207	1,2116
54,3	1,4692	1,4452	1,4234	1,4033	1,3847	1,3674	1,3512	1,3359	1,3216	1,308	1,2951	1,2828	1,2711	1,2599	1,2492	1,2389	1,2291	1,2196	1,2104
54,4	1,4679	1,444	1,4222	1,4021	1,3835	1,3662	1,35	1,3347	1,3204	1,3068	1,2939	1,2816	1,2699	1,2588	1,2481	1,2378	1,2279	1,2184	1,2093
54,5	1,4667	1,4428	1,421	1,4009	1,3823	1,365	1,3488	1,3335	1,3192	1,3056	1,2927	1,2805	1,2688	1,2576	1,2469	1,2366	1,2268	1,2173	1,2081
54,6	1,4654	1,4415	1,4197	1,3997	1,3811	1,3638	1,3476	1,3323	1,318	1,3044	1,2915	1,2793	1,2676	1,2564	1,2457	1,2355	1,2256	1,2161	1,207
54,7	1,4642	1,4403	1,4185	1,3984	1,3799	1,3626	1,3464	1,3312	1,3168	1,3032	1,2904	1,2781	1,2664	1,2553	1,2446	1,2343	1,2244	1,2149	1,2058
54,8	1,4629	1,4391	1,4173	1,3972	1,3786	1,3613	1,3452	1,33	1,3156	1,3021	1,2892	1,2769	1,2652	1,2541	1,2434	1,2331	1,2233	1,2138	1,2047
54,9	1,4617	1,4378	1,4161	1,396	1,3774	1,3601	1,344	1,3288	1,3144	1,3009	1,288	1,2758	1,2641	1,2529	1,2422	1,232	1,2221	1,2126	1,2035
55	1,4605	1,4366	1,4148	1,3948	1,3762	1,3589	1,3428	1,3276	1,3132	1,2997	1,2868	1,2746	1,2629	1,2518	1,2411	1,2308	1,221	1,2115	1,2024
55,1	1,4592	1,4354	1,4136	1,3936	1,375	1,3577	1,3416	1,3264	1,3121	1,2985	1,2856	1,2734	1,2617	1,2506	1,2399	1,2297	1,2198	1,2103	1,2012
55,2	1,458	1,4342	1,4124	1,3924	1,3738	1,3565	1,3404	1,3252	1,3109	1,2973	1,2845	1,2722	1,2606	1,2494	1,2388	1,2285	1,2187	1,2092	1,2001
55,3	1,4568	1,4329	1,4112	1,3912	1,3726	1,3553	1,3392	1,324	1,3097	1,2962	1,2833	1,2711	1,2594	1,2483	1,2376	1,2274	1,2175	1,208	1,1989
55,4	1,4555	1,4317	1,41	1,3899	1,3714	1,3541	1,338	1,3228	1,3085	1,295	1,2821	1,2699	1,2582	1,2471	1,2364	1,2262	1,2164	1,2069	1,1978
55,5	1,4543	1,4305	1,4087	1,3887	1,3702	1,353	1,3368	1,3216	1,3073	1,2938	1,281	1,2687	1,2571	1,2459	1,2353	1,225	1,2152	1,2058	1,1966
55,6	1,4531	1,4293	1,4075	1,3875	1,369	1,3518	1,3356	1,3205	1,3062	1,2926	1,2798	1,2676	1,2559	1,2448	1,2341	1,2239	1,2141	1,2046	1,1955
55,7	1,4518	1,428	1,4063	1,3863	1,3678	1,3506	1,3344	1,3193	1,305	1,2914	1,2786	1,2664	1,2548	1,2436	1,233	1,2227	1,2129	1,2035	1,1943
55,8	1,4506	1,4268	1,4051	1,3851	1,3666	1,3494	1,3332	1,3181	1,3038	1,2903	1,2774	1,2652	1,2536	1,2425	1,2318	1,2216	1,2118	1,2023	1,1932
55,9	1,4494	1,4256	1,4039	1,3839	1,3654	1,3482	1,3321	1,3169	1,3026	1,2891	1,2763	1,2641	1,2524	1,2413	1,2307	1,2204	1,2106	1,2012	1,1921
56	1,4482	1,4244	1,4027	1,3827	1,3642	1,347	1,3309	1,3157	1,3014	1,2879	1,2751	1,2629	1,2513	1,2402	1,2295	1,2193	1,2095	1,2	1,1909
56,1	1,4469	1,4232	1,4015	1,3815	1,363	1,3458	1,3297	1,3145	1,3003	1,2868	1,2739	1,2617	1,2501	1,239	1,2284	1,2181	1,2083	1,1989	1,1898
56,2	1,4457	1,422	1,4003	1,3803	1,3618	1,3446	1,3285	1,3134	1,2991	1,2856	1,2728	1,2606	1,249	1,2378	1,2272	1,217	1,2072	1,1978	1,1887
56,3	1,4445	1,4207	1,3991	1,3791	1,3606	1,3434	1,3273	1,3122	1,2979	1,2844	1,2716	1,2594	1,2478	1,2367	1,2261	1,2159	1,206	1,1966	1,1875
56,4	1,4433	1,4195	1,3979	1,3779	1,3594	1,3422	1,3261	1,311	1,2967	1,2833	1,2705	1,2583	1,2466	1,2355	1,2249	1,2147	1,2049	1,1955	1,1864
56,5	1,442	1,4183	1,3966	1,3767	1,3582	1,341	1,325	1,3098	1,2956	1,2821	1,2693	1,2571	1,2455	1,2344	1,2238	1,2136	1,2038	1,1943	1,1852
56,6	1,4408	1,4171	1,3954	1,3755	1,3571	1,3399	1,3238	1,3087	1,2944	1,2809	1,2681	1,256	1,2443	1,2332	1,2226	1,2124	1,2026	1,1932	1,1841
56,7	1,4396	1,4159	1,3942	1,3743	1,3559	1,3387	1,3226	1,3075	1,2932	1,2798	1,267	1,2548	1,2432	1,2321	1,2215	1,2113	1,2015	1,1921	1,183
56,8	1,4384	1,4147	1,393	1,3731	1,3547	1,3375	1,3214	1,3063	1,2921	1,2786	1,2658	1,2536	1,242	1,2309	1,2203	1,2101	1,2003	1,1909	1,1818
56,9	1,4372	1,4135	1,3918	1,3719	1,3535	1,3363	1,3202	1,3051	1,2909	1,2774	1,2646	1,2525	1,2409	1,2298	1,2192	1,209	1,1992	1,1898	1,1807

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
53,5	1,2108	1,2023	1,194	1,186	1,1782	1,1706	1,1633	1,1562	1,1493	1,1425	1,1359	1,1295	1,1233	1,1172	1,1112	1,1054	1,0997	1,0942	1,0887
53,6	1,2097	1,2011	1,1928	1,1848	1,177	1,1695	1,1622	1,155	1,1481	1,1414	1,1348	1,1284	1,1222	1,1161	1,1101	1,1043	1,0986	1,093	1,0876
53,7	1,2085	1,1999	1,1917	1,1837	1,1759	1,1683	1,161	1,1539	1,147	1,1402	1,1337	1,1273	1,121	1,1149	1,109	1,1032	1,0975	1,0919	1,0865
53,8	1,2073	1,1988	1,1905	1,1825	1,1747	1,1672	1,1599	1,1528	1,1458	1,1391	1,1325	1,1261	1,1199	1,1138	1,1079	1,102	1,0964	1,0908	1,0854
53,9	1,2062	1,1976	1,1894	1,1814	1,1736	1,1661	1,1587	1,1516	1,1447	1,138	1,1314	1,125	1,1188	1,1127	1,1067	1,1009	1,0952	1,0897	1,0842
54	1,205	1,1965	1,1882	1,1802	1,1724	1,1649	1,1576	1,1505	1,1436	1,1368	1,1303	1,1239	1,1177	1,1116	1,1056	1,0998	1,0941	1,0886	1,0831
54,1	1,2039	1,1953	1,1871	1,1791	1,1713	1,1638	1,1565	1,1494	1,1424	1,1357	1,1292	1,1228	1,1165	1,1104	1,1045	1,0987	1,093	1,0875	1,082
54,2	1,2027	1,1942	1,1859	1,1779	1,1702	1,1626	1,1553	1,1482	1,1413	1,1346	1,128	1,1216	1,1154	1,1093	1,1034	1,0976	1,0919	1,0863	1,0809
54,3	1,2016	1,193	1,1848	1,1768	1,169	1,1615	1,1542	1,1471	1,1402	1,1335	1,1269	1,1205	1,1143	1,1082	1,1023	1,0965	1,0908	1,0852	1,0798
54,4	1,2004	1,1919	1,1836	1,1756	1,1679	1,1604	1,1531	1,146	1,139	1,1323	1,1258	1,1194	1,1132	1,1071	1,1011	1,0953	1,0897	1,0841	1,0787
54,5	1,1993	1,1907	1,1825	1,1745	1,1667	1,1592	1,1519	1,1448	1,1379	1,1312	1,1246	1,1183	1,112	1,106	1,1	1,0942	1,0886	1,083	1,0776
54,6	1,1981	1,1896	1,1813	1,1734	1,1656	1,1581	1,1508	1,1437	1,1368	1,1301	1,1235	1,1171	1,1109	1,1048	1,0989	1,0931	1,0874	1,0819	1,0765
54,7	1,197	1,1885	1,1802	1,1722	1,1645	1,157	1,1497	1,1426	1,1357	1,1289	1,1224	1,116	1,1098	1,1037	1,0978	1,092	1,0863	1,0808	1,0754
54,8	1,1958	1,1873	1,1791	1,1711	1,1633	1,1558	1,1485	1,1414	1,1345	1,1278	1,1213	1,1149	1,1087	1,1026	1,0967	1,0909	1,0852	1,0797	1,0743
54,9	1,1947	1,1862	1,1779	1,1699	1,1622	1,1547	1,1474	1,1403	1,1334	1,1267	1,1202	1,1138	1,1076	1,1015	1,0956	1,0898	1,0841	1,0786	1,0732
55	1,1935	1,185	1,1768	1,1688	1,1611	1,1536	1,1463	1,1392	1,1323	1,1256	1,119	1,1127	1,1064	1,1004	1,0945	1,0887	1,083	1,0775	1,072
55,1	1,1924	1,1839	1,1756	1,1677	1,1599	1,1524	1,1451	1,1381	1,1312	1,1245	1,1179	1,1115	1,1053	1,0993	1,0933	1,0876	1,0819	1,0764	1,0709
55,2	1,1913	1,1827	1,1745	1,1665	1,1588	1,1513	1,144	1,1369	1,13	1,1233	1,1168	1,1104	1,1042	1,0982	1,0922	1,0864	1,0808	1,0753	1,0698
55,3	1,1901	1,1816	1,1734	1,1654	1,1577	1,1502	1,1429	1,1358	1,1289	1,1222	1,1157	1,1093	1,1031	1,097	1,0911	1,0853	1,0797	1,0741	1,0687
55,4	1,189	1,1805	1,1722	1,1643	1,1565	1,149	1,1418	1,1347	1,1278	1,1211	1,1146	1,1082	1,102	1,0959	1,09	1,0842	1,0786	1,073	1,0676
55,5	1,1878	1,1793	1,1711	1,1631	1,1554	1,1479	1,1406	1,1336	1,1267	1,12	1,1134	1,1071	1,1009	1,0948	1,0889	1,0831	1,0775	1,0719	1,0665
55,6	1,1867	1,1782	1,17	1,162	1,1543	1,1468	1,1395	1,1324	1,1256	1,1189	1,1123	1,106	1,0998	1,0937	1,0878	1,082	1,0764	1,0708	1,0654
55,7	1,1855	1,1771	1,1688	1,1609	1,1531	1,1457	1,1384	1,1313	1,1244	1,1177	1,1112	1,1049	1,0987	1,0926	1,0867	1,0809	1,0753	1,0697	1,0643
55,8	1,1844	1,1759	1,1677	1,1597	1,152	1,1445	1,1373	1,1302	1,1233	1,1166	1,1101	1,1037	1,0975	1,0915	1,0856	1,0798	1,0742	1,0686	1,0632
55,9	1,1833	1,1748	1,1666	1,1586	1,1509	1,1434	1,1361	1,1291	1,1222	1,1155	1,109	1,1026	1,0964	1,0904	1,0845	1,0787	1,0731	1,0675	1,0621
56	1,1821	1,1736	1,1654	1,1575	1,1498	1,1423	1,135	1,128	1,1211	1,1144	1,1079	1,1015	1,0953	1,0893	1,0834	1,0776	1,072	1,0664	1,061
56,1	1,181	1,1725	1,1643	1,1564	1,1486	1,1412	1,1339	1,1268	1,12	1,1133	1,1068	1,1004	1,0942	1,0882	1,0823	1,0765	1,0709	1,0653	1,0599
56,2	1,1799	1,1714	1,1632	1,1552	1,1475	1,14	1,1328	1,1257	1,1189	1,1122	1,1057	1,0993	1,0931	1,0871	1,0812	1,0754	1,0698	1,0642	1,0589
56,3	1,1787	1,1703	1,162	1,1541	1,1464	1,1389	1,1317	1,1246	1,1177	1,1111	1,1045	1,0982	1,092	1,086	1,0801	1,0743	1,0687	1,0632	1,0578
56,4	1,1776	1,1691	1,1609	1,153	1,1453	1,1378	1,1305	1,1235	1,1166	1,1099	1,1034	1,0971	1,0909	1,0849	1,079	1,0732	1,0676	1,0621	1,0567
56,5	1,1765	1,168	1,1598	1,1519	1,1442	1,1367	1,1294	1,1224	1,1155	1,1088	1,1023	1,096	1,0898	1,0838	1,0779	1,0721	1,0665	1,061	1,0556
56,6	1,1753	1,1669	1,1587	1,1507	1,143	1,1356	1,1283	1,1213	1,1144	1,1077	1,1012	1,0949	1,0887	1,0827	1,0768	1,071	1,0654	1,0599	1,0545
56,7	1,1742	1,1657	1,1575	1,1496	1,1419	1,1344	1,1272	1,1201	1,1133	1,1066	1,1001	1,0938	1,0876	1,0816	1,0757	1,0699	1,0643	1,0588	1,0534
56,8	1,1731	1,1646	1,1564	1,1485	1,1408	1,1333	1,1261	1,119	1,1122	1,1055	1,099	1,0927	1,0865	1,0805	1,0746	1,0688	1,0632	1,0577	1,0523
56,9	1,172	1,1635	1,1553	1,1474	1,1397	1,1322	1,125	1,1179	1,1111	1,1044	1,0979	1,0916	1,0854	1,0794	1,0735	1,0677	1,0621	1,0566	1,0512

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
53,5	1,0834	1,0782	1,073	1,068	1,0631	1,0583	1,0535	1,0489	1,0443	1,0398	1,0354	1,0311	1,0268	1,0226	1,0185	1,0144	1,0104	1,0065	1,0026
53,6	1,0823	1,077	1,0719	1,0669	1,062	1,0572	1,0524	1,0478	1,0432	1,0387	1,0343	1,03	1,0257	1,0215	1,0174	1,0133	1,0093	1,0054	1,0015
53,7	1,0811	1,0759	1,0708	1,0658	1,0609	1,0561	1,0513	1,0467	1,0421	1,0376	1,0332	1,0289	1,0246	1,0204	1,0163	1,0122	1,0083	1,0043	1,0004
53,8	1,08	1,0748	1,0697	1,0647	1,0598	1,055	1,0502	1,0456	1,041	1,0365	1,0321	1,0278	1,0235	1,0193	1,0152	1,0112	1,0072	1,0032	0,9994
53,9	1,0789	1,0737	1,0686	1,0636	1,0587	1,0538	1,0491	1,0445	1,0399	1,0354	1,031	1,0267	1,0224	1,0182	1,0141	1,0101	1,0061	1,0021	0,9983
54	1,0778	1,0726	1,0675	1,0625	1,0576	1,0527	1,048	1,0434	1,0388	1,0343	1,0299	1,0256	1,0213	1,0172	1,013	1,009	1,005	1,0011	0,9972
54,1	1,0767	1,0715	1,0664	1,0614	1,0565	1,0516	1,0469	1,0423	1,0377	1,0332	1,0288	1,0245	1,0202	1,0161	1,0119	1,0079	1,0039	1	0,9961
54,2	1,0756	1,0704	1,0653	1,0603	1,0554	1,0505	1,0458	1,0412	1,0366	1,0321	1,0277	1,0234	1,0192	1,015	1,0109	1,0068	1,0028	0,9989	0,995
54,3	1,0745	1,0693	1,0642	1,0592	1,0543	1,0494	1,0447	1,0401	1,0355	1,031	1,0266	1,0223	1,0181	1,0139	1,0098	1,0057	1,0017	0,9978	0,9939
54,4	1,0734	1,0682	1,0631	1,0581	1,0532	1,0483	1,0436	1,039	1,0344	1,0299	1,0256	1,0212	1,017	1,0128	1,0087	1,0046	1,0006	0,9967	0,9929
54,5	1,0723	1,0671	1,062	1,057	1,0521	1,0472	1,0425	1,0379	1,0333	1,0289	1,0245	1,0201	1,0159	1,0117	1,0076	1,0035	0,9996	0,9956	0,9918
54,6	1,0712	1,066	1,0609	1,0559	1,051	1,0461	1,0414	1,0368	1,0322	1,0278	1,0234	1,019	1,0148	1,0106	1,0065	1,0025	0,9985	0,9946	0,9907
54,7	1,0701	1,0649	1,0598	1,0548	1,0499	1,045	1,0403	1,0357	1,0311	1,0267	1,0223	1,018	1,0137	1,0095	1,0054	1,0014	0,9974	0,9935	0,9896
54,8	1,0689	1,0637	1,0587	1,0537	1,0488	1,0439	1,0392	1,0346	1,03	1,0256	1,0212	1,0169	1,0126	1,0084	1,0043	1,0003	0,9963	0,9924	0,9885
54,9	1,0678	1,0626	1,0576	1,0526	1,0477	1,0429	1,0381	1,0335	1,029	1,0245	1,0201	1,0158	1,0115	1,0074	1,0033	0,9992	0,9952	0,9913	0,9875
55	1,0667	1,0615	1,0565	1,0515	1,0466	1,0418	1,037	1,0324	1,0279	1,0234	1,019	1,0147	1,0105	1,0063	1,0022	0,9981	0,9942	0,9902	0,9864
55,1	1,0656	1,0604	1,0554	1,0504	1,0455	1,0407	1,036	1,0313	1,0268	1,0223	1,0179	1,0136	1,0094	1,0052	1,0011	0,9971	0,9931	0,9892	0,9853
55,2	1,0645	1,0593	1,0543	1,0493	1,0444	1,0396	1,0349	1,0302	1,0257	1,0212	1,0168	1,0125	1,0083	1,0041	1	0,996	0,992	0,9881	0,9842
55,3	1,0634	1,0582	1,0532	1,0482	1,0433	1,0385	1,0338	1,0291	1,0246	1,0201	1,0158	1,0114	1,0072	1,003	0,9989	0,9949	0,9909	0,987	0,9832
55,4	1,0623	1,0571	1,0521	1,0471	1,0422	1,0374	1,0327	1,0281	1,0235	1,0191	1,0147	1,0104	1,0061	1,002	0,9979	0,9938	0,9898	0,9859	0,9821
55,5	1,0612	1,056	1,051	1,046	1,0411	1,0363	1,0316	1,027	1,0224	1,018	1,0136	1,0093	1,005	1,0009	0,9968	0,9927	0,9888	0,9849	0,981
55,6	1,0601	1,055	1,0499	1,0449	1,04	1,0352	1,0305	1,0259	1,0213	1,0169	1,0125	1,0082	1,004	0,9998	0,9957	0,9917	0,9877	0,9838	0,9799
55,7	1,059	1,0539	1,0488	1,0438	1,0389	1,0341	1,0294	1,0248	1,0203	1,0158	1,0114	1,0071	1,0029	0,9987	0,9946	0,9906	0,9866	0,9827	0,9789
55,8	1,0579	1,0528	1,0477	1,0427	1,0378	1,033	1,0283	1,0237	1,0192	1,0147	1,0103	1,006	1,0018	0,9976	0,9935	0,9895	0,9855	0,9816	0,9778
55,9	1,0568	1,0517	1,0466	1,0416	1,0367	1,0319	1,0272	1,0226	1,0181	1,0136	1,0093	1,005	1,0007	0,9966	0,9925	0,9884	0,9845	0,9806	0,9767
56	1,0558	1,0506	1,0455	1,0405	1,0356	1,0308	1,0262	1,0215	1,017	1,0126	1,0082	1,0039	0,9996	0,9955	0,9914	0,9874	0,9834	0,9795	0,9757
56,1	1,0547	1,0495	1,0444	1,0394	1,0346	1,0298	1,0251	1,0205	1,0159	1,0115	1,0071	1,0028	0,9986	0,9944	0,9903	0,9863	0,9823	0,9784	0,9746
56,2	1,0536	1,0484	1,0433	1,0383	1,0335	1,0287	1,024	1,0194	1,0148	1,0104	1,006	1,0017	0,9975	0,9933	0,9892	0,9852	0,9813	0,9774	0,9735
56,3	1,0525	1,0473	1,0422	1,0373	1,0324	1,0276	1,0229	1,0183	1,0138	1,0093	1,0049	1,0006	0,9964	0,9923	0,9882	0,9841	0,9802	0,9763	0,9724
56,4	1,0514	1,0462	1,0411	1,0362	1,0313	1,0265	1,0218	1,0172	1,0127	1,0082	1,0039	0,9996	0,9953	0,9912	0,9871	0,9831	0,9791	0,9752	0,9714
56,5	1,0503	1,0451	1,04	1,0351	1,0302	1,0254	1,0207	1,0161	1,0116	1,0072	1,0028	0,9985	0,9943	0,9901	0,986	0,982	0,978	0,9742	0,9703
56,6	1,0492	1,044	1,039	1,034	1,0291	1,0243	1,0196	1,015	1,0105	1,0061	1,0017	0,9974	0,9932	0,989	0,985	0,9809	0,977	0,9731	0,9692
56,7	1,0481	1,0429	1,0379	1,0329	1,028	1,0233	1,0186	1,014	1,0094	1,005	1,0006	0,9963	0,9921	0,988	0,9839	0,9799	0,9759	0,972	0,9682
56,8	1,047	1,0418	1,0368	1,0318	1,027	1,0222	1,0175	1,0129	1,0084	1,0039	0,9996	0,9953	0,991	0,9869	0,9828	0,9788	0,9748	0,971	0,9671
56,9	1,0459	1,0408	1,0357	1,0307	1,0259	1,0211	1,0164	1,0118	1,0073	1,0028	0,9985	0,9942	0,99	0,9858	0,9817	0,9777	0,9738	0,9699	0,9661

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
53,5	0,9988	0,995	0,9913	0,9877	0,9841	0,9805	0,977	0,9736	0,9701	0,9668	0,9635	0,9602	0,9569	0,9537	0,9506	0,9475	0,9444	0,9413	0,9383
53,6	0,9977	0,994	0,9903	0,9866	0,983	0,9794	0,9759	0,9725	0,9691	0,9657	0,9624	0,9591	0,9559	0,9527	0,9495	0,9464	0,9433	0,9403	0,9373
53,7	0,9966	0,9929	0,9892	0,9855	0,9819	0,9784	0,9749	0,9714	0,968	0,9646	0,9613	0,958	0,9548	0,9516	0,9484	0,9453	0,9422	0,9392	0,9362
53,8	0,9955	0,9918	0,9881	0,9844	0,9808	0,9773	0,9738	0,9703	0,9669	0,9636	0,9602	0,957	0,9537	0,9505	0,9474	0,9443	0,9412	0,9381	0,9351
53,9	0,9945	0,9907	0,987	0,9834	0,9798	0,9762	0,9727	0,9693	0,9658	0,9625	0,9592	0,9559	0,9527	0,9495	0,9463	0,9432	0,9401	0,9371	0,9341
54	0,9934	0,9896	0,9859	0,9823	0,9787	0,9751	0,9716	0,9682	0,9648	0,9614	0,9581	0,9548	0,9516	0,9484	0,9452	0,9421	0,939	0,936	0,933
54,1	0,9923	0,9885	0,9848	0,9812	0,9776	0,974	0,9706	0,9671	0,9637	0,9603	0,957	0,9537	0,9505	0,9473	0,9442	0,9411	0,938	0,9349	0,9319
54,2	0,9912	0,9875	0,9838	0,9801	0,9765	0,973	0,9695	0,966	0,9626	0,9593	0,9559	0,9527	0,9494	0,9463	0,9431	0,94	0,9369	0,9339	0,9309
54,3	0,9901	0,9864	0,9827	0,979	0,9754	0,9719	0,9684	0,965	0,9616	0,9582	0,9549	0,9516	0,9484	0,9452	0,942	0,9389	0,9358	0,9328	0,9298
54,4	0,9891	0,9853	0,9816	0,978	0,9744	0,9708	0,9673	0,9639	0,9605	0,9571	0,9538	0,9505	0,9473	0,9441	0,941	0,9379	0,9348	0,9317	0,9287
54,5	0,988	0,9842	0,9805	0,9769	0,9733	0,9698	0,9663	0,9628	0,9594	0,9561	0,9527	0,9495	0,9462	0,9431	0,9399	0,9368	0,9337	0,9307	0,9277
54,6	0,9869	0,9831	0,9794	0,9758	0,9722	0,9687	0,9652	0,9617	0,9583	0,955	0,9517	0,9484	0,9452	0,942	0,9388	0,9357	0,9327	0,9296	0,9266
54,7	0,9858	0,9821	0,9784	0,9747	0,9711	0,9676	0,9641	0,9607	0,9573	0,9539	0,9506	0,9473	0,9441	0,9409	0,9378	0,9347	0,9316	0,9286	0,9256
54,8	0,9847	0,981	0,9773	0,9737	0,9701	0,9665	0,963	0,9596	0,9562	0,9529	0,9495	0,9463	0,943	0,9399	0,9367	0,9336	0,9305	0,9275	0,9245
54,9	0,9837	0,9799	0,9762	0,9726	0,969	0,9655	0,962	0,9585	0,9551	0,9518	0,9485	0,9452	0,942	0,9388	0,9357	0,9326	0,9295	0,9264	0,9234
55	0,9826	0,9788	0,9752	0,9715	0,9679	0,9644	0,9609	0,9575	0,9541	0,9507	0,9474	0,9441	0,9409	0,9377	0,9346	0,9315	0,9284	0,9254	0,9224
55,1	0,9815	0,9778	0,9741	0,9704	0,9669	0,9633	0,9598	0,9564	0,953	0,9497	0,9463	0,9431	0,9399	0,9367	0,9335	0,9304	0,9274	0,9243	0,9213
55,2	0,9804	0,9767	0,973	0,9694	0,9658	0,9623	0,9588	0,9553	0,9519	0,9486	0,9453	0,942	0,9388	0,9356	0,9325	0,9294	0,9263	0,9233	0,9203
55,3	0,9794	0,9756	0,9719	0,9683	0,9647	0,9612	0,9577	0,9543	0,9509	0,9475	0,9442	0,941	0,9377	0,9346	0,9314	0,9283	0,9252	0,9222	0,9192
55,4	0,9783	0,9745	0,9709	0,9672	0,9637	0,9601	0,9566	0,9532	0,9498	0,9465	0,9432	0,9399	0,9367	0,9335	0,9304	0,9273	0,9242	0,9212	0,9182
55,5	0,9772	0,9735	0,9698	0,9662	0,9626	0,9591	0,9556	0,9521	0,9487	0,9454	0,9421	0,9388	0,9356	0,9324	0,9293	0,9262	0,9231	0,9201	0,9171
55,6	0,9761	0,9724	0,9687	0,9651	0,9615	0,958	0,9545	0,9511	0,9477	0,9443	0,941	0,9378	0,9346	0,9314	0,9282	0,9251	0,9221	0,9191	0,9161
55,7	0,9751	0,9713	0,9677	0,964	0,9605	0,9569	0,9534	0,95	0,9466	0,9433	0,94	0,9367	0,9335	0,9303	0,9272	0,9241	0,921	0,918	0,915
55,8	0,974	0,9703	0,9666	0,963	0,9594	0,9559	0,9524	0,9489	0,9456	0,9422	0,9389	0,9357	0,9324	0,9293	0,9261	0,923	0,92	0,917	0,914
55,9	0,9729	0,9692	0,9655	0,9619	0,9583	0,9548	0,9513	0,9479	0,9445	0,9412	0,9379	0,9346	0,9314	0,9282	0,9251	0,922	0,9189	0,9159	0,9129
56	0,9719	0,9681	0,9645	0,9608	0,9573	0,9537	0,9503	0,9468	0,9434	0,9401	0,9368	0,9335	0,9303	0,9272	0,924	0,9209	0,9179	0,9148	0,9119
56,1	0,9708	0,9671	0,9634	0,9598	0,9562	0,9527	0,9492	0,9458	0,9424	0,939	0,9357	0,9325	0,9293	0,9261	0,923	0,9199	0,9168	0,9138	0,9108
56,2	0,9697	0,966	0,9623	0,9587	0,9551	0,9516	0,9481	0,9447	0,9413	0,938	0,9347	0,9314	0,9282	0,9251	0,9219	0,9188	0,9158	0,9127	0,9098
56,3	0,9687	0,9649	0,9613	0,9576	0,9541	0,9505	0,9471	0,9436	0,9403	0,9369	0,9336	0,9304	0,9272	0,924	0,9209	0,9178	0,9147	0,9117	0,9087
56,4	0,9676	0,9639	0,9602	0,9566	0,953	0,9495	0,946	0,9426	0,9392	0,9359	0,9326	0,9293	0,9261	0,9229	0,9198	0,9167	0,9137	0,9107	0,9077
56,5	0,9665	0,9628	0,9591	0,9555	0,9519	0,9484	0,945	0,9415	0,9381	0,9348	0,9315	0,9283	0,9251	0,9219	0,9188	0,9157	0,9126	0,9096	0,9066
56,6	0,9655	0,9617	0,9581	0,9545	0,9509	0,9474	0,9439	0,9405	0,9371	0,9338	0,9305	0,9272	0,924	0,9208	0,9177	0,9146	0,9116	0,9086	0,9056
56,7	0,9644	0,9607	0,957	0,9534	0,9498	0,9463	0,9428	0,9394	0,936	0,9327	0,9294	0,9262	0,923	0,9198	0,9167	0,9136	0,9105	0,9075	0,9045
56,8	0,9633	0,9596	0,9559	0,9523	0,9488	0,9452	0,9418	0,9384	0,935	0,9316	0,9284	0,9251	0,9219	0,9187	0,9156	0,9125	0,9095	0,9065	0,9035
56,9	0,9623	0,9586	0,9549	0,9513	0,9477	0,9442	0,9407	0,9373	0,9339	0,9306	0,9273	0,9241	0,9209	0,9177	0,9146	0,9115	0,9084	0,9054	0,9024

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
53,5	0,9353	0,9324	0,9295	0,9266	0,9238	0,921	0,9182	0,9154	0,9127	0,91	0,9073	0,9047	0,9021	0,8995	0,8969	0,8944	0,8919	0,8894	0,8869
53,6	0,9343	0,9313	0,9284	0,9256	0,9227	0,9199	0,9171	0,9144	0,9116	0,9089	0,9063	0,9036	0,901	0,8984	0,8959	0,8933	0,8908	0,8883	0,8859
53,7	0,9332	0,9303	0,9274	0,9245	0,9216	0,9188	0,9161	0,9133	0,9106	0,9079	0,9052	0,9026	0,9	0,8974	0,8948	0,8923	0,8898	0,8873	0,8848
53,8	0,9321	0,9292	0,9263	0,9234	0,9206	0,9178	0,915	0,9122	0,9095	0,9068	0,9042	0,9015	0,8989	0,8963	0,8938	0,8912	0,8887	0,8862	0,8838
53,9	0,9311	0,9281	0,9252	0,9224	0,9195	0,9167	0,9139	0,9112	0,9085	0,9058	0,9031	0,9005	0,8979	0,8953	0,8927	0,8902	0,8877	0,8852	0,8827
54	0,93	0,9271	0,9242	0,9213	0,9185	0,9157	0,9129	0,9101	0,9074	0,9047	0,9021	0,8994	0,8968	0,8942	0,8917	0,8891	0,8866	0,8841	0,8817
54,1	0,929	0,926	0,9231	0,9202	0,9174	0,9146	0,9118	0,9091	0,9064	0,9037	0,901	0,8984	0,8958	0,8932	0,8906	0,8881	0,8856	0,8831	0,8806
54,2	0,9279	0,925	0,9221	0,9192	0,9163	0,9135	0,9108	0,908	0,9053	0,9026	0,8999	0,8973	0,8947	0,8921	0,8896	0,887	0,8845	0,8821	0,8796
54,3	0,9268	0,9239	0,921	0,9181	0,9153	0,9125	0,9097	0,907	0,9042	0,9016	0,8989	0,8963	0,8937	0,8911	0,8885	0,886	0,8835	0,881	0,8785
54,4	0,9258	0,9228	0,9199	0,9171	0,9142	0,9114	0,9087	0,9059	0,9032	0,9005	0,8978	0,8952	0,8926	0,89	0,8875	0,8849	0,8824	0,88	0,8775
54,5	0,9247	0,9218	0,9189	0,916	0,9132	0,9104	0,9076	0,9049	0,9021	0,8995	0,8968	0,8942	0,8916	0,889	0,8864	0,8839	0,8814	0,8789	0,8765
54,6	0,9237	0,9207	0,9178	0,915	0,9121	0,9093	0,9066	0,9038	0,9011	0,8984	0,8957	0,8931	0,8905	0,8879	0,8854	0,8829	0,8804	0,8779	0,8754
54,7	0,9226	0,9197	0,9168	0,9139	0,9111	0,9083	0,9055	0,9028	0,9	0,8974	0,8947	0,8921	0,8895	0,8869	0,8843	0,8818	0,8793	0,8768	0,8744
54,8	0,9215	0,9186	0,9157	0,9129	0,91	0,9072	0,9044	0,9017	0,899	0,8963	0,8937	0,891	0,8884	0,8858	0,8833	0,8808	0,8783	0,8758	0,8733
54,9	0,9205	0,9176	0,9147	0,9118	0,909	0,9062	0,9034	0,9007	0,8979	0,8953	0,8926	0,89	0,8874	0,8848	0,8822	0,8797	0,8772	0,8747	0,8723
55	0,9194	0,9165	0,9136	0,9107	0,9079	0,9051	0,9023	0,8996	0,8969	0,8942	0,8916	0,8889	0,8863	0,8838	0,8812	0,8787	0,8762	0,8737	0,8713
55,1	0,9184	0,9154	0,9126	0,9097	0,9069	0,9041	0,9013	0,8986	0,8958	0,8932	0,8905	0,8879	0,8853	0,8827	0,8802	0,8776	0,8751	0,8727	0,8702
55,2	0,9173	0,9144	0,9115	0,9086	0,9058	0,903	0,9002	0,8975	0,8948	0,8921	0,8895	0,8868	0,8842	0,8817	0,8791	0,8766	0,8741	0,8716	0,8692
55,3	0,9163	0,9133	0,9104	0,9076	0,9048	0,902	0,8992	0,8965	0,8938	0,8911	0,8884	0,8858	0,8832	0,8806	0,8781	0,8756	0,8731	0,8706	0,8681
55,4	0,9152	0,9123	0,9094	0,9065	0,9037	0,9009	0,8981	0,8954	0,8927	0,89	0,8874	0,8847	0,8821	0,8796	0,877	0,8745	0,872	0,8695	0,8671
55,5	0,9142	0,9112	0,9083	0,9055	0,9027	0,8999	0,8971	0,8944	0,8917	0,889	0,8863	0,8837	0,8811	0,8785	0,876	0,8735	0,871	0,8685	0,8661
55,6	0,9131	0,9102	0,9073	0,9044	0,9016	0,8988	0,8961	0,8933	0,8906	0,8879	0,8853	0,8827	0,8801	0,8775	0,875	0,8724	0,8699	0,8675	0,865
55,7	0,9121	0,9091	0,9062	0,9034	0,9006	0,8978	0,895	0,8923	0,8896	0,8869	0,8842	0,8816	0,879	0,8765	0,8739	0,8714	0,8689	0,8664	0,864
55,8	0,911	0,9081	0,9052	0,9023	0,8995	0,8967	0,894	0,8912	0,8885	0,8858	0,8832	0,8806	0,878	0,8754	0,8729	0,8704	0,8679	0,8654	0,8629
55,9	0,91	0,907	0,9042	0,9013	0,8985	0,8957	0,8929	0,8902	0,8875	0,8848	0,8822	0,8795	0,8769	0,8744	0,8718	0,8693	0,8668	0,8644	0,8619
56	0,9089	0,906	0,9031	0,9002	0,8974	0,8946	0,8919	0,8891	0,8864	0,8838	0,8811	0,8785	0,8759	0,8733	0,8708	0,8683	0,8658	0,8633	0,8609
56,1	0,9079	0,9049	0,9021	0,8992	0,8964	0,8936	0,8908	0,8881	0,8854	0,8827	0,8801	0,8775	0,8749	0,8723	0,8698	0,8672	0,8648	0,8623	0,8598
56,2	0,9068	0,9039	0,901	0,8982	0,8953	0,8925	0,8898	0,8871	0,8844	0,8817	0,879	0,8764	0,8738	0,8713	0,8687	0,8662	0,8637	0,8613	0,8588
56,3	0,9058	0,9028	0,9	0,8971	0,8943	0,8915	0,8887	0,886	0,8833	0,8806	0,878	0,8754	0,8728	0,8702	0,8677	0,8652	0,8627	0,8602	0,8578
56,4	0,9047	0,9018	0,8989	0,8961	0,8933	0,8905	0,8877	0,885	0,8823	0,8796	0,877	0,8743	0,8718	0,8692	0,8667	0,8641	0,8616	0,8592	0,8567
56,5	0,9037	0,9008	0,8979	0,895	0,8922	0,8894	0,8867	0,8839	0,8812	0,8786	0,8759	0,8733	0,8707	0,8682	0,8656	0,8631	0,8606	0,8582	0,8557
56,6	0,9026	0,8997	0,8968	0,894	0,8912	0,8884	0,8856	0,8829	0,8802	0,8775	0,8749	0,8723	0,8697	0,8671	0,8646	0,8621	0,8596	0,8571	0,8547
56,7	0,9016	0,8987	0,8958	0,8929	0,8901	0,8873	0,8846	0,8819	0,8792	0,8765	0,8738	0,8712	0,8686	0,8661	0,8635	0,861	0,8586	0,8561	0,8536
56,8	0,9005	0,8976	0,8947	0,8919	0,8891	0,8863	0,8835	0,8808	0,8781	0,8755	0,8728	0,8702	0,8676	0,8651	0,8625	0,86	0,8575	0,8551	0,8526
56,9	0,8995	0,8966	0,8937	0,8909	0,888	0,8853	0,8825	0,8798	0,8771	0,8744	0,8718	0,8692	0,8666	0,864	0,8615	0,859	0,8565	0,854	0,8516

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
53,5	0,8845	0,8821	0,8797	0,8773	0,875	0,8726	0,8703	0,868	0,8658	0,8635	0,8613	0,8591	0,8569	0,8547	0,8525	0,8504	0,8483	0,8462	0,8441
53,6	0,8834	0,881	0,8786	0,8763	0,8739	0,8716	0,8693	0,867	0,8647	0,8625	0,8602	0,858	0,8558	0,8537	0,8515	0,8494	0,8473	0,8452	0,8431
53,7	0,8824	0,88	0,8776	0,8752	0,8729	0,8705	0,8682	0,8659	0,8637	0,8614	0,8592	0,857	0,8548	0,8526	0,8505	0,8483	0,8462	0,8441	0,842
53,8	0,8813	0,8789	0,8765	0,8742	0,8718	0,8695	0,8672	0,8649	0,8626	0,8604	0,8582	0,8559	0,8538	0,8516	0,8494	0,8473	0,8452	0,8431	0,841
53,9	0,8803	0,8779	0,8755	0,8731	0,8708	0,8684	0,8661	0,8639	0,8616	0,8593	0,8571	0,8549	0,8527	0,8505	0,8484	0,8463	0,8441	0,842	0,84
54	0,8793	0,8768	0,8744	0,8721	0,8697	0,8674	0,8651	0,8628	0,8605	0,8583	0,8561	0,8539	0,8517	0,8495	0,8474	0,8452	0,8431	0,841	0,8389
54,1	0,8782	0,8758	0,8734	0,871	0,8687	0,8664	0,8641	0,8618	0,8595	0,8573	0,855	0,8528	0,8506	0,8485	0,8463	0,8442	0,8421	0,84	0,8379
54,2	0,8772	0,8747	0,8724	0,87	0,8676	0,8653	0,863	0,8607	0,8585	0,8562	0,854	0,8518	0,8496	0,8474	0,8453	0,8432	0,841	0,8389	0,8369
54,3	0,8761	0,8737	0,8713	0,8689	0,8666	0,8643	0,862	0,8597	0,8574	0,8552	0,853	0,8508	0,8486	0,8464	0,8443	0,8421	0,84	0,8379	0,8358
54,4	0,8751	0,8727	0,8703	0,8679	0,8656	0,8632	0,8609	0,8587	0,8564	0,8541	0,8519	0,8497	0,8475	0,8454	0,8432	0,8411	0,839	0,8369	0,8348
54,5	0,874	0,8716	0,8692	0,8669	0,8645	0,8622	0,8599	0,8576	0,8554	0,8531	0,8509	0,8487	0,8465	0,8443	0,8422	0,8401	0,8379	0,8358	0,8338
54,6	0,873	0,8706	0,8682	0,8658	0,8635	0,8612	0,8589	0,8566	0,8543	0,8521	0,8499	0,8477	0,8455	0,8433	0,8412	0,839	0,8369	0,8348	0,8327
54,7	0,8719	0,8695	0,8671	0,8648	0,8624	0,8601	0,8578	0,8555	0,8533	0,851	0,8488	0,8466	0,8444	0,8423	0,8401	0,838	0,8359	0,8338	0,8317
54,8	0,8709	0,8685	0,8661	0,8637	0,8614	0,8591	0,8568	0,8545	0,8522	0,85	0,8478	0,8456	0,8434	0,8412	0,8391	0,837	0,8348	0,8328	0,8307
54,9	0,8699	0,8675	0,8651	0,8627	0,8604	0,858	0,8557	0,8535	0,8512	0,849	0,8468	0,8446	0,8424	0,8402	0,8381	0,8359	0,8338	0,8317	0,8297
55	0,8688	0,8664	0,864	0,8617	0,8593	0,857	0,8547	0,8524	0,8502	0,8479	0,8457	0,8435	0,8413	0,8392	0,837	0,8349	0,8328	0,8307	0,8286
55,1	0,8678	0,8654	0,863	0,8606	0,8583	0,856	0,8537	0,8514	0,8491	0,8469	0,8447	0,8425	0,8403	0,8381	0,836	0,8339	0,8318	0,8297	0,8276
55,2	0,8667	0,8643	0,862	0,8596	0,8573	0,8549	0,8526	0,8504	0,8481	0,8459	0,8437	0,8415	0,8393	0,8371	0,835	0,8328	0,8307	0,8286	0,8266
55,3	0,8657	0,8633	0,8609	0,8586	0,8562	0,8539	0,8516	0,8493	0,8471	0,8448	0,8426	0,8404	0,8382	0,8361	0,8339	0,8318	0,8297	0,8276	0,8255
55,4	0,8647	0,8623	0,8599	0,8575	0,8552	0,8529	0,8506	0,8483	0,846	0,8438	0,8416	0,8394	0,8372	0,8351	0,8329	0,8308	0,8287	0,8266	0,8245
55,5	0,8636	0,8612	0,8588	0,8565	0,8542	0,8518	0,8495	0,8473	0,845	0,8428	0,8406	0,8384	0,8362	0,834	0,8319	0,8298	0,8277	0,8256	0,8235
55,6	0,8626	0,8602	0,8578	0,8555	0,8531	0,8508	0,8485	0,8462	0,844	0,8417	0,8395	0,8373	0,8352	0,833	0,8309	0,8287	0,8266	0,8245	0,8225
55,7	0,8616	0,8592	0,8568	0,8544	0,8521	0,8498	0,8475	0,8452	0,843	0,8407	0,8385	0,8363	0,8341	0,832	0,8298	0,8277	0,8256	0,8235	0,8214
55,8	0,8605	0,8581	0,8557	0,8534	0,8511	0,8487	0,8465	0,8442	0,8419	0,8397	0,8375	0,8353	0,8331	0,831	0,8288	0,8267	0,8246	0,8225	0,8204
55,9	0,8595	0,8571	0,8547	0,8524	0,85	0,8477	0,8454	0,8431	0,8409	0,8387	0,8365	0,8343	0,8321	0,8299	0,8278	0,8257	0,8236	0,8215	0,8194
56	0,8585	0,8561	0,8537	0,8513	0,849	0,8467	0,8444	0,8421	0,8399	0,8376	0,8354	0,8332	0,8311	0,8289	0,8268	0,8246	0,8225	0,8204	0,8184
56,1	0,8574	0,855	0,8526	0,8503	0,848	0,8457	0,8434	0,8411	0,8388	0,8366	0,8344	0,8322	0,83	0,8279	0,8257	0,8236	0,8215	0,8194	0,8174
56,2	0,8564	0,854	0,8516	0,8493	0,8469	0,8446	0,8423	0,8401	0,8378	0,8356	0,8334	0,8312	0,829	0,8269	0,8247	0,8226	0,8205	0,8184	0,8163
56,3	0,8554	0,853	0,8506	0,8482	0,8459	0,8436	0,8413	0,839	0,8368	0,8346	0,8323	0,8302	0,828	0,8258	0,8237	0,8216	0,8195	0,8174	0,8153
56,4	0,8543	0,8519	0,8496	0,8472	0,8449	0,8426	0,8403	0,838	0,8358	0,8335	0,8313	0,8291	0,827	0,8248	0,8227	0,8206	0,8184	0,8164	0,8143
56,5	0,8533	0,8509	0,8485	0,8462	0,8438	0,8415	0,8392	0,837	0,8347	0,8325	0,8303	0,8281	0,8259	0,8238	0,8216	0,8195	0,8174	0,8153	0,8133
56,6	0,8523	0,8499	0,8475	0,8451	0,8428	0,8405	0,8382	0,836	0,8337	0,8315	0,8293	0,8271	0,8249	0,8228	0,8206	0,8185	0,8164	0,8143	0,8123
56,7	0,8512	0,8488	0,8465	0,8441	0,8418	0,8395	0,8372	0,8349	0,8327	0,8305	0,8282	0,8261	0,8239	0,8217	0,8196	0,8175	0,8154	0,8133	0,8112
56,8	0,8502	0,8478	0,8454	0,8431	0,8408	0,8385	0,8362	0,8339	0,8317	0,8294	0,8272	0,825	0,8229	0,8207	0,8186	0,8165	0,8144	0,8123	0,8102
56,9	0,8492	0,8468	0,8444	0,8421	0,8397	0,8374	0,8351	0,8329	0,8306	0,8284	0,8262	0,824	0,8218	0,8197	0,8176	0,8154	0,8134	0,8113	0,8092

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
53,5	0,842	0,84	0,8379	0,8359	0,8339	0,8319	0,83	0,828	0,8261	0,8241	0,8222	0,8203	0,8184	0,8165	0,8147	0,8128	0,811	0,8092	0,8074
53,6	0,841	0,8389	0,8369	0,8349	0,8329	0,8309	0,8289	0,827	0,825	0,8231	0,8212	0,8193	0,8174	0,8155	0,8137	0,8118	0,81	0,8082	0,8063
53,7	0,84	0,8379	0,8359	0,8339	0,8319	0,8299	0,8279	0,8259	0,824	0,8221	0,8201	0,8182	0,8164	0,8145	0,8126	0,8108	0,8089	0,8071	0,8053
53,8	0,8389	0,8369	0,8348	0,8328	0,8308	0,8288	0,8269	0,8249	0,823	0,821	0,8191	0,8172	0,8153	0,8135	0,8116	0,8098	0,8079	0,8061	0,8043
53,9	0,8379	0,8358	0,8338	0,8318	0,8298	0,8278	0,8258	0,8239	0,8219	0,82	0,8181	0,8162	0,8143	0,8124	0,8106	0,8087	0,8069	0,8051	0,8033
54	0,8369	0,8348	0,8328	0,8308	0,8288	0,8268	0,8248	0,8228	0,8209	0,819	0,8171	0,8152	0,8133	0,8114	0,8096	0,8077	0,8059	0,8041	0,8023
54,1	0,8358	0,8338	0,8317	0,8297	0,8277	0,8257	0,8238	0,8218	0,8199	0,8179	0,816	0,8141	0,8123	0,8104	0,8085	0,8067	0,8049	0,803	0,8012
54,2	0,8348	0,8327	0,8307	0,8287	0,8267	0,8247	0,8227	0,8208	0,8188	0,8169	0,815	0,8131	0,8112	0,8094	0,8075	0,8057	0,8038	0,802	0,8002
54,3	0,8338	0,8317	0,8297	0,8277	0,8257	0,8237	0,8217	0,8198	0,8178	0,8159	0,814	0,8121	0,8102	0,8083	0,8065	0,8046	0,8028	0,801	0,7992
54,4	0,8327	0,8307	0,8287	0,8266	0,8246	0,8227	0,8207	0,8187	0,8168	0,8149	0,813	0,8111	0,8092	0,8073	0,8055	0,8036	0,8018	0,8	0,7982
54,5	0,8317	0,8297	0,8276	0,8256	0,8236	0,8216	0,8197	0,8177	0,8158	0,8138	0,8119	0,81	0,8082	0,8063	0,8044	0,8026	0,8008	0,799	0,7971
54,6	0,8307	0,8286	0,8266	0,8246	0,8226	0,8206	0,8186	0,8167	0,8147	0,8128	0,8109	0,809	0,8071	0,8053	0,8034	0,8016	0,7997	0,7979	0,7961
54,7	0,8296	0,8276	0,8256	0,8236	0,8216	0,8196	0,8176	0,8157	0,8137	0,8118	0,8099	0,808	0,8061	0,8043	0,8024	0,8006	0,7987	0,7969	0,7951
54,8	0,8286	0,8266	0,8245	0,8225	0,8205	0,8186	0,8166	0,8146	0,8127	0,8108	0,8089	0,807	0,8051	0,8032	0,8014	0,7995	0,7977	0,7959	0,7941
54,9	0,8276	0,8255	0,8235	0,8215	0,8195	0,8175	0,8156	0,8136	0,8117	0,8098	0,8079	0,806	0,8041	0,8022	0,8004	0,7985	0,7967	0,7949	0,7931
55	0,8266	0,8245	0,8225	0,8205	0,8185	0,8165	0,8145	0,8126	0,8107	0,8087	0,8068	0,8049	0,8031	0,8012	0,7993	0,7975	0,7957	0,7939	0,7921
55,1	0,8255	0,8235	0,8215	0,8195	0,8175	0,8155	0,8135	0,8116	0,8096	0,8077	0,8058	0,8039	0,802	0,8002	0,7983	0,7965	0,7947	0,7928	0,791
55,2	0,8245	0,8225	0,8204	0,8184	0,8164	0,8145	0,8125	0,8106	0,8086	0,8067	0,8048	0,8029	0,801	0,7992	0,7973	0,7955	0,7936	0,7918	0,79
55,3	0,8235	0,8214	0,8194	0,8174	0,8154	0,8134	0,8115	0,8095	0,8076	0,8057	0,8038	0,8019	0,8	0,7981	0,7963	0,7944	0,7926	0,7908	0,789
55,4	0,8225	0,8204	0,8184	0,8164	0,8144	0,8124	0,8105	0,8085	0,8066	0,8047	0,8028	0,8009	0,799	0,7971	0,7953	0,7934	0,7916	0,7898	0,788
55,5	0,8214	0,8194	0,8174	0,8154	0,8134	0,8114	0,8094	0,8075	0,8056	0,8036	0,8017	0,7998	0,798	0,7961	0,7943	0,7924	0,7906	0,7888	0,787
55,6	0,8204	0,8184	0,8164	0,8143	0,8124	0,8104	0,8084	0,8065	0,8045	0,8026	0,8007	0,7988	0,797	0,7951	0,7932	0,7914	0,7896	0,7878	0,786
55,7	0,8194	0,8174	0,8153	0,8133	0,8113	0,8094	0,8074	0,8055	0,8035	0,8016	0,7997	0,7978	0,7959	0,7941	0,7922	0,7904	0,7886	0,7868	0,785
55,8	0,8184	0,8163	0,8143	0,8123	0,8103	0,8083	0,8064	0,8044	0,8025	0,8006	0,7987	0,7968	0,7949	0,7931	0,7912	0,7894	0,7876	0,7857	0,7839
55,9	0,8173	0,8153	0,8133	0,8113	0,8093	0,8073	0,8054	0,8034	0,8015	0,7996	0,7977	0,7958	0,7939	0,792	0,7902	0,7884	0,7865	0,7847	0,7829
56	0,8163	0,8143	0,8123	0,8103	0,8083	0,8063	0,8043	0,8024	0,8005	0,7986	0,7967	0,7948	0,7929	0,791	0,7892	0,7874	0,7855	0,7837	0,7819
56,1	0,8153	0,8133	0,8113	0,8092	0,8073	0,8053	0,8033	0,8014	0,7995	0,7975	0,7956	0,7938	0,7919	0,79	0,7882	0,7863	0,7845	0,7827	0,7809
56,2	0,8143	0,8123	0,8102	0,8082	0,8062	0,8043	0,8023	0,8004	0,7984	0,7965	0,7946	0,7927	0,7909	0,789	0,7872	0,7853	0,7835	0,7817	0,7799
56,3	0,8133	0,8112	0,8092	0,8072	0,8052	0,8032	0,8013	0,7993	0,7974	0,7955	0,7936	0,7917	0,7899	0,788	0,7861	0,7843	0,7825	0,7807	0,7789
56,4	0,8122	0,8102	0,8082	0,8062	0,8042	0,8022	0,8003	0,7983	0,7964	0,7945	0,7926	0,7907	0,7888	0,787	0,7851	0,7833	0,7815	0,7797	0,7779
56,5	0,8112	0,8092	0,8072	0,8052	0,8032	0,8012	0,7993	0,7973	0,7954	0,7935	0,7916	0,7897	0,7878	0,786	0,7841	0,7823	0,7805	0,7787	0,7769
56,6	0,8102	0,8082	0,8062	0,8042	0,8022	0,8002	0,7982	0,7963	0,7944	0,7925	0,7906	0,7887	0,7868	0,785	0,7831	0,7813	0,7795	0,7777	0,7759
56,7	0,8092	0,8072	0,8051	0,8031	0,8012	0,7992	0,7972	0,7953	0,7934	0,7915	0,7896	0,7877	0,7858	0,7839	0,7821	0,7803	0,7785	0,7767	0,7749
56,8	0,8082	0,8061	0,8041	0,8021	0,8001	0,7982	0,7962	0,7943	0,7924	0,7904	0,7885	0,7867	0,7848	0,7829	0,7811	0,7793	0,7775	0,7756	0,7739
56,9	0,8072	0,8051	0,8031	0,8011	0,7991	0,7972	0,7952	0,7933	0,7913	0,7894	0,7875	0,7857	0,7838	0,7819	0,7801	0,7783	0,7764	0,7746	0,7728

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
53,5	0,8056	0,8038	0,802	0,8003	0,7985	0,7968	0,795	0,7933
53,6	0,8045	0,8028	0,801	0,7992	0,7975	0,7957	0,794	0,7923
53,7	0,8035	0,8017	0,8	0,7982	0,7965	0,7947	0,793	0,7913
53,8	0,8025	0,8007	0,7989	0,7972	0,7954	0,7937	0,792	0,7903
53,9	0,8015	0,7997	0,7979	0,7962	0,7944	0,7927	0,791	0,7893
54	0,8005	0,7987	0,7969	0,7951	0,7934	0,7917	0,7899	0,7882
54,1	0,7994	0,7977	0,7959	0,7941	0,7924	0,7907	0,7889	0,7872
54,2	0,7984	0,7966	0,7949	0,7931	0,7914	0,7896	0,7879	0,7862
54,3	0,7974	0,7956	0,7938	0,7921	0,7903	0,7886	0,7869	0,7852
54,4	0,7964	0,7946	0,7928	0,7911	0,7893	0,7876	0,7859	0,7842
54,5	0,7954	0,7936	0,7918	0,7901	0,7883	0,7866	0,7849	0,7832
54,6	0,7943	0,7926	0,7908	0,789	0,7873	0,7856	0,7838	0,7821
54,7	0,7933	0,7915	0,7898	0,788	0,7863	0,7846	0,7828	0,7811
54,8	0,7923	0,7905	0,7888	0,787	0,7853	0,7835	0,7818	0,7801
54,9	0,7913	0,7895	0,7877	0,786	0,7843	0,7825	0,7808	0,7791
55	0,7903	0,7885	0,7867	0,785	0,7832	0,7815	0,7798	0,7781
55,1	0,7893	0,7875	0,7857	0,784	0,7822	0,7805	0,7788	0,7771
55,2	0,7882	0,7865	0,7847	0,783	0,7812	0,7795	0,7778	0,7761
55,3	0,7872	0,7855	0,7837	0,7819	0,7802	0,7785	0,7768	0,7751
55,4	0,7862	0,7844	0,7827	0,7809	0,7792	0,7775	0,7758	0,774
55,5	0,7852	0,7834	0,7817	0,7799	0,7782	0,7765	0,7747	0,773
55,6	0,7842	0,7824	0,7807	0,7789	0,7772	0,7754	0,7737	0,772
55,7	0,7832	0,7814	0,7796	0,7779	0,7762	0,7744	0,7727	0,771
55,8	0,7822	0,7804	0,7786	0,7769	0,7752	0,7734	0,7717	0,77
55,9	0,7812	0,7794	0,7776	0,7759	0,7741	0,7724	0,7707	0,769
56	0,7801	0,7784	0,7766	0,7749	0,7731	0,7714	0,7697	0,768
56,1	0,7791	0,7774	0,7756	0,7739	0,7721	0,7704	0,7687	0,767
56,2	0,7781	0,7764	0,7746	0,7729	0,7711	0,7694	0,7677	0,766
56,3	0,7771	0,7753	0,7736	0,7718	0,7701	0,7684	0,7667	0,765
56,4	0,7761	0,7743	0,7726	0,7708	0,7691	0,7674	0,7657	0,764
56,5	0,7751	0,7733	0,7716	0,7698	0,7681	0,7664	0,7647	0,763
56,6	0,7741	0,7723	0,7706	0,7688	0,7671	0,7654	0,7637	0,762
56,7	0,7731	0,7713	0,7696	0,7678	0,7661	0,7644	0,7627	0,761
56,8	0,7721	0,7703	0,7686	0,7668	0,7651	0,7634	0,7617	0,76
56,9	0,7711	0,7693	0,7676	0,7658	0,7641	0,7624	0,7607	0,759

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
57	1,436	1,4123	1,3906	1,3707	1,3523	1,3351	1,3191	1,304	1,2897	1,2763	1,2635	1,2513	1,2397	1,2287	1,218	1,2079	1,1981	1,1887	1,1796
57,1	1,4347	1,4111	1,3894	1,3695	1,3511	1,3339	1,3179	1,3028	1,2886	1,2751	1,2623	1,2502	1,2386	1,2275	1,2169	1,2067	1,1969	1,1875	1,1785
57,2	1,4335	1,4099	1,3882	1,3684	1,3499	1,3328	1,3167	1,3016	1,2874	1,2739	1,2612	1,249	1,2374	1,2264	1,2158	1,2056	1,1958	1,1864	1,1773
57,3	1,4323	1,4087	1,387	1,3672	1,3487	1,3316	1,3155	1,3005	1,2862	1,2728	1,26	1,2479	1,2363	1,2252	1,2146	1,2044	1,1947	1,1853	1,1762
57,4	1,4311	1,4075	1,3859	1,366	1,3476	1,3304	1,3144	1,2993	1,2851	1,2716	1,2589	1,2467	1,2351	1,2241	1,2135	1,2033	1,1935	1,1841	1,1751
57,5	1,4299	1,4063	1,3847	1,3648	1,3464	1,3292	1,3132	1,2981	1,2839	1,2705	1,2577	1,2456	1,234	1,2229	1,2123	1,2022	1,1924	1,183	1,1739
57,6	1,4287	1,4051	1,3835	1,3636	1,3452	1,3281	1,312	1,297	1,2828	1,2693	1,2566	1,2444	1,2329	1,2218	1,2112	1,201	1,1913	1,1819	1,1728
57,7	1,4275	1,4039	1,3823	1,3624	1,344	1,3269	1,3109	1,2958	1,2816	1,2682	1,2554	1,2433	1,2317	1,2207	1,2101	1,1999	1,1901	1,1807	1,1717
57,8	1,4263	1,4027	1,3811	1,3612	1,3428	1,3257	1,3097	1,2946	1,2804	1,267	1,2543	1,2421	1,2306	1,2195	1,2089	1,1988	1,189	1,1796	1,1706
57,9	1,4251	1,4015	1,3799	1,36	1,3417	1,3245	1,3085	1,2935	1,2793	1,2659	1,2531	1,241	1,2294	1,2184	1,2078	1,1976	1,1879	1,1785	1,1694
58	1,4239	1,4003	1,3787	1,3589	1,3405	1,3234	1,3074	1,2923	1,2781	1,2647	1,252	1,2398	1,2283	1,2172	1,2067	1,1965	1,1868	1,1774	1,1683
58,1	1,4227	1,3991	1,3775	1,3577	1,3393	1,3222	1,3062	1,2911	1,277	1,2635	1,2508	1,2387	1,2271	1,2161	1,2055	1,1954	1,1856	1,1762	1,1672
58,2	1,4215	1,3979	1,3763	1,3565	1,3381	1,321	1,305	1,29	1,2758	1,2624	1,2497	1,2375	1,226	1,215	1,2044	1,1942	1,1845	1,1751	1,1661
58,3	1,4203	1,3967	1,3751	1,3553	1,337	1,3199	1,3039	1,2888	1,2747	1,2612	1,2485	1,2364	1,2249	1,2138	1,2033	1,1931	1,1834	1,174	1,165
58,4	1,4191	1,3955	1,3739	1,3541	1,3358	1,3187	1,3027	1,2877	1,2735	1,2601	1,2474	1,2353	1,2237	1,2127	1,2021	1,192	1,1822	1,1729	1,1638
58,5	1,4179	1,3943	1,3728	1,3529	1,3346	1,3175	1,3015	1,2865	1,2723	1,2589	1,2462	1,2341	1,2226	1,2116	1,201	1,1909	1,1811	1,1717	1,1627
58,6	1,4167	1,3931	1,3716	1,3518	1,3334	1,3163	1,3004	1,2854	1,2712	1,2578	1,2451	1,233	1,2214	1,2104	1,1999	1,1897	1,18	1,1706	1,1616
58,7	1,4155	1,3919	1,3704	1,3506	1,3323	1,3152	1,2992	1,2842	1,27	1,2566	1,2439	1,2318	1,2203	1,2093	1,1987	1,1886	1,1789	1,1695	1,1605
58,8	1,4143	1,3907	1,3692	1,3494	1,3311	1,314	1,298	1,283	1,2689	1,2555	1,2428	1,2307	1,2192	1,2081	1,1976	1,1875	1,1777	1,1684	1,1594
58,9	1,4131	1,3895	1,368	1,3482	1,3299	1,3129	1,2969	1,2819	1,2677	1,2543	1,2416	1,2296	1,218	1,207	1,1965	1,1863	1,1766	1,1673	1,1582
59	1,4119	1,3883	1,3668	1,3471	1,3287	1,3117	1,2957	1,2807	1,2666	1,2532	1,2405	1,2284	1,2169	1,2059	1,1953	1,1852	1,1755	1,1661	1,1571
59,1	1,4107	1,3871	1,3657	1,3459	1,3276	1,3105	1,2946	1,2796	1,2654	1,2521	1,2394	1,2273	1,2158	1,2048	1,1942	1,1841	1,1744	1,165	1,156
59,2	1,4095	1,386	1,3645	1,3447	1,3264	1,3094	1,2934	1,2784	1,2643	1,2509	1,2382	1,2261	1,2146	1,2036	1,1931	1,183	1,1733	1,1639	1,1549
59,3	1,4083	1,3848	1,3633	1,3435	1,3252	1,3082	1,2923	1,2773	1,2631	1,2498	1,2371	1,225	1,2135	1,2025	1,192	1,1818	1,1721	1,1628	1,1538
59,4	1,4071	1,3836	1,3621	1,3424	1,3241	1,307	1,2911	1,2761	1,262	1,2486	1,2359	1,2239	1,2124	1,2014	1,1908	1,1807	1,171	1,1617	1,1527
59,5	1,4059	1,3824	1,3609	1,3412	1,3229	1,3059	1,2899	1,275	1,2608	1,2475	1,2348	1,2227	1,2112	1,2002	1,1897	1,1796	1,1699	1,1605	1,1515
59,6	1,4047	1,3812	1,3598	1,34	1,3217	1,3047	1,2888	1,2738	1,2597	1,2463	1,2337	1,2216	1,2101	1,1991	1,1886	1,1785	1,1688	1,1594	1,1504
59,7	1,4035	1,38	1,3586	1,3389	1,3206	1,3036	1,2876	1,2727	1,2585	1,2452	1,2325	1,2205	1,209	1,198	1,1875	1,1774	1,1677	1,1583	1,1493
59,8	1,4023	1,3789	1,3574	1,3377	1,3194	1,3024	1,2865	1,2715	1,2574	1,2441	1,2314	1,2193	1,2078	1,1969	1,1863	1,1762	1,1665	1,1572	1,1482
59,9	1,4011	1,3777	1,3562	1,3365	1,3182	1,3012	1,2853	1,2704	1,2563	1,2429	1,2303	1,2182	1,2067	1,1957	1,1852	1,1751	1,1654	1,1561	1,1471
60	1,4	1,3765	1,3551	1,3353	1,3171	1,3001	1,2842	1,2692	1,2551	1,2418	1,2291	1,2171	1,2056	1,1946	1,1841	1,174	1,1643	1,155	1,146
60,1	1,3988	1,3753	1,3539	1,3342	1,3159	1,2989	1,283	1,2681	1,254	1,2406	1,228	1,2159	1,2045	1,1935	1,183	1,1729	1,1632	1,1539	1,1449
60,2	1,3976	1,3741	1,3527	1,333	1,3148	1,2978	1,2819	1,2669	1,2528	1,2395	1,2268	1,2148	1,2033	1,1924	1,1818	1,1718	1,1621	1,1527	1,1438
60,3	1,3964	1,373	1,3515	1,3318	1,3136	1,2966	1,2807	1,2658	1,2517	1,2384	1,2257	1,2137	1,2022	1,1912	1,1807	1,1706	1,161	1,1516	1,1427
60,4	1,3952	1,3718	1,3504	1,3307	1,3124	1,2955	1,2796	1,2646	1,2505	1,2372	1,2246	1,2125	1,2011	1,1901	1,1796	1,1695	1,1598	1,1505	1,1415

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
57	1,1708	1,1624	1,1542	1,1462	1,1386	1,1311	1,1239	1,1168	1,11	1,1033	1,0968	1,0905	1,0843	1,0783	1,0724	1,0666	1,061	1,0555	1,0501
57,1	1,1697	1,1612	1,1531	1,1451	1,1374	1,13	1,1227	1,1157	1,1089	1,1022	1,0957	1,0894	1,0832	1,0772	1,0713	1,0655	1,0599	1,0544	1,049
57,2	1,1686	1,1601	1,1519	1,144	1,1363	1,1289	1,1216	1,1146	1,1077	1,1011	1,0946	1,0883	1,0821	1,0761	1,0702	1,0644	1,0588	1,0533	1,0479
57,3	1,1674	1,159	1,1508	1,1429	1,1352	1,1278	1,1205	1,1135	1,1066	1,1	1,0935	1,0872	1,081	1,075	1,0691	1,0633	1,0577	1,0522	1,0468
57,4	1,1663	1,1579	1,1497	1,1418	1,1341	1,1266	1,1194	1,1124	1,1055	1,0989	1,0924	1,0861	1,0799	1,0739	1,068	1,0622	1,0566	1,0511	1,0458
57,5	1,1652	1,1567	1,1486	1,1407	1,133	1,1255	1,1183	1,1113	1,1044	1,0978	1,0913	1,085	1,0788	1,0728	1,0669	1,0612	1,0555	1,05	1,0447
57,6	1,1641	1,1556	1,1475	1,1395	1,1319	1,1244	1,1172	1,1102	1,1033	1,0967	1,0902	1,0839	1,0777	1,0717	1,0658	1,0601	1,0545	1,049	1,0436
57,7	1,1629	1,1545	1,1463	1,1384	1,1308	1,1233	1,1161	1,1091	1,1022	1,0956	1,0891	1,0828	1,0766	1,0706	1,0647	1,059	1,0534	1,0479	1,0425
57,8	1,1618	1,1534	1,1452	1,1373	1,1296	1,1222	1,115	1,108	1,1011	1,0945	1,088	1,0817	1,0755	1,0695	1,0636	1,0579	1,0523	1,0468	1,0414
57,9	1,1607	1,1523	1,1441	1,1362	1,1285	1,1211	1,1139	1,1068	1,1	1,0934	1,0869	1,0806	1,0744	1,0684	1,0625	1,0568	1,0512	1,0457	1,0403
58	1,1596	1,1511	1,143	1,1351	1,1274	1,12	1,1128	1,1057	1,0989	1,0923	1,0858	1,0795	1,0733	1,0673	1,0614	1,0557	1,0501	1,0446	1,0392
58,1	1,1585	1,15	1,1419	1,134	1,1263	1,1189	1,1117	1,1046	1,0978	1,0912	1,0847	1,0784	1,0722	1,0662	1,0604	1,0546	1,049	1,0435	1,0382
58,2	1,1573	1,1489	1,1408	1,1329	1,1252	1,1178	1,1106	1,1035	1,0967	1,0901	1,0836	1,0773	1,0711	1,0651	1,0593	1,0535	1,0479	1,0424	1,0371
58,3	1,1562	1,1478	1,1396	1,1317	1,1241	1,1167	1,1094	1,1024	1,0956	1,089	1,0825	1,0762	1,07	1,064	1,0582	1,0524	1,0468	1,0414	1,036
58,4	1,1551	1,1467	1,1385	1,1306	1,123	1,1156	1,1083	1,1013	1,0945	1,0879	1,0814	1,0751	1,069	1,0629	1,0571	1,0514	1,0458	1,0403	1,0349
58,5	1,154	1,1456	1,1374	1,1295	1,1219	1,1144	1,1072	1,1002	1,0934	1,0868	1,0803	1,074	1,0679	1,0619	1,056	1,0503	1,0447	1,0392	1,0338
58,6	1,1529	1,1445	1,1363	1,1284	1,1208	1,1133	1,1061	1,0991	1,0923	1,0857	1,0792	1,0729	1,0668	1,0608	1,0549	1,0492	1,0436	1,0381	1,0328
58,7	1,1518	1,1433	1,1352	1,1273	1,1197	1,1122	1,105	1,098	1,0912	1,0846	1,0781	1,0718	1,0657	1,0597	1,0538	1,0481	1,0425	1,037	1,0317
58,8	1,1506	1,1422	1,1341	1,1262	1,1186	1,1111	1,1039	1,0969	1,0901	1,0835	1,077	1,0707	1,0646	1,0586	1,0527	1,047	1,0414	1,036	1,0306
58,9	1,1495	1,1411	1,133	1,1251	1,1174	1,11	1,1028	1,0958	1,089	1,0824	1,0759	1,0696	1,0635	1,0575	1,0517	1,0459	1,0403	1,0349	1,0295
59	1,1484	1,14	1,1319	1,124	1,1163	1,1089	1,1017	1,0947	1,0879	1,0813	1,0748	1,0686	1,0624	1,0564	1,0506	1,0448	1,0393	1,0338	1,0284
59,1	1,1473	1,1389	1,1308	1,1229	1,1152	1,1078	1,1006	1,0936	1,0868	1,0802	1,0738	1,0675	1,0613	1,0553	1,0495	1,0438	1,0382	1,0327	1,0274
59,2	1,1462	1,1378	1,1296	1,1218	1,1141	1,1067	1,0995	1,0925	1,0857	1,0791	1,0727	1,0664	1,0602	1,0542	1,0484	1,0427	1,0371	1,0316	1,0263
59,3	1,1451	1,1367	1,1285	1,1207	1,113	1,1056	1,0984	1,0914	1,0846	1,078	1,0716	1,0653	1,0591	1,0532	1,0473	1,0416	1,036	1,0306	1,0252
59,4	1,144	1,1356	1,1274	1,1196	1,1119	1,1045	1,0973	1,0903	1,0835	1,0769	1,0705	1,0642	1,0581	1,0521	1,0462	1,0405	1,0349	1,0295	1,0241
59,5	1,1429	1,1345	1,1263	1,1185	1,1108	1,1034	1,0962	1,0893	1,0825	1,0758	1,0694	1,0631	1,057	1,051	1,0452	1,0394	1,0339	1,0284	1,0231
59,6	1,1417	1,1333	1,1252	1,1174	1,1097	1,1023	1,0951	1,0882	1,0814	1,0747	1,0683	1,062	1,0559	1,0499	1,0441	1,0384	1,0328	1,0273	1,022
59,7	1,1406	1,1322	1,1241	1,1163	1,1086	1,1012	1,094	1,0871	1,0803	1,0737	1,0672	1,0609	1,0548	1,0488	1,043	1,0373	1,0317	1,0262	1,0209
59,8	1,1395	1,1311	1,123	1,1151	1,1075	1,1001	1,0929	1,086	1,0792	1,0726	1,0661	1,0598	1,0537	1,0477	1,0419	1,0362	1,0306	1,0252	1,0198
59,9	1,1384	1,13	1,1219	1,114	1,1064	1,099	1,0919	1,0849	1,0781	1,0715	1,065	1,0588	1,0526	1,0467	1,0408	1,0351	1,0295	1,0241	1,0188
60	1,1373	1,1289	1,1208	1,1129	1,1053	1,0979	1,0908	1,0838	1,077	1,0704	1,064	1,0577	1,0516	1,0456	1,0397	1,034	1,0285	1,023	1,0177
60,1	1,1362	1,1278	1,1197	1,1118	1,1042	1,0968	1,0897	1,0827	1,0759	1,0693	1,0629	1,0566	1,0505	1,0445	1,0387	1,033	1,0274	1,0219	1,0166
60,2	1,1351	1,1267	1,1186	1,1107	1,1031	1,0957	1,0886	1,0816	1,0748	1,0682	1,0618	1,0555	1,0494	1,0434	1,0376	1,0319	1,0263	1,0209	1,0155
60,3	1,134	1,1256	1,1175	1,1096	1,102	1,0947	1,0875	1,0805	1,0737	1,0671	1,0607	1,0544	1,0483	1,0423	1,0365	1,0308	1,0252	1,0198	1,0145
60,4	1,1329	1,1245	1,1164	1,1085	1,1009	1,0936	1,0864	1,0794	1,0726	1,066	1,0596	1,0533	1,0472	1,0413	1,0354	1,0297	1,0242	1,0187	1,0134

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
57	1,0448	1,0397	1,0346	1,0297	1,0248	1,02	1,0153	1,0107	1,0062	1,0018	0,9974	0,9931	0,9889	0,9848	0,9807	0,9767	0,9727	0,9688	0,965
57,1	1,0438	1,0386	1,0335	1,0286	1,0237	1,0189	1,0142	1,0097	1,0051	1,0007	0,9963	0,9921	0,9878	0,9837	0,9796	0,9756	0,9716	0,9678	0,9639
57,2	1,0427	1,0375	1,0324	1,0275	1,0226	1,0179	1,0132	1,0086	1,0041	0,9996	0,9953	0,991	0,9868	0,9826	0,9785	0,9745	0,9706	0,9667	0,9629
57,3	1,0416	1,0364	1,0314	1,0264	1,0215	1,0168	1,0121	1,0075	1,003	0,9986	0,9942	0,9899	0,9857	0,9816	0,9775	0,9735	0,9695	0,9656	0,9618
57,4	1,0405	1,0353	1,0303	1,0253	1,0205	1,0157	1,011	1,0064	1,0019	0,9975	0,9931	0,9888	0,9846	0,9805	0,9764	0,9724	0,9685	0,9646	0,9607
57,5	1,0394	1,0342	1,0292	1,0242	1,0194	1,0146	1,0099	1,0053	1,0008	0,9964	0,9921	0,9878	0,9836	0,9794	0,9753	0,9713	0,9674	0,9635	0,9597
57,6	1,0383	1,0332	1,0281	1,0232	1,0183	1,0135	1,0089	1,0043	0,9998	0,9953	0,991	0,9867	0,9825	0,9784	0,9743	0,9703	0,9663	0,9624	0,9586
57,7	1,0372	1,0321	1,027	1,0221	1,0172	1,0125	1,0078	1,0032	0,9987	0,9943	0,9899	0,9856	0,9814	0,9773	0,9732	0,9692	0,9653	0,9614	0,9576
57,8	1,0362	1,031	1,026	1,021	1,0162	1,0114	1,0067	1,0021	0,9976	0,9932	0,9888	0,9846	0,9804	0,9762	0,9722	0,9681	0,9642	0,9603	0,9565
57,9	1,0351	1,0299	1,0249	1,0199	1,0151	1,0103	1,0056	1,0011	0,9965	0,9921	0,9878	0,9835	0,9793	0,9752	0,9711	0,9671	0,9631	0,9593	0,9554
58	1,034	1,0288	1,0238	1,0188	1,014	1,0092	1,0046	1	0,9955	0,9911	0,9867	0,9824	0,9782	0,9741	0,97	0,966	0,9621	0,9582	0,9544
58,1	1,0329	1,0278	1,0227	1,0178	1,0129	1,0082	1,0035	0,9989	0,9944	0,99	0,9856	0,9814	0,9772	0,973	0,969	0,965	0,961	0,9571	0,9533
58,2	1,0318	1,0267	1,0216	1,0167	1,0118	1,0071	1,0024	0,9978	0,9933	0,9889	0,9846	0,9803	0,9761	0,972	0,9679	0,9639	0,96	0,9561	0,9523
58,3	1,0307	1,0256	1,0206	1,0156	1,0108	1,006	1,0014	0,9968	0,9923	0,9879	0,9835	0,9792	0,975	0,9709	0,9668	0,9628	0,9589	0,955	0,9512
58,4	1,0297	1,0245	1,0195	1,0145	1,0097	1,0049	1,0003	0,9957	0,9912	0,9868	0,9824	0,9782	0,974	0,9698	0,9658	0,9618	0,9578	0,954	0,9502
58,5	1,0286	1,0234	1,0184	1,0135	1,0086	1,0039	0,9992	0,9946	0,9901	0,9857	0,9814	0,9771	0,9729	0,9688	0,9647	0,9607	0,9568	0,9529	0,9491
58,6	1,0275	1,0224	1,0173	1,0124	1,0076	1,0028	0,9981	0,9936	0,9891	0,9846	0,9803	0,976	0,9718	0,9677	0,9637	0,9597	0,9557	0,9519	0,948
58,7	1,0264	1,0213	1,0163	1,0113	1,0065	1,0017	0,9971	0,9925	0,988	0,9836	0,9792	0,975	0,9708	0,9667	0,9626	0,9586	0,9547	0,9508	0,947
58,8	1,0254	1,0202	1,0152	1,0102	1,0054	1,0007	0,996	0,9914	0,9869	0,9825	0,9782	0,9739	0,9697	0,9656	0,9615	0,9575	0,9536	0,9497	0,9459
58,9	1,0243	1,0191	1,0141	1,0092	1,0043	0,9996	0,9949	0,9904	0,9859	0,9815	0,9771	0,9729	0,9687	0,9645	0,9605	0,9565	0,9526	0,9487	0,9449
59	1,0232	1,0181	1,013	1,0081	1,0033	0,9985	0,9939	0,9893	0,9848	0,9804	0,9761	0,9718	0,9676	0,9635	0,9594	0,9554	0,9515	0,9476	0,9438
59,1	1,0221	1,017	1,012	1,007	1,0022	0,9975	0,9928	0,9882	0,9837	0,9793	0,975	0,9707	0,9665	0,9624	0,9584	0,9544	0,9504	0,9466	0,9428
59,2	1,021	1,0159	1,0109	1,006	1,0011	0,9964	0,9917	0,9872	0,9827	0,9783	0,9739	0,9697	0,9655	0,9614	0,9573	0,9533	0,9494	0,9455	0,9417
59,3	1,02	1,0148	1,0098	1,0049	1,0001	0,9953	0,9907	0,9861	0,9816	0,9772	0,9729	0,9686	0,9644	0,9603	0,9562	0,9523	0,9483	0,9445	0,9407
59,4	1,0189	1,0138	1,0087	1,0038	0,999	0,9942	0,9896	0,985	0,9805	0,9761	0,9718	0,9675	0,9634	0,9592	0,9552	0,9512	0,9473	0,9434	0,9396
59,5	1,0178	1,0127	1,0077	1,0027	0,9979	0,9932	0,9885	0,984	0,9795	0,9751	0,9707	0,9665	0,9623	0,9582	0,9541	0,9502	0,9462	0,9424	0,9386
59,6	1,0167	1,0116	1,0066	1,0017	0,9968	0,9921	0,9875	0,9829	0,9784	0,974	0,9697	0,9654	0,9612	0,9571	0,9531	0,9491	0,9452	0,9413	0,9375
59,7	1,0157	1,0106	1,0055	1,0006	0,9958	0,991	0,9864	0,9818	0,9774	0,973	0,9686	0,9644	0,9602	0,9561	0,952	0,948	0,9441	0,9403	0,9365
59,8	1,0146	1,0095	1,0045	0,9995	0,9947	0,99	0,9853	0,9808	0,9763	0,9719	0,9676	0,9633	0,9591	0,955	0,951	0,947	0,9431	0,9392	0,9354
59,9	1,0135	1,0084	1,0034	0,9985	0,9936	0,9889	0,9843	0,9797	0,9752	0,9708	0,9665	0,9623	0,9581	0,954	0,9499	0,9459	0,942	0,9382	0,9344
60	1,0125	1,0073	1,0023	0,9974	0,9926	0,9878	0,9832	0,9786	0,9742	0,9698	0,9654	0,9612	0,957	0,9529	0,9489	0,9449	0,941	0,9371	0,9333
60,1	1,0114	1,0063	1,0013	0,9963	0,9915	0,9868	0,9821	0,9776	0,9731	0,9687	0,9644	0,9601	0,956	0,9519	0,9478	0,9438	0,9399	0,9361	0,9323
60,2	1,0103	1,0052	1,0002	0,9953	0,9904	0,9857	0,9811	0,9765	0,972	0,9676	0,9633	0,9591	0,9549	0,9508	0,9468	0,9428	0,9389	0,935	0,9312
60,3	1,0092	1,0041	0,9991	0,9942	0,9894	0,9847	0,98	0,9755	0,971	0,9666	0,9623	0,958	0,9539	0,9497	0,9457	0,9417	0,9378	0,934	0,9302
60,4	1,0082	1,0031	0,998	0,9931	0,9883	0,9836	0,979	0,9744	0,9699	0,9655	0,9612	0,957	0,9528	0,9487	0,9446	0,9407	0,9368	0,9329	0,9291

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
57	0,9612	0,9575	0,9538	0,9502	0,9466	0,9431	0,9397	0,9362	0,9329	0,9295	0,9263	0,923	0,9198	0,9166	0,9135	0,9104	0,9074	0,9044	0,9014
57,1	0,9601	0,9564	0,9528	0,9492	0,9456	0,9421	0,9386	0,9352	0,9318	0,9285	0,9252	0,922	0,9188	0,9156	0,9125	0,9094	0,9063	0,9033	0,9003
57,2	0,9591	0,9554	0,9517	0,9481	0,9445	0,941	0,9376	0,9341	0,9308	0,9274	0,9242	0,9209	0,9177	0,9145	0,9114	0,9083	0,9053	0,9023	0,8993
57,3	0,958	0,9543	0,9506	0,947	0,9435	0,94	0,9365	0,9331	0,9297	0,9264	0,9231	0,9199	0,9167	0,9135	0,9104	0,9073	0,9042	0,9012	0,8983
57,4	0,957	0,9532	0,9496	0,946	0,9424	0,9389	0,9354	0,932	0,9287	0,9253	0,9221	0,9188	0,9156	0,9125	0,9093	0,9062	0,9032	0,9002	0,8972
57,5	0,9559	0,9522	0,9485	0,9449	0,9414	0,9379	0,9344	0,931	0,9276	0,9243	0,921	0,9178	0,9146	0,9114	0,9083	0,9052	0,9022	0,8991	0,8962
57,6	0,9548	0,9511	0,9475	0,9439	0,9403	0,9368	0,9333	0,9299	0,9266	0,9232	0,92	0,9167	0,9135	0,9104	0,9072	0,9042	0,9011	0,8981	0,8951
57,7	0,9538	0,9501	0,9464	0,9428	0,9393	0,9357	0,9323	0,9289	0,9255	0,9222	0,9189	0,9157	0,9125	0,9093	0,9062	0,9031	0,9001	0,8971	0,8941
57,8	0,9527	0,949	0,9454	0,9418	0,9382	0,9347	0,9312	0,9278	0,9245	0,9211	0,9179	0,9146	0,9114	0,9083	0,9052	0,9021	0,899	0,896	0,8931
57,9	0,9517	0,948	0,9443	0,9407	0,9371	0,9336	0,9302	0,9268	0,9234	0,9201	0,9168	0,9136	0,9104	0,9072	0,9041	0,901	0,898	0,895	0,892
58	0,9506	0,9469	0,9432	0,9396	0,9361	0,9326	0,9291	0,9257	0,9224	0,919	0,9158	0,9125	0,9093	0,9062	0,9031	0,9	0,8969	0,8939	0,891
58,1	0,9496	0,9459	0,9422	0,9386	0,935	0,9315	0,9281	0,9247	0,9213	0,918	0,9147	0,9115	0,9083	0,9051	0,902	0,8989	0,8959	0,8929	0,8899
58,2	0,9485	0,9448	0,9411	0,9375	0,934	0,9305	0,927	0,9236	0,9203	0,9169	0,9137	0,9104	0,9072	0,9041	0,901	0,8979	0,8949	0,8919	0,8889
58,3	0,9474	0,9437	0,9401	0,9365	0,9329	0,9294	0,926	0,9226	0,9192	0,9159	0,9126	0,9094	0,9062	0,903	0,8999	0,8969	0,8938	0,8908	0,8879
58,4	0,9464	0,9427	0,939	0,9354	0,9319	0,9284	0,9249	0,9215	0,9182	0,9149	0,9116	0,9083	0,9052	0,902	0,8989	0,8958	0,8928	0,8898	0,8868
58,5	0,9453	0,9416	0,938	0,9344	0,9308	0,9273	0,9239	0,9205	0,9171	0,9138	0,9105	0,9073	0,9041	0,901	0,8979	0,8948	0,8917	0,8887	0,8858
58,6	0,9443	0,9406	0,9369	0,9333	0,9298	0,9263	0,9228	0,9194	0,9161	0,9128	0,9095	0,9063	0,9031	0,8999	0,8968	0,8937	0,8907	0,8877	0,8847
58,7	0,9432	0,9395	0,9359	0,9323	0,9287	0,9252	0,9218	0,9184	0,915	0,9117	0,9084	0,9052	0,902	0,8989	0,8958	0,8927	0,8897	0,8867	0,8837
58,8	0,9422	0,9385	0,9348	0,9312	0,9277	0,9242	0,9207	0,9173	0,914	0,9107	0,9074	0,9042	0,901	0,8978	0,8947	0,8917	0,8886	0,8856	0,8827
58,9	0,9411	0,9374	0,9338	0,9302	0,9266	0,9231	0,9197	0,9163	0,9129	0,9096	0,9064	0,9031	0,8999	0,8968	0,8937	0,8906	0,8876	0,8846	0,8816
59	0,9401	0,9364	0,9327	0,9291	0,9256	0,9221	0,9186	0,9152	0,9119	0,9086	0,9053	0,9021	0,8989	0,8958	0,8927	0,8896	0,8866	0,8836	0,8806
59,1	0,939	0,9353	0,9317	0,9281	0,9245	0,921	0,9176	0,9142	0,9109	0,9075	0,9043	0,901	0,8979	0,8947	0,8916	0,8885	0,8855	0,8825	0,8796
59,2	0,938	0,9343	0,9306	0,927	0,9235	0,92	0,9166	0,9132	0,9098	0,9065	0,9032	0,9	0,8968	0,8937	0,8906	0,8875	0,8845	0,8815	0,8785
59,3	0,9369	0,9332	0,9296	0,926	0,9224	0,919	0,9155	0,9121	0,9088	0,9055	0,9022	0,899	0,8958	0,8926	0,8895	0,8865	0,8834	0,8805	0,8775
59,4	0,9359	0,9322	0,9285	0,9249	0,9214	0,9179	0,9145	0,9111	0,9077	0,9044	0,9012	0,8979	0,8947	0,8916	0,8885	0,8854	0,8824	0,8794	0,8765
59,5	0,9348	0,9311	0,9275	0,9239	0,9204	0,9169	0,9134	0,91	0,9067	0,9034	0,9001	0,8969	0,8937	0,8906	0,8875	0,8844	0,8814	0,8784	0,8754
59,6	0,9338	0,9301	0,9264	0,9228	0,9193	0,9158	0,9124	0,909	0,9056	0,9023	0,8991	0,8958	0,8927	0,8895	0,8864	0,8834	0,8803	0,8773	0,8744
59,7	0,9327	0,929	0,9254	0,9218	0,9183	0,9148	0,9113	0,9079	0,9046	0,9013	0,898	0,8948	0,8916	0,8885	0,8854	0,8823	0,8793	0,8763	0,8734
59,8	0,9317	0,928	0,9243	0,9207	0,9172	0,9137	0,9103	0,9069	0,9036	0,9002	0,897	0,8938	0,8906	0,8875	0,8844	0,8813	0,8783	0,8753	0,8723
59,9	0,9306	0,9269	0,9233	0,9197	0,9162	0,9127	0,9092	0,9059	0,9025	0,8992	0,8959	0,8927	0,8896	0,8864	0,8833	0,8803	0,8772	0,8742	0,8713
60	0,9296	0,9259	0,9222	0,9187	0,9151	0,9116	0,9082	0,9048	0,9015	0,8982	0,8949	0,8917	0,8885	0,8854	0,8823	0,8792	0,8762	0,8732	0,8703
60,1	0,9285	0,9248	0,9212	0,9176	0,9141	0,9106	0,9072	0,9038	0,9004	0,8971	0,8939	0,8907	0,8875	0,8843	0,8812	0,8782	0,8752	0,8722	0,8692
60,2	0,9275	0,9238	0,9201	0,9166	0,913	0,9096	0,9061	0,9027	0,8994	0,8961	0,8928	0,8896	0,8864	0,8833	0,8802	0,8772	0,8741	0,8711	0,8682
60,3	0,9264	0,9227	0,9191	0,9155	0,912	0,9085	0,9051	0,9017	0,8983	0,895	0,8918	0,8886	0,8854	0,8823	0,8792	0,8761	0,8731	0,8701	0,8672
60,4	0,9254	0,9217	0,9181	0,9145	0,9109	0,9075	0,904	0,9007	0,8973	0,894	0,8908	0,8875	0,8844	0,8812	0,8781	0,8751	0,8721	0,8691	0,8661

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
57	0,8984	0,8955	0,8927	0,8898	0,887	0,8842	0,8815	0,8787	0,876	0,8734	0,8707	0,8681	0,8655	0,863	0,8605	0,8579	0,8555	0,853	0,8506
57,1	0,8974	0,8945	0,8916	0,8888	0,886	0,8832	0,8804	0,8777	0,875	0,8723	0,8697	0,8671	0,8645	0,862	0,8594	0,8569	0,8544	0,852	0,8495
57,2	0,8964	0,8935	0,8906	0,8877	0,8849	0,8821	0,8794	0,8767	0,874	0,8713	0,8687	0,8661	0,8635	0,8609	0,8584	0,8559	0,8534	0,8509	0,8485
57,3	0,8953	0,8924	0,8895	0,8867	0,8839	0,8811	0,8784	0,8756	0,8729	0,8703	0,8676	0,865	0,8624	0,8599	0,8574	0,8548	0,8524	0,8499	0,8475
57,4	0,8943	0,8914	0,8885	0,8857	0,8828	0,8801	0,8773	0,8746	0,8719	0,8692	0,8666	0,864	0,8614	0,8589	0,8563	0,8538	0,8513	0,8489	0,8464
57,5	0,8932	0,8903	0,8875	0,8846	0,8818	0,879	0,8763	0,8736	0,8709	0,8682	0,8656	0,863	0,8604	0,8578	0,8553	0,8528	0,8503	0,8479	0,8454
57,6	0,8922	0,8893	0,8864	0,8836	0,8808	0,878	0,8752	0,8725	0,8698	0,8672	0,8645	0,8619	0,8594	0,8568	0,8543	0,8518	0,8493	0,8468	0,8444
57,7	0,8912	0,8883	0,8854	0,8825	0,8797	0,877	0,8742	0,8715	0,8688	0,8661	0,8635	0,8609	0,8583	0,8558	0,8532	0,8507	0,8483	0,8458	0,8434
57,8	0,8901	0,8872	0,8843	0,8815	0,8787	0,8759	0,8732	0,8705	0,8678	0,8651	0,8625	0,8599	0,8573	0,8547	0,8522	0,8497	0,8472	0,8448	0,8423
57,9	0,8891	0,8862	0,8833	0,8805	0,8777	0,8749	0,8721	0,8694	0,8667	0,8641	0,8614	0,8588	0,8563	0,8537	0,8512	0,8487	0,8462	0,8437	0,8413
58	0,888	0,8851	0,8823	0,8794	0,8766	0,8738	0,8711	0,8684	0,8657	0,863	0,8604	0,8578	0,8552	0,8527	0,8502	0,8476	0,8452	0,8427	0,8403
58,1	0,887	0,8841	0,8812	0,8784	0,8756	0,8728	0,8701	0,8674	0,8647	0,862	0,8594	0,8568	0,8542	0,8516	0,8491	0,8466	0,8441	0,8417	0,8393
58,2	0,886	0,8831	0,8802	0,8774	0,8746	0,8718	0,869	0,8663	0,8636	0,861	0,8584	0,8557	0,8532	0,8506	0,8481	0,8456	0,8431	0,8407	0,8382
58,3	0,8849	0,882	0,8792	0,8763	0,8735	0,8707	0,868	0,8653	0,8626	0,86	0,8573	0,8547	0,8521	0,8496	0,8471	0,8446	0,8421	0,8396	0,8372
58,4	0,8839	0,881	0,8781	0,8753	0,8725	0,8697	0,867	0,8643	0,8616	0,8589	0,8563	0,8537	0,8511	0,8486	0,846	0,8435	0,8411	0,8386	0,8362
58,5	0,8828	0,88	0,8771	0,8743	0,8715	0,8687	0,8659	0,8632	0,8605	0,8579	0,8553	0,8527	0,8501	0,8475	0,845	0,8425	0,84	0,8376	0,8352
58,6	0,8818	0,8789	0,8761	0,8732	0,8704	0,8676	0,8649	0,8622	0,8595	0,8569	0,8542	0,8516	0,8491	0,8465	0,844	0,8415	0,839	0,8366	0,8341
58,7	0,8808	0,8779	0,875	0,8722	0,8694	0,8666	0,8639	0,8612	0,8585	0,8558	0,8532	0,8506	0,848	0,8455	0,843	0,8405	0,838	0,8355	0,8331
58,8	0,8797	0,8768	0,874	0,8712	0,8684	0,8656	0,8628	0,8601	0,8575	0,8548	0,8522	0,8496	0,847	0,8445	0,8419	0,8394	0,837	0,8345	0,8321
58,9	0,8787	0,8758	0,8729	0,8701	0,8673	0,8646	0,8618	0,8591	0,8564	0,8538	0,8512	0,8486	0,846	0,8434	0,8409	0,8384	0,836	0,8335	0,8311
59	0,8777	0,8748	0,8719	0,8691	0,8663	0,8635	0,8608	0,8581	0,8554	0,8527	0,8501	0,8475	0,845	0,8424	0,8399	0,8374	0,8349	0,8325	0,8301
59,1	0,8766	0,8737	0,8709	0,8681	0,8653	0,8625	0,8598	0,857	0,8544	0,8517	0,8491	0,8465	0,8439	0,8414	0,8389	0,8364	0,8339	0,8315	0,829
59,2	0,8756	0,8727	0,8699	0,867	0,8642	0,8615	0,8587	0,856	0,8533	0,8507	0,8481	0,8455	0,8429	0,8404	0,8378	0,8354	0,8329	0,8304	0,828
59,3	0,8746	0,8717	0,8688	0,866	0,8632	0,8604	0,8577	0,855	0,8523	0,8497	0,847	0,8445	0,8419	0,8393	0,8368	0,8343	0,8319	0,8294	0,827
59,4	0,8735	0,8706	0,8678	0,865	0,8622	0,8594	0,8567	0,854	0,8513	0,8486	0,846	0,8434	0,8409	0,8383	0,8358	0,8333	0,8308	0,8284	0,826
59,5	0,8725	0,8696	0,8668	0,8639	0,8611	0,8584	0,8556	0,8529	0,8503	0,8476	0,845	0,8424	0,8398	0,8373	0,8348	0,8323	0,8298	0,8274	0,825
59,6	0,8715	0,8686	0,8657	0,8629	0,8601	0,8573	0,8546	0,8519	0,8492	0,8466	0,844	0,8414	0,8388	0,8363	0,8338	0,8313	0,8288	0,8264	0,8239
59,7	0,8704	0,8675	0,8647	0,8619	0,8591	0,8563	0,8536	0,8509	0,8482	0,8456	0,8429	0,8404	0,8378	0,8352	0,8327	0,8302	0,8278	0,8253	0,8229
59,8	0,8694	0,8665	0,8637	0,8608	0,858	0,8553	0,8526	0,8499	0,8472	0,8445	0,8419	0,8393	0,8368	0,8342	0,8317	0,8292	0,8268	0,8243	0,8219
59,9	0,8684	0,8655	0,8626	0,8598	0,857	0,8543	0,8515	0,8488	0,8462	0,8435	0,8409	0,8383	0,8357	0,8332	0,8307	0,8282	0,8257	0,8233	0,8209
60	0,8673	0,8645	0,8616	0,8588	0,856	0,8532	0,8505	0,8478	0,8451	0,8425	0,8399	0,8373	0,8347	0,8322	0,8297	0,8272	0,8247	0,8223	0,8199
60,1	0,8663	0,8634	0,8606	0,8578	0,855	0,8522	0,8495	0,8468	0,8441	0,8415	0,8388	0,8363	0,8337	0,8312	0,8286	0,8262	0,8237	0,8213	0,8188
60,2	0,8653	0,8624	0,8595	0,8567	0,8539	0,8512	0,8485	0,8458	0,8431	0,8404	0,8378	0,8352	0,8327	0,8301	0,8276	0,8251	0,8227	0,8202	0,8178
60,3	0,8642	0,8614	0,8585	0,8557	0,8529	0,8502	0,8474	0,8447	0,8421	0,8394	0,8368	0,8342	0,8317	0,8291	0,8266	0,8241	0,8217	0,8192	0,8168
60,4	0,8632	0,8603	0,8575	0,8547	0,8519	0,8491	0,8464	0,8437	0,841	0,8384	0,8358	0,8332	0,8306	0,8281	0,8256	0,8231	0,8206	0,8182	0,8158

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
57	0,8481	0,8458	0,8434	0,841	0,8387	0,8364	0,8341	0,8319	0,8296	0,8274	0,8252	0,823	0,8208	0,8187	0,8165	0,8144	0,8123	0,8103	0,8082
57,1	0,8471	0,8447	0,8424	0,84	0,8377	0,8354	0,8331	0,8308	0,8286	0,8264	0,8242	0,822	0,8198	0,8177	0,8155	0,8134	0,8113	0,8092	0,8072
57,2	0,8461	0,8437	0,8413	0,839	0,8367	0,8344	0,8321	0,8298	0,8276	0,8253	0,8231	0,821	0,8188	0,8166	0,8145	0,8124	0,8103	0,8082	0,8062
57,3	0,8451	0,8427	0,8403	0,838	0,8356	0,8333	0,831	0,8288	0,8265	0,8243	0,8221	0,8199	0,8178	0,8156	0,8135	0,8114	0,8093	0,8072	0,8051
57,4	0,844	0,8416	0,8393	0,8369	0,8346	0,8323	0,83	0,8278	0,8255	0,8233	0,8211	0,8189	0,8167	0,8146	0,8125	0,8104	0,8083	0,8062	0,8041
57,5	0,843	0,8406	0,8383	0,8359	0,8336	0,8313	0,829	0,8267	0,8245	0,8223	0,8201	0,8179	0,8157	0,8136	0,8115	0,8093	0,8072	0,8052	0,8031
57,6	0,842	0,8396	0,8372	0,8349	0,8326	0,8303	0,828	0,8257	0,8235	0,8213	0,8191	0,8169	0,8147	0,8126	0,8104	0,8083	0,8062	0,8042	0,8021
57,7	0,841	0,8386	0,8362	0,8339	0,8315	0,8292	0,827	0,8247	0,8225	0,8202	0,818	0,8159	0,8137	0,8115	0,8094	0,8073	0,8052	0,8031	0,8011
57,8	0,8399	0,8375	0,8352	0,8328	0,8305	0,8282	0,8259	0,8237	0,8214	0,8192	0,817	0,8148	0,8127	0,8105	0,8084	0,8063	0,8042	0,8021	0,8001
57,9	0,8389	0,8365	0,8342	0,8318	0,8295	0,8272	0,8249	0,8227	0,8204	0,8182	0,816	0,8138	0,8117	0,8095	0,8074	0,8053	0,8032	0,8011	0,7991
58	0,8379	0,8355	0,8331	0,8308	0,8285	0,8262	0,8239	0,8216	0,8194	0,8172	0,815	0,8128	0,8106	0,8085	0,8064	0,8043	0,8022	0,8001	0,798
58,1	0,8369	0,8345	0,8321	0,8298	0,8275	0,8252	0,8229	0,8206	0,8184	0,8162	0,814	0,8118	0,8096	0,8075	0,8054	0,8032	0,8012	0,7991	0,797
58,2	0,8358	0,8335	0,8311	0,8287	0,8264	0,8241	0,8219	0,8196	0,8174	0,8151	0,8129	0,8108	0,8086	0,8065	0,8043	0,8022	0,8001	0,7981	0,796
58,3	0,8348	0,8324	0,8301	0,8277	0,8254	0,8231	0,8208	0,8186	0,8163	0,8141	0,8119	0,8098	0,8076	0,8055	0,8033	0,8012	0,7991	0,7971	0,795
58,4	0,8338	0,8314	0,829	0,8267	0,8244	0,8221	0,8198	0,8176	0,8153	0,8131	0,8109	0,8087	0,8066	0,8044	0,8023	0,8002	0,7981	0,796	0,794
58,5	0,8328	0,8304	0,828	0,8257	0,8234	0,8211	0,8188	0,8165	0,8143	0,8121	0,8099	0,8077	0,8056	0,8034	0,8013	0,7992	0,7971	0,795	0,793
58,6	0,8317	0,8294	0,827	0,8247	0,8224	0,8201	0,8178	0,8155	0,8133	0,8111	0,8089	0,8067	0,8046	0,8024	0,8003	0,7982	0,7961	0,794	0,792
58,7	0,8307	0,8283	0,826	0,8236	0,8213	0,819	0,8168	0,8145	0,8123	0,8101	0,8079	0,8057	0,8035	0,8014	0,7993	0,7972	0,7951	0,793	0,791
58,8	0,8297	0,8273	0,825	0,8226	0,8203	0,818	0,8157	0,8135	0,8113	0,8091	0,8069	0,8047	0,8025	0,8004	0,7983	0,7962	0,7941	0,792	0,7899
58,9	0,8287	0,8263	0,8239	0,8216	0,8193	0,817	0,8147	0,8125	0,8102	0,808	0,8058	0,8037	0,8015	0,7994	0,7972	0,7951	0,7931	0,791	0,7889
59	0,8277	0,8253	0,8229	0,8206	0,8183	0,816	0,8137	0,8115	0,8092	0,807	0,8048	0,8027	0,8005	0,7984	0,7962	0,7941	0,792	0,79	0,7879
59,1	0,8266	0,8243	0,8219	0,8196	0,8173	0,815	0,8127	0,8104	0,8082	0,806	0,8038	0,8016	0,7995	0,7973	0,7952	0,7931	0,791	0,789	0,7869
59,2	0,8256	0,8232	0,8209	0,8186	0,8162	0,814	0,8117	0,8094	0,8072	0,805	0,8028	0,8006	0,7985	0,7963	0,7942	0,7921	0,79	0,788	0,7859
59,3	0,8246	0,8222	0,8199	0,8175	0,8152	0,8129	0,8107	0,8084	0,8062	0,804	0,8018	0,7996	0,7975	0,7953	0,7932	0,7911	0,789	0,787	0,7849
59,4	0,8236	0,8212	0,8188	0,8165	0,8142	0,8119	0,8097	0,8074	0,8052	0,803	0,8008	0,7986	0,7964	0,7943	0,7922	0,7901	0,788	0,7859	0,7839
59,5	0,8226	0,8202	0,8178	0,8155	0,8132	0,8109	0,8086	0,8064	0,8042	0,8019	0,7998	0,7976	0,7954	0,7933	0,7912	0,7891	0,787	0,7849	0,7829
59,6	0,8215	0,8192	0,8168	0,8145	0,8122	0,8099	0,8076	0,8054	0,8031	0,8009	0,7987	0,7966	0,7944	0,7923	0,7902	0,7881	0,786	0,7839	0,7819
59,7	0,8205	0,8181	0,8158	0,8135	0,8112	0,8089	0,8066	0,8044	0,8021	0,7999	0,7977	0,7956	0,7934	0,7913	0,7892	0,7871	0,785	0,7829	0,7809
59,8	0,8195	0,8171	0,8148	0,8125	0,8101	0,8079	0,8056	0,8033	0,8011	0,7989	0,7967	0,7946	0,7924	0,7903	0,7882	0,7861	0,784	0,7819	0,7799
59,9	0,8185	0,8161	0,8138	0,8114	0,8091	0,8068	0,8046	0,8023	0,8001	0,7979	0,7957	0,7935	0,7914	0,7893	0,7871	0,785	0,783	0,7809	0,7789
60	0,8175	0,8151	0,8127	0,8104	0,8081	0,8058	0,8036	0,8013	0,7991	0,7969	0,7947	0,7925	0,7904	0,7882	0,7861	0,784	0,782	0,7799	0,7778
60,1	0,8164	0,8141	0,8117	0,8094	0,8071	0,8048	0,8025	0,8003	0,7981	0,7959	0,7937	0,7915	0,7894	0,7872	0,7851	0,783	0,7809	0,7789	0,7768
60,2	0,8154	0,8131	0,8107	0,8084	0,8061	0,8038	0,8015	0,7993	0,7971	0,7949	0,7927	0,7905	0,7884	0,7862	0,7841	0,782	0,7799	0,7779	0,7758
60,3	0,8144	0,812	0,8097	0,8074	0,8051	0,8028	0,8005	0,7983	0,7961	0,7939	0,7917	0,7895	0,7874	0,7852	0,7831	0,781	0,7789	0,7769	0,7748
60,4	0,8134	0,811	0,8087	0,8064	0,8041	0,8018	0,7995	0,7973	0,795	0,7928	0,7907	0,7885	0,7863	0,7842	0,7821	0,78	0,7779	0,7759	0,7738

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
57	0,8061	0,8041	0,8021	0,8001	0,7981	0,7961	0,7942	0,7923	0,7903	0,7884	0,7865	0,7846	0,7828	0,7809	0,7791	0,7773	0,7754	0,7736	0,7718
57,1	0,8051	0,8031	0,8011	0,7991	0,7971	0,7951	0,7932	0,7912	0,7893	0,7874	0,7855	0,7836	0,7818	0,7799	0,7781	0,7762	0,7744	0,7726	0,7708
57,2	0,8041	0,8021	0,8001	0,7981	0,7961	0,7941	0,7922	0,7902	0,7883	0,7864	0,7845	0,7826	0,7808	0,7789	0,7771	0,7752	0,7734	0,7716	0,7698
57,3	0,8031	0,8011	0,7991	0,7971	0,7951	0,7931	0,7912	0,7892	0,7873	0,7854	0,7835	0,7816	0,7797	0,7779	0,7761	0,7742	0,7724	0,7706	0,7688
57,4	0,8021	0,8001	0,798	0,796	0,7941	0,7921	0,7901	0,7882	0,7863	0,7844	0,7825	0,7806	0,7787	0,7769	0,775	0,7732	0,7714	0,7696	0,7678
57,5	0,8011	0,799	0,797	0,795	0,793	0,7911	0,7891	0,7872	0,7853	0,7834	0,7815	0,7796	0,7777	0,7759	0,774	0,7722	0,7704	0,7686	0,7668
57,6	0,8001	0,798	0,796	0,794	0,792	0,7901	0,7881	0,7862	0,7843	0,7824	0,7805	0,7786	0,7767	0,7749	0,773	0,7712	0,7694	0,7676	0,7658
57,7	0,799	0,797	0,795	0,793	0,791	0,7891	0,7871	0,7852	0,7833	0,7814	0,7795	0,7776	0,7757	0,7739	0,772	0,7702	0,7684	0,7666	0,7648
57,8	0,798	0,796	0,794	0,792	0,79	0,7881	0,7861	0,7842	0,7822	0,7803	0,7785	0,7766	0,7747	0,7729	0,771	0,7692	0,7674	0,7656	0,7638
57,9	0,797	0,795	0,793	0,791	0,789	0,787	0,7851	0,7832	0,7812	0,7793	0,7774	0,7756	0,7737	0,7719	0,77	0,7682	0,7664	0,7646	0,7628
58	0,796	0,794	0,792	0,79	0,788	0,786	0,7841	0,7822	0,7802	0,7783	0,7764	0,7746	0,7727	0,7708	0,769	0,7672	0,7654	0,7636	0,7618
58,1	0,795	0,793	0,791	0,789	0,787	0,785	0,7831	0,7811	0,7792	0,7773	0,7754	0,7736	0,7717	0,7698	0,768	0,7662	0,7644	0,7626	0,7608
58,2	0,794	0,792	0,7899	0,788	0,786	0,784	0,7821	0,7801	0,7782	0,7763	0,7744	0,7725	0,7707	0,7688	0,767	0,7652	0,7634	0,7616	0,7598
58,3	0,793	0,7909	0,7889	0,7869	0,785	0,783	0,7811	0,7791	0,7772	0,7753	0,7734	0,7715	0,7697	0,7678	0,766	0,7642	0,7624	0,7606	0,7588
58,4	0,792	0,7899	0,7879	0,7859	0,784	0,782	0,7801	0,7781	0,7762	0,7743	0,7724	0,7705	0,7687	0,7668	0,765	0,7632	0,7614	0,7596	0,7578
58,5	0,7909	0,7889	0,7869	0,7849	0,7829	0,781	0,779	0,7771	0,7752	0,7733	0,7714	0,7695	0,7677	0,7658	0,764	0,7622	0,7604	0,7586	0,7568
58,6	0,7899	0,7879	0,7859	0,7839	0,7819	0,78	0,778	0,7761	0,7742	0,7723	0,7704	0,7685	0,7667	0,7648	0,763	0,7612	0,7594	0,7576	0,7558
58,7	0,7889	0,7869	0,7849	0,7829	0,7809	0,779	0,777	0,7751	0,7732	0,7713	0,7694	0,7675	0,7657	0,7638	0,762	0,7602	0,7584	0,7566	0,7548
58,8	0,7879	0,7859	0,7839	0,7819	0,7799	0,778	0,776	0,7741	0,7722	0,7703	0,7684	0,7665	0,7647	0,7628	0,761	0,7592	0,7574	0,7556	0,7538
58,9	0,7869	0,7849	0,7829	0,7809	0,7789	0,777	0,775	0,7731	0,7712	0,7693	0,7674	0,7655	0,7637	0,7618	0,76	0,7582	0,7564	0,7546	0,7528
59	0,7859	0,7839	0,7819	0,7799	0,7779	0,776	0,774	0,7721	0,7702	0,7683	0,7664	0,7645	0,7627	0,7608	0,759	0,7572	0,7554	0,7536	0,7518
59,1	0,7849	0,7829	0,7809	0,7789	0,7769	0,7749	0,773	0,7711	0,7692	0,7673	0,7654	0,7635	0,7617	0,7598	0,758	0,7562	0,7544	0,7526	0,7508
59,2	0,7839	0,7819	0,7799	0,7779	0,7759	0,7739	0,772	0,7701	0,7682	0,7663	0,7644	0,7625	0,7607	0,7588	0,757	0,7552	0,7534	0,7516	0,7498
59,3	0,7829	0,7809	0,7788	0,7769	0,7749	0,7729	0,771	0,7691	0,7672	0,7653	0,7634	0,7615	0,7597	0,7578	0,756	0,7542	0,7524	0,7506	0,7488
59,4	0,7819	0,7798	0,7778	0,7759	0,7739	0,7719	0,77	0,7681	0,7662	0,7643	0,7624	0,7605	0,7586	0,7568	0,755	0,7532	0,7514	0,7496	0,7478
59,5	0,7809	0,7788	0,7768	0,7749	0,7729	0,7709	0,769	0,7671	0,7652	0,7633	0,7614	0,7595	0,7576	0,7558	0,754	0,7522	0,7504	0,7486	0,7468
59,6	0,7798	0,7778	0,7758	0,7738	0,7719	0,7699	0,768	0,7661	0,7641	0,7623	0,7604	0,7585	0,7566	0,7548	0,753	0,7512	0,7494	0,7476	0,7458
59,7	0,7788	0,7768	0,7748	0,7728	0,7709	0,7689	0,767	0,7651	0,7631	0,7612	0,7594	0,7575	0,7556	0,7538	0,752	0,7502	0,7484	0,7466	0,7448
59,8	0,7778	0,7758	0,7738	0,7718	0,7699	0,7679	0,766	0,7641	0,7621	0,7602	0,7584	0,7565	0,7546	0,7528	0,751	0,7492	0,7474	0,7456	0,7438
59,9	0,7768	0,7748	0,7728	0,7708	0,7689	0,7669	0,765	0,763	0,7611	0,7592	0,7574	0,7555	0,7536	0,7518	0,75	0,7482	0,7464	0,7446	0,7428
60	0,7758	0,7738	0,7718	0,7698	0,7679	0,7659	0,764	0,762	0,7601	0,7582	0,7564	0,7545	0,7526	0,7508	0,749	0,7472	0,7454	0,7436	0,7418
60,1	0,7748	0,7728	0,7708	0,7688	0,7669	0,7649	0,763	0,761	0,7591	0,7572	0,7554	0,7535	0,7516	0,7498	0,748	0,7462	0,7444	0,7426	0,7408
60,2	0,7738	0,7718	0,7698	0,7678	0,7658	0,7639	0,762	0,76	0,7581	0,7562	0,7544	0,7525	0,7506	0,7488	0,747	0,7452	0,7434	0,7416	0,7398
60,3	0,7728	0,7708	0,7688	0,7668	0,7648	0,7629	0,761	0,759	0,7571	0,7552	0,7534	0,7515	0,7496	0,7478	0,746	0,7442	0,7424	0,7406	0,7388
60,4	0,7718	0,7698	0,7678	0,7658	0,7638	0,7619	0,76	0,758	0,7561	0,7542	0,7524	0,7505	0,7486	0,7468	0,745	0,7432	0,7414	0,7396	0,7378

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
57	0,7701	0,7683	0,7665	0,7648	0,7631	0,7614	0,7596	0,758
57,1	0,7691	0,7673	0,7655	0,7638	0,7621	0,7604	0,7586	0,757
57,2	0,7681	0,7663	0,7645	0,7628	0,7611	0,7594	0,7576	0,756
57,3	0,767	0,7653	0,7635	0,7618	0,7601	0,7583	0,7566	0,7549
57,4	0,766	0,7643	0,7625	0,7608	0,7591	0,7573	0,7556	0,7539
57,5	0,765	0,7633	0,7615	0,7598	0,7581	0,7563	0,7546	0,7529
57,6	0,764	0,7623	0,7605	0,7588	0,7571	0,7553	0,7536	0,7519
57,7	0,763	0,7613	0,7595	0,7578	0,7561	0,7543	0,7526	0,7509
57,8	0,762	0,7603	0,7585	0,7568	0,7551	0,7533	0,7516	0,7499
57,9	0,761	0,7593	0,7575	0,7558	0,7541	0,7523	0,7506	0,7489
58	0,76	0,7583	0,7565	0,7548	0,7531	0,7513	0,7496	0,7479
58,1	0,759	0,7573	0,7555	0,7538	0,7521	0,7503	0,7486	0,747
58,2	0,758	0,7563	0,7545	0,7528	0,7511	0,7493	0,7476	0,746
58,3	0,757	0,7553	0,7535	0,7518	0,7501	0,7483	0,7466	0,745
58,4	0,756	0,7543	0,7525	0,7508	0,7491	0,7473	0,7456	0,744
58,5	0,755	0,7533	0,7515	0,7498	0,7481	0,7463	0,7446	0,743
58,6	0,754	0,7523	0,7505	0,7488	0,7471	0,7454	0,7436	0,742
58,7	0,753	0,7513	0,7495	0,7478	0,7461	0,7444	0,7427	0,741
58,8	0,752	0,7503	0,7485	0,7468	0,7451	0,7434	0,7417	0,74
58,9	0,751	0,7493	0,7475	0,7458	0,7441	0,7424	0,7407	0,739
59	0,75	0,7483	0,7465	0,7448	0,7431	0,7414	0,7397	0,738
59,1	0,749	0,7473	0,7455	0,7438	0,7421	0,7404	0,7387	0,737
59,2	0,748	0,7463	0,7445	0,7428	0,7411	0,7394	0,7377	0,736
59,3	0,747	0,7453	0,7435	0,7418	0,7401	0,7384	0,7367	0,735
59,4	0,746	0,7443	0,7425	0,7408	0,7391	0,7374	0,7357	0,734
59,5	0,745	0,7433	0,7415	0,7398	0,7381	0,7364	0,7347	0,733
59,6	0,744	0,7423	0,7405	0,7388	0,7371	0,7354	0,7337	0,732
59,7	0,743	0,7413	0,7395	0,7378	0,7361	0,7344	0,7327	0,731
59,8	0,742	0,7403	0,7385	0,7368	0,7351	0,7334	0,7317	0,73
59,9	0,741	0,7393	0,7375	0,7358	0,7341	0,7324	0,7307	0,729
60	0,74	0,7383	0,7366	0,7348	0,7331	0,7314	0,7297	0,728
60,1	0,739	0,7373	0,7356	0,7338	0,7321	0,7304	0,7287	0,727
60,2	0,738	0,7363	0,7346	0,7328	0,7311	0,7294	0,7277	0,726
60,3	0,7371	0,7353	0,7336	0,7318	0,7301	0,7284	0,7267	0,7251
60,4	0,7361	0,7343	0,7326	0,7308	0,7291	0,7274	0,7257	0,7241

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
60,5	1,394	1,3706	1,3492	1,3295	1,3113	1,2943	1,2784	1,2635	1,2494	1,2361	1,2234	1,2114	1,1999	1,189	1,1785	1,1684	1,1587	1,1494	1,1404
60,6	1,3928	1,3694	1,348	1,3284	1,3101	1,2932	1,2773	1,2623	1,2483	1,2349	1,2223	1,2103	1,1988	1,1879	1,1774	1,1673	1,1576	1,1483	1,1393
60,7	1,3917	1,3682	1,3469	1,3272	1,309	1,292	1,2761	1,2612	1,2471	1,2338	1,2212	1,2092	1,1977	1,1867	1,1762	1,1662	1,1565	1,1472	1,1382
60,8	1,3905	1,3671	1,3457	1,326	1,3078	1,2908	1,275	1,2601	1,246	1,2327	1,22	1,208	1,1966	1,1856	1,1751	1,1651	1,1554	1,1461	1,1371
60,9	1,3893	1,3659	1,3445	1,3249	1,3067	1,2897	1,2738	1,2589	1,2448	1,2315	1,2189	1,2069	1,1954	1,1845	1,174	1,1639	1,1543	1,145	1,136
61	1,3881	1,3647	1,3434	1,3237	1,3055	1,2885	1,2727	1,2578	1,2437	1,2304	1,2178	1,2058	1,1943	1,1834	1,1729	1,1628	1,1532	1,1439	1,1349
61,1	1,3869	1,3635	1,3422	1,3225	1,3043	1,2874	1,2715	1,2566	1,2426	1,2293	1,2167	1,2046	1,1932	1,1823	1,1718	1,1617	1,1521	1,1428	1,1338
61,2	1,3858	1,3624	1,341	1,3214	1,3032	1,2862	1,2704	1,2555	1,2414	1,2281	1,2155	1,2035	1,1921	1,1811	1,1707	1,1606	1,1509	1,1416	1,1327
61,3	1,3846	1,3612	1,3399	1,3202	1,302	1,2851	1,2692	1,2543	1,2403	1,227	1,2144	1,2024	1,191	1,18	1,1695	1,1595	1,1498	1,1405	1,1316
61,4	1,3834	1,36	1,3387	1,3191	1,3009	1,2839	1,2681	1,2532	1,2392	1,2259	1,2133	1,2013	1,1898	1,1789	1,1684	1,1584	1,1487	1,1394	1,1305
61,5	1,3822	1,3589	1,3375	1,3179	1,2997	1,2828	1,267	1,2521	1,238	1,2247	1,2121	1,2001	1,1887	1,1778	1,1673	1,1573	1,1476	1,1383	1,1294
61,6	1,381	1,3577	1,3364	1,3167	1,2986	1,2816	1,2658	1,2509	1,2369	1,2236	1,211	1,199	1,1876	1,1767	1,1662	1,1562	1,1465	1,1372	1,1283
61,7	1,3799	1,3565	1,3352	1,3156	1,2974	1,2805	1,2647	1,2498	1,2358	1,2225	1,2099	1,1979	1,1865	1,1755	1,1651	1,155	1,1454	1,1361	1,1272
61,8	1,3787	1,3554	1,334	1,3144	1,2963	1,2793	1,2635	1,2486	1,2346	1,2214	1,2088	1,1968	1,1853	1,1744	1,164	1,1539	1,1443	1,135	1,1261
61,9	1,3775	1,3542	1,3329	1,3133	1,2951	1,2782	1,2624	1,2475	1,2335	1,2202	1,2076	1,1957	1,1842	1,1733	1,1629	1,1528	1,1432	1,1339	1,125
62	1,3763	1,353	1,3317	1,3121	1,294	1,2771	1,2612	1,2464	1,2324	1,2191	1,2065	1,1945	1,1831	1,1722	1,1617	1,1517	1,1421	1,1328	1,1239
62,1	1,3752	1,3518	1,3306	1,311	1,2928	1,2759	1,2601	1,2452	1,2312	1,218	1,2054	1,1934	1,182	1,1711	1,1606	1,1506	1,141	1,1317	1,1228
62,2	1,374	1,3507	1,3294	1,3098	1,2917	1,2748	1,259	1,2441	1,2301	1,2168	1,2043	1,1923	1,1809	1,17	1,1595	1,1495	1,1399	1,1306	1,1217
62,3	1,3728	1,3495	1,3282	1,3086	1,2905	1,2736	1,2578	1,243	1,229	1,2157	1,2031	1,1912	1,1798	1,1688	1,1584	1,1484	1,1388	1,1295	1,1205
62,4	1,3716	1,3483	1,3271	1,3075	1,2894	1,2725	1,2567	1,2418	1,2278	1,2146	1,202	1,19	1,1786	1,1677	1,1573	1,1473	1,1376	1,1284	1,1194
62,5	1,3705	1,3472	1,3259	1,3063	1,2882	1,2713	1,2555	1,2407	1,2267	1,2135	1,2009	1,1889	1,1775	1,1666	1,1562	1,1462	1,1365	1,1273	1,1183
62,6	1,3693	1,346	1,3248	1,3052	1,2871	1,2702	1,2544	1,2396	1,2256	1,2123	1,1998	1,1878	1,1764	1,1655	1,1551	1,1451	1,1354	1,1262	1,1172
62,7	1,3681	1,3448	1,3236	1,304	1,2859	1,269	1,2533	1,2384	1,2244	1,2112	1,1986	1,1867	1,1753	1,1644	1,154	1,1439	1,1343	1,1251	1,1161
62,8	1,367	1,3437	1,3224	1,3029	1,2848	1,2679	1,2521	1,2373	1,2233	1,2101	1,1975	1,1856	1,1742	1,1633	1,1528	1,1428	1,1332	1,124	1,115
62,9	1,3658	1,3425	1,3213	1,3017	1,2836	1,2668	1,251	1,2362	1,2222	1,2089	1,1964	1,1844	1,1731	1,1622	1,1517	1,1417	1,1321	1,1229	1,1139
63	1,3646	1,3414	1,3201	1,3006	1,2825	1,2656	1,2498	1,235	1,221	1,2078	1,1953	1,1833	1,1719	1,1611	1,1506	1,1406	1,131	1,1218	1,1128
63,1	1,3634	1,3402	1,319	1,2994	1,2813	1,2645	1,2487	1,2339	1,2199	1,2067	1,1941	1,1822	1,1708	1,1599	1,1495	1,1395	1,1299	1,1207	1,1117
63,2	1,3623	1,339	1,3178	1,2983	1,2802	1,2633	1,2476	1,2328	1,2188	1,2056	1,193	1,1811	1,1697	1,1588	1,1484	1,1384	1,1288	1,1196	1,1107
63,3	1,3611	1,3379	1,3167	1,2971	1,279	1,2622	1,2464	1,2316	1,2177	1,2044	1,1919	1,18	1,1686	1,1577	1,1473	1,1373	1,1277	1,1185	1,1096
63,4	1,3599	1,3367	1,3155	1,296	1,2779	1,2611	1,2453	1,2305	1,2165	1,2033	1,1908	1,1789	1,1675	1,1566	1,1462	1,1362	1,1266	1,1174	1,1085
63,5	1,3588	1,3355	1,3143	1,2948	1,2767	1,2599	1,2442	1,2294	1,2154	1,2022	1,1897	1,1777	1,1664	1,1555	1,1451	1,1351	1,1255	1,1163	1,1074
63,6	1,3576	1,3344	1,3132	1,2937	1,2756	1,2588	1,243	1,2282	1,2143	1,2011	1,1885	1,1766	1,1652	1,1544	1,144	1,134	1,1244	1,1152	1,1063
63,7	1,3564	1,3332	1,312	1,2925	1,2745	1,2576	1,2419	1,2271	1,2132	1,1999	1,1874	1,1755	1,1641	1,1533	1,1429	1,1329	1,1233	1,1141	1,1052
63,8	1,3553	1,3321	1,3109	1,2914	1,2733	1,2565	1,2408	1,226	1,212	1,1988	1,1863	1,1744	1,163	1,1522	1,1418	1,1318	1,1222	1,113	1,1041
63,9	1,3541	1,3309	1,3097	1,2902	1,2722	1,2554	1,2396	1,2248	1,2109	1,1977	1,1852	1,1733	1,1619	1,1511	1,1407	1,1307	1,1211	1,1119	1,103

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
60,5	1,1318	1,1234	1,1153	1,1074	1,0998	1,0925	1,0853	1,0783	1,0715	1,0649	1,0585	1,0523	1,0461	1,0402	1,0343	1,0287	1,0231	1,0176	1,0123
60,6	1,1307	1,1223	1,1142	1,1063	1,0987	1,0914	1,0842	1,0772	1,0705	1,0639	1,0574	1,0512	1,0451	1,0391	1,0333	1,0276	1,022	1,0166	1,0112
60,7	1,1296	1,1212	1,1131	1,1052	1,0976	1,0903	1,0831	1,0761	1,0694	1,0628	1,0564	1,0501	1,044	1,038	1,0322	1,0265	1,0209	1,0155	1,0102
60,8	1,1284	1,1201	1,112	1,1042	1,0965	1,0892	1,082	1,0751	1,0683	1,0617	1,0553	1,049	1,0429	1,0369	1,0311	1,0254	1,0199	1,0144	1,0091
60,9	1,1273	1,119	1,1109	1,1031	1,0955	1,0881	1,0809	1,074	1,0672	1,0606	1,0542	1,0479	1,0418	1,0359	1,03	1,0244	1,0188	1,0134	1,008
61	1,1262	1,1179	1,1098	1,102	1,0944	1,087	1,0798	1,0729	1,0661	1,0595	1,0531	1,0468	1,0407	1,0348	1,029	1,0233	1,0177	1,0123	1,007
61,1	1,1251	1,1168	1,1087	1,1009	1,0933	1,0859	1,0787	1,0718	1,065	1,0584	1,052	1,0458	1,0397	1,0337	1,0279	1,0222	1,0166	1,0112	1,0059
61,2	1,124	1,1157	1,1076	1,0998	1,0922	1,0848	1,0777	1,0707	1,0639	1,0574	1,0509	1,0447	1,0386	1,0326	1,0268	1,0211	1,0156	1,0101	1,0048
61,3	1,1229	1,1146	1,1065	1,0987	1,0911	1,0837	1,0766	1,0696	1,0629	1,0563	1,0499	1,0436	1,0375	1,0316	1,0257	1,0201	1,0145	1,0091	1,0038
61,4	1,1218	1,1135	1,1054	1,0976	1,09	1,0826	1,0755	1,0685	1,0618	1,0552	1,0488	1,0425	1,0364	1,0305	1,0247	1,019	1,0134	1,008	1,0027
61,5	1,1207	1,1124	1,1043	1,0965	1,0889	1,0815	1,0744	1,0674	1,0607	1,0541	1,0477	1,0414	1,0353	1,0294	1,0236	1,0179	1,0124	1,0069	1,0016
61,6	1,1196	1,1113	1,1032	1,0954	1,0878	1,0804	1,0733	1,0664	1,0596	1,053	1,0466	1,0404	1,0343	1,0283	1,0225	1,0168	1,0113	1,0059	1,0005
61,7	1,1185	1,1102	1,1021	1,0943	1,0867	1,0794	1,0722	1,0653	1,0585	1,0519	1,0455	1,0393	1,0332	1,0272	1,0214	1,0158	1,0102	1,0048	0,9995
61,8	1,1174	1,1091	1,101	1,0932	1,0856	1,0783	1,0711	1,0642	1,0574	1,0509	1,0445	1,0382	1,0321	1,0262	1,0204	1,0147	1,0091	1,0037	0,9984
61,9	1,1163	1,108	1,0999	1,0921	1,0845	1,0772	1,07	1,0631	1,0563	1,0498	1,0434	1,0371	1,031	1,0251	1,0193	1,0136	1,0081	1,0027	0,9973
62	1,1152	1,1069	1,0988	1,091	1,0834	1,0761	1,0689	1,062	1,0553	1,0487	1,0423	1,0361	1,03	1,024	1,0182	1,0126	1,007	1,0016	0,9963
62,1	1,1141	1,1058	1,0977	1,0899	1,0823	1,075	1,0679	1,0609	1,0542	1,0476	1,0412	1,035	1,0289	1,0229	1,0171	1,0115	1,0059	1,0005	0,9952
62,2	1,113	1,1047	1,0966	1,0888	1,0813	1,0739	1,0668	1,0598	1,0531	1,0465	1,0401	1,0339	1,0278	1,0219	1,0161	1,0104	1,0049	0,9994	0,9941
62,3	1,1119	1,1036	1,0955	1,0877	1,0802	1,0728	1,0657	1,0588	1,052	1,0454	1,0391	1,0328	1,0267	1,0208	1,015	1,0093	1,0038	0,9984	0,9931
62,4	1,1108	1,1025	1,0944	1,0866	1,0791	1,0717	1,0646	1,0577	1,0509	1,0444	1,038	1,0317	1,0257	1,0197	1,0139	1,0083	1,0027	0,9973	0,992
62,5	1,1097	1,1014	1,0933	1,0855	1,078	1,0706	1,0635	1,0566	1,0498	1,0433	1,0369	1,0307	1,0246	1,0187	1,0129	1,0072	1,0017	0,9962	0,9909
62,6	1,1086	1,1003	1,0923	1,0845	1,0769	1,0696	1,0624	1,0555	1,0488	1,0422	1,0358	1,0296	1,0235	1,0176	1,0118	1,0061	1,0006	0,9952	0,9899
62,7	1,1075	1,0992	1,0912	1,0834	1,0758	1,0685	1,0613	1,0544	1,0477	1,0411	1,0347	1,0285	1,0224	1,0165	1,0107	1,0051	0,9995	0,9941	0,9888
62,8	1,1064	1,0981	1,0901	1,0823	1,0747	1,0674	1,0603	1,0533	1,0466	1,04	1,0337	1,0274	1,0214	1,0154	1,0096	1,004	0,9985	0,993	0,9877
62,9	1,1053	1,097	1,089	1,0812	1,0736	1,0663	1,0592	1,0523	1,0455	1,039	1,0326	1,0264	1,0203	1,0144	1,0086	1,0029	0,9974	0,992	0,9867
63	1,1042	1,0959	1,0879	1,0801	1,0725	1,0652	1,0581	1,0512	1,0444	1,0379	1,0315	1,0253	1,0192	1,0133	1,0075	1,0018	0,9963	0,9909	0,9856
63,1	1,1031	1,0948	1,0868	1,079	1,0715	1,0641	1,057	1,0501	1,0434	1,0368	1,0304	1,0242	1,0181	1,0122	1,0064	1,0008	0,9953	0,9898	0,9846
63,2	1,102	1,0937	1,0857	1,0779	1,0704	1,063	1,0559	1,049	1,0423	1,0357	1,0294	1,0231	1,0171	1,0111	1,0054	0,9997	0,9942	0,9888	0,9835
63,3	1,101	1,0926	1,0846	1,0768	1,0693	1,062	1,0548	1,0479	1,0412	1,0347	1,0283	1,0221	1,016	1,0101	1,0043	0,9986	0,9931	0,9877	0,9824
63,4	1,0999	1,0915	1,0835	1,0757	1,0682	1,0609	1,0538	1,0468	1,0401	1,0336	1,0272	1,021	1,0149	1,009	1,0032	0,9976	0,9921	0,9866	0,9814
63,5	1,0988	1,0905	1,0824	1,0746	1,0671	1,0598	1,0527	1,0458	1,039	1,0325	1,0261	1,0199	1,0138	1,0079	1,0022	0,9965	0,991	0,9856	0,9803
63,6	1,0977	1,0894	1,0813	1,0736	1,066	1,0587	1,0516	1,0447	1,038	1,0314	1,025	1,0188	1,0128	1,0069	1,0011	0,9954	0,9899	0,9845	0,9792
63,7	1,0966	1,0883	1,0802	1,0725	1,0649	1,0576	1,0505	1,0436	1,0369	1,0303	1,024	1,0178	1,0117	1,0058	1	0,9944	0,9889	0,9835	0,9782
63,8	1,0955	1,0872	1,0791	1,0714	1,0638	1,0565	1,0494	1,0425	1,0358	1,0293	1,0229	1,0167	1,0106	1,0047	0,9989	0,9933	0,9878	0,9824	0,9771
63,9	1,0944	1,0861	1,0781	1,0703	1,0628	1,0554	1,0483	1,0414	1,0347	1,0282	1,0218	1,0156	1,0096	1,0036	0,9979	0,9922	0,9867	0,9813	0,976

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality *α*)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
60,5	1,0071	1,002	0,997	0,9921	0,9873	0,9825	0,9779	0,9733	0,9689	0,9645	0,9602	0,9559	0,9517	0,9476	0,9436	0,9396	0,9357	0,9319	0,9281
60,6	1,006	1,0009	0,9959	0,991	0,9862	0,9815	0,9768	0,9723	0,9678	0,9634	0,9591	0,9549	0,9507	0,9466	0,9425	0,9386	0,9347	0,9308	0,927
60,7	1,005	0,9998	0,9948	0,9899	0,9851	0,9804	0,9758	0,9712	0,9667	0,9624	0,958	0,9538	0,9496	0,9455	0,9415	0,9375	0,9336	0,9298	0,926
60,8	1,0039	0,9988	0,9938	0,9889	0,9841	0,9793	0,9747	0,9702	0,9657	0,9613	0,957	0,9527	0,9486	0,9445	0,9404	0,9365	0,9326	0,9287	0,9249
60,9	1,0028	0,9977	0,9927	0,9878	0,983	0,9783	0,9736	0,9691	0,9646	0,9602	0,9559	0,9517	0,9475	0,9434	0,9394	0,9354	0,9315	0,9277	0,9239
61	1,0018	0,9966	0,9916	0,9867	0,9819	0,9772	0,9726	0,968	0,9636	0,9592	0,9549	0,9506	0,9465	0,9424	0,9383	0,9344	0,9305	0,9266	0,9228
61,1	1,0007	0,9956	0,9906	0,9857	0,9809	0,9762	0,9715	0,967	0,9625	0,9581	0,9538	0,9496	0,9454	0,9413	0,9373	0,9333	0,9294	0,9256	0,9218
61,2	0,9996	0,9945	0,9895	0,9846	0,9798	0,9751	0,9705	0,9659	0,9615	0,9571	0,9528	0,9485	0,9444	0,9403	0,9362	0,9323	0,9284	0,9245	0,9207
61,3	0,9985	0,9934	0,9884	0,9835	0,9787	0,974	0,9694	0,9649	0,9604	0,956	0,9517	0,9475	0,9433	0,9392	0,9352	0,9312	0,9273	0,9235	0,9197
61,4	0,9975	0,9924	0,9874	0,9825	0,9777	0,973	0,9683	0,9638	0,9593	0,955	0,9507	0,9464	0,9423	0,9382	0,9341	0,9302	0,9263	0,9224	0,9186
61,5	0,9964	0,9913	0,9863	0,9814	0,9766	0,9719	0,9673	0,9627	0,9583	0,9539	0,9496	0,9454	0,9412	0,9371	0,9331	0,9291	0,9252	0,9214	0,9176
61,6	0,9953	0,9903	0,9853	0,9804	0,9756	0,9709	0,9662	0,9617	0,9572	0,9529	0,9485	0,9443	0,9402	0,9361	0,932	0,9281	0,9242	0,9203	0,9166
61,7	0,9943	0,9892	0,9842	0,9793	0,9745	0,9698	0,9652	0,9606	0,9562	0,9518	0,9475	0,9433	0,9391	0,935	0,931	0,927	0,9231	0,9193	0,9155
61,8	0,9932	0,9881	0,9831	0,9782	0,9734	0,9687	0,9641	0,9596	0,9551	0,9507	0,9464	0,9422	0,9381	0,934	0,9299	0,926	0,9221	0,9182	0,9145
61,9	0,9921	0,9871	0,9821	0,9772	0,9724	0,9677	0,9631	0,9585	0,9541	0,9497	0,9454	0,9412	0,937	0,9329	0,9289	0,9249	0,921	0,9172	0,9134
62	0,9911	0,986	0,981	0,9761	0,9713	0,9666	0,962	0,9575	0,953	0,9486	0,9443	0,9401	0,936	0,9319	0,9278	0,9239	0,92	0,9161	0,9124
62,1	0,99	0,9849	0,9799	0,9751	0,9703	0,9656	0,9609	0,9564	0,952	0,9476	0,9433	0,9391	0,9349	0,9308	0,9268	0,9228	0,9189	0,9151	0,9113
62,2	0,989	0,9839	0,9789	0,974	0,9692	0,9645	0,9599	0,9553	0,9509	0,9465	0,9422	0,938	0,9338	0,9298	0,9257	0,9218	0,9179	0,9141	0,9103
62,3	0,9879	0,9828	0,9778	0,9729	0,9681	0,9634	0,9588	0,9543	0,9498	0,9455	0,9412	0,937	0,9328	0,9287	0,9247	0,9207	0,9168	0,913	0,9092
62,4	0,9868	0,9817	0,9768	0,9719	0,9671	0,9624	0,9578	0,9532	0,9488	0,9444	0,9401	0,9359	0,9318	0,9277	0,9236	0,9197	0,9158	0,912	0,9082
62,5	0,9858	0,9807	0,9757	0,9708	0,966	0,9613	0,9567	0,9522	0,9477	0,9434	0,9391	0,9349	0,9307	0,9266	0,9226	0,9186	0,9148	0,9109	0,9072
62,6	0,9847	0,9796	0,9746	0,9698	0,965	0,9603	0,9557	0,9511	0,9467	0,9423	0,938	0,9338	0,9297	0,9256	0,9216	0,9176	0,9137	0,9099	0,9061
62,7	0,9836	0,9785	0,9736	0,9687	0,9639	0,9592	0,9546	0,9501	0,9456	0,9413	0,937	0,9328	0,9286	0,9245	0,9205	0,9166	0,9127	0,9088	0,9051
62,8	0,9826	0,9775	0,9725	0,9676	0,9628	0,9581	0,9535	0,949	0,9446	0,9402	0,9359	0,9317	0,9276	0,9235	0,9195	0,9155	0,9116	0,9078	0,904
62,9	0,9815	0,9764	0,9714	0,9666	0,9618	0,9571	0,9525	0,948	0,9435	0,9392	0,9349	0,9307	0,9265	0,9224	0,9184	0,9145	0,9106	0,9067	0,903
63	0,9804	0,9754	0,9704	0,9655	0,9607	0,956	0,9514	0,9469	0,9425	0,9381	0,9338	0,9296	0,9255	0,9214	0,9174	0,9134	0,9095	0,9057	0,9019
63,1	0,9794	0,9743	0,9693	0,9645	0,9597	0,955	0,9504	0,9459	0,9414	0,9371	0,9328	0,9286	0,9244	0,9203	0,9163	0,9124	0,9085	0,9047	0,9009
63,2	0,9783	0,9732	0,9683	0,9634	0,9586	0,9539	0,9493	0,9448	0,9404	0,936	0,9317	0,9275	0,9234	0,9193	0,9153	0,9113	0,9074	0,9036	0,8999
63,3	0,9772	0,9722	0,9672	0,9623	0,9576	0,9529	0,9483	0,9437	0,9393	0,9349	0,9307	0,9265	0,9223	0,9182	0,9142	0,9103	0,9064	0,9026	0,8988
63,4	0,9762	0,9711	0,9661	0,9613	0,9565	0,9518	0,9472	0,9427	0,9383	0,9339	0,9296	0,9254	0,9213	0,9172	0,9132	0,9092	0,9054	0,9015	0,8978
63,5	0,9751	0,9701	0,9651	0,9602	0,9554	0,9508	0,9462	0,9416	0,9372	0,9328	0,9286	0,9244	0,9202	0,9161	0,9121	0,9082	0,9043	0,9005	0,8967
63,6	0,9741	0,969	0,964	0,9592	0,9544	0,9497	0,9451	0,9406	0,9361	0,9318	0,9275	0,9233	0,9192	0,9151	0,9111	0,9071	0,9033	0,8994	0,8957
63,7	0,973	0,9679	0,963	0,9581	0,9533	0,9486	0,944	0,9395	0,9351	0,9307	0,9265	0,9223	0,9181	0,914	0,91	0,9061	0,9022	0,8984	0,8946
63,8	0,9719	0,9669	0,9619	0,957	0,9523	0,9476	0,943	0,9385	0,934	0,9297	0,9254	0,9212	0,9171	0,913	0,909	0,9051	0,9012	0,8974	0,8936
63,9	0,9709	0,9658	0,9608	0,956	0,9512	0,9465	0,9419	0,9374	0,933	0,9286	0,9244	0,9202	0,916	0,912	0,908	0,904	0,9001	0,8963	0,8926

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
60,5	0,9243	0,9206	0,917	0,9134	0,9099	0,9064	0,903	0,8996	0,8963	0,893	0,8897	0,8865	0,8833	0,8802	0,8771	0,8741	0,871	0,8681	0,8651
60,6	0,9233	0,9196	0,916	0,9124	0,9089	0,9054	0,902	0,8986	0,8952	0,8919	0,8887	0,8855	0,8823	0,8792	0,8761	0,873	0,87	0,867	0,8641
60,7	0,9222	0,9185	0,9149	0,9113	0,9078	0,9043	0,9009	0,8975	0,8942	0,8909	0,8876	0,8844	0,8813	0,8781	0,875	0,872	0,869	0,866	0,863
60,8	0,9212	0,9175	0,9139	0,9103	0,9068	0,9033	0,8999	0,8965	0,8932	0,8899	0,8866	0,8834	0,8802	0,8771	0,874	0,871	0,8679	0,865	0,862
60,9	0,9201	0,9165	0,9128	0,9093	0,9057	0,9023	0,8988	0,8955	0,8921	0,8888	0,8856	0,8824	0,8792	0,8761	0,873	0,8699	0,8669	0,8639	0,861
61	0,9191	0,9154	0,9118	0,9082	0,9047	0,9012	0,8978	0,8944	0,8911	0,8878	0,8845	0,8813	0,8782	0,875	0,8719	0,8689	0,8659	0,8629	0,86
61,1	0,918	0,9144	0,9107	0,9072	0,9037	0,9002	0,8968	0,8934	0,89	0,8867	0,8835	0,8803	0,8771	0,874	0,8709	0,8679	0,8648	0,8619	0,8589
61,2	0,917	0,9133	0,9097	0,9061	0,9026	0,8991	0,8957	0,8923	0,889	0,8857	0,8825	0,8793	0,8761	0,873	0,8699	0,8668	0,8638	0,8608	0,8579
61,3	0,916	0,9123	0,9087	0,9051	0,9016	0,8981	0,8947	0,8913	0,888	0,8847	0,8814	0,8782	0,8751	0,8719	0,8688	0,8658	0,8628	0,8598	0,8569
61,4	0,9149	0,9112	0,9076	0,904	0,9005	0,8971	0,8936	0,8903	0,8869	0,8836	0,8804	0,8772	0,874	0,8709	0,8678	0,8648	0,8618	0,8588	0,8558
61,5	0,9139	0,9102	0,9066	0,903	0,8995	0,896	0,8926	0,8892	0,8859	0,8826	0,8794	0,8762	0,873	0,8699	0,8668	0,8637	0,8607	0,8577	0,8548
61,6	0,9128	0,9092	0,9055	0,902	0,8984	0,895	0,8916	0,8882	0,8849	0,8816	0,8783	0,8751	0,872	0,8688	0,8658	0,8627	0,8597	0,8567	0,8538
61,7	0,9118	0,9081	0,9045	0,9009	0,8974	0,8939	0,8905	0,8871	0,8838	0,8805	0,8773	0,8741	0,8709	0,8678	0,8647	0,8617	0,8587	0,8557	0,8527
61,8	0,9107	0,9071	0,9034	0,8999	0,8964	0,8929	0,8895	0,8861	0,8828	0,8795	0,8763	0,8731	0,8699	0,8668	0,8637	0,8606	0,8576	0,8547	0,8517
61,9	0,9097	0,906	0,9024	0,8988	0,8953	0,8919	0,8884	0,8851	0,8817	0,8785	0,8752	0,872	0,8689	0,8657	0,8627	0,8596	0,8566	0,8536	0,8507
62	0,9086	0,905	0,9014	0,8978	0,8943	0,8908	0,8874	0,884	0,8807	0,8774	0,8742	0,871	0,8678	0,8647	0,8616	0,8586	0,8556	0,8526	0,8497
62,1	0,9076	0,9039	0,9003	0,8968	0,8932	0,8898	0,8864	0,883	0,8797	0,8764	0,8731	0,87	0,8668	0,8637	0,8606	0,8576	0,8545	0,8516	0,8486
62,2	0,9066	0,9029	0,8993	0,8957	0,8922	0,8887	0,8853	0,882	0,8786	0,8754	0,8721	0,8689	0,8658	0,8626	0,8596	0,8565	0,8535	0,8505	0,8476
62,3	0,9055	0,9019	0,8982	0,8947	0,8912	0,8877	0,8843	0,8809	0,8776	0,8743	0,8711	0,8679	0,8647	0,8616	0,8585	0,8555	0,8525	0,8495	0,8466
62,4	0,9045	0,9008	0,8972	0,8936	0,8901	0,8867	0,8833	0,8799	0,8766	0,8733	0,87	0,8669	0,8637	0,8606	0,8575	0,8545	0,8515	0,8485	0,8456
62,5	0,9034	0,8998	0,8962	0,8926	0,8891	0,8856	0,8822	0,8789	0,8755	0,8723	0,869	0,8658	0,8627	0,8596	0,8565	0,8534	0,8504	0,8475	0,8445
62,6	0,9024	0,8987	0,8951	0,8916	0,8881	0,8846	0,8812	0,8778	0,8745	0,8712	0,868	0,8648	0,8616	0,8585	0,8554	0,8524	0,8494	0,8464	0,8435
62,7	0,9013	0,8977	0,8941	0,8905	0,887	0,8836	0,8801	0,8768	0,8735	0,8702	0,8669	0,8638	0,8606	0,8575	0,8544	0,8514	0,8484	0,8454	0,8425
62,8	0,9003	0,8966	0,893	0,8895	0,886	0,8825	0,8791	0,8757	0,8724	0,8691	0,8659	0,8627	0,8596	0,8565	0,8534	0,8503	0,8473	0,8444	0,8415
62,9	0,8993	0,8956	0,892	0,8884	0,8849	0,8815	0,8781	0,8747	0,8714	0,8681	0,8649	0,8617	0,8585	0,8554	0,8524	0,8493	0,8463	0,8434	0,8404
63	0,8982	0,8946	0,891	0,8874	0,8839	0,8804	0,877	0,8737	0,8704	0,8671	0,8639	0,8607	0,8575	0,8544	0,8513	0,8483	0,8453	0,8423	0,8394
63,1	0,8972	0,8935	0,8899	0,8864	0,8829	0,8794	0,876	0,8726	0,8693	0,866	0,8628	0,8596	0,8565	0,8534	0,8503	0,8473	0,8443	0,8413	0,8384
63,2	0,8961	0,8925	0,8889	0,8853	0,8818	0,8784	0,875	0,8716	0,8683	0,865	0,8618	0,8586	0,8554	0,8523	0,8493	0,8462	0,8432	0,8403	0,8373
63,3	0,8951	0,8914	0,8878	0,8843	0,8808	0,8773	0,8739	0,8706	0,8673	0,864	0,8608	0,8576	0,8544	0,8513	0,8482	0,8452	0,8422	0,8392	0,8363
63,4	0,8941	0,8904	0,8868	0,8833	0,8798	0,8763	0,8729	0,8695	0,8662	0,863	0,8597	0,8565	0,8534	0,8503	0,8472	0,8442	0,8412	0,8382	0,8353
63,5	0,893	0,8894	0,8858	0,8822	0,8787	0,8753	0,8719	0,8685	0,8652	0,8619	0,8587	0,8555	0,8524	0,8492	0,8462	0,8431	0,8402	0,8372	0,8343
63,6	0,892	0,8883	0,8847	0,8812	0,8777	0,8742	0,8708	0,8675	0,8642	0,8609	0,8577	0,8545	0,8513	0,8482	0,8451	0,8421	0,8391	0,8362	0,8332
63,7	0,8909	0,8873	0,8837	0,8801	0,8766	0,8732	0,8698	0,8664	0,8631	0,8599	0,8566	0,8534	0,8503	0,8472	0,8441	0,8411	0,8381	0,8351	0,8322
63,8	0,8899	0,8862	0,8826	0,8791	0,8756	0,8722	0,8688	0,8654	0,8621	0,8588	0,8556	0,8524	0,8493	0,8462	0,8431	0,8401	0,8371	0,8341	0,8312
63,9	0,8889	0,8852	0,8816	0,8781	0,8746	0,8711	0,8677	0,8644	0,8611	0,8578	0,8546	0,8514	0,8482	0,8451	0,8421	0,839	0,836	0,8331	0,8302

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
60,5	0,8622	0,8593	0,8565	0,8536	0,8509	0,8481	0,8454	0,8427	0,84	0,8374	0,8348	0,8322	0,8296	0,8271	0,8246	0,8221	0,8196	0,8172	0,8148
60,6	0,8612	0,8583	0,8554	0,8526	0,8498	0,8471	0,8443	0,8417	0,839	0,8363	0,8337	0,8311	0,8286	0,8261	0,8235	0,8211	0,8186	0,8162	0,8138
60,7	0,8601	0,8572	0,8544	0,8516	0,8488	0,846	0,8433	0,8406	0,838	0,8353	0,8327	0,8301	0,8276	0,825	0,8225	0,82	0,8176	0,8152	0,8127
60,8	0,8591	0,8562	0,8534	0,8506	0,8478	0,845	0,8423	0,8396	0,8369	0,8343	0,8317	0,8291	0,8265	0,824	0,8215	0,819	0,8166	0,8141	0,8117
60,9	0,8581	0,8552	0,8523	0,8495	0,8467	0,844	0,8413	0,8386	0,8359	0,8333	0,8307	0,8281	0,8255	0,823	0,8205	0,818	0,8156	0,8131	0,8107
61	0,857	0,8542	0,8513	0,8485	0,8457	0,843	0,8402	0,8376	0,8349	0,8323	0,8296	0,8271	0,8245	0,822	0,8195	0,817	0,8145	0,8121	0,8097
61,1	0,856	0,8531	0,8503	0,8475	0,8447	0,8419	0,8392	0,8365	0,8339	0,8312	0,8286	0,826	0,8235	0,821	0,8185	0,816	0,8135	0,8111	0,8087
61,2	0,855	0,8521	0,8493	0,8465	0,8437	0,8409	0,8382	0,8355	0,8328	0,8302	0,8276	0,825	0,8225	0,8199	0,8174	0,815	0,8125	0,8101	0,8077
61,3	0,854	0,8511	0,8482	0,8454	0,8426	0,8399	0,8372	0,8345	0,8318	0,8292	0,8266	0,824	0,8214	0,8189	0,8164	0,8139	0,8115	0,8091	0,8066
61,4	0,8529	0,8501	0,8472	0,8444	0,8416	0,8389	0,8362	0,8335	0,8308	0,8282	0,8256	0,823	0,8204	0,8179	0,8154	0,8129	0,8105	0,808	0,8056
61,5	0,8519	0,849	0,8462	0,8434	0,8406	0,8378	0,8351	0,8324	0,8298	0,8271	0,8245	0,822	0,8194	0,8169	0,8144	0,8119	0,8094	0,807	0,8046
61,6	0,8509	0,848	0,8452	0,8423	0,8396	0,8368	0,8341	0,8314	0,8288	0,8261	0,8235	0,8209	0,8184	0,8159	0,8134	0,8109	0,8084	0,806	0,8036
61,7	0,8498	0,847	0,8441	0,8413	0,8385	0,8358	0,8331	0,8304	0,8277	0,8251	0,8225	0,8199	0,8174	0,8148	0,8123	0,8099	0,8074	0,805	0,8026
61,8	0,8488	0,8459	0,8431	0,8403	0,8375	0,8348	0,8321	0,8294	0,8267	0,8241	0,8215	0,8189	0,8164	0,8138	0,8113	0,8089	0,8064	0,804	0,8016
61,9	0,8478	0,8449	0,8421	0,8393	0,8365	0,8338	0,831	0,8284	0,8257	0,8231	0,8205	0,8179	0,8153	0,8128	0,8103	0,8078	0,8054	0,803	0,8006
62	0,8468	0,8439	0,8411	0,8382	0,8355	0,8327	0,83	0,8273	0,8247	0,822	0,8194	0,8169	0,8143	0,8118	0,8093	0,8068	0,8044	0,8019	0,7995
62,1	0,8457	0,8429	0,84	0,8372	0,8345	0,8317	0,829	0,8263	0,8237	0,821	0,8184	0,8158	0,8133	0,8108	0,8083	0,8058	0,8034	0,8009	0,7985
62,2	0,8447	0,8418	0,839	0,8362	0,8334	0,8307	0,828	0,8253	0,8226	0,82	0,8174	0,8148	0,8123	0,8098	0,8073	0,8048	0,8023	0,7999	0,7975
62,3	0,8437	0,8408	0,838	0,8352	0,8324	0,8297	0,827	0,8243	0,8216	0,819	0,8164	0,8138	0,8113	0,8087	0,8062	0,8038	0,8013	0,7989	0,7965
62,4	0,8427	0,8398	0,837	0,8342	0,8314	0,8286	0,8259	0,8232	0,8206	0,818	0,8154	0,8128	0,8102	0,8077	0,8052	0,8028	0,8003	0,7979	0,7955
62,5	0,8416	0,8388	0,8359	0,8331	0,8304	0,8276	0,8249	0,8222	0,8196	0,8169	0,8143	0,8118	0,8092	0,8067	0,8042	0,8017	0,7993	0,7969	0,7945
62,6	0,8406	0,8377	0,8349	0,8321	0,8293	0,8266	0,8239	0,8212	0,8186	0,8159	0,8133	0,8108	0,8082	0,8057	0,8032	0,8007	0,7983	0,7959	0,7935
62,7	0,8396	0,8367	0,8339	0,8311	0,8283	0,8256	0,8229	0,8202	0,8175	0,8149	0,8123	0,8097	0,8072	0,8047	0,8022	0,7997	0,7973	0,7948	0,7924
62,8	0,8386	0,8357	0,8329	0,8301	0,8273	0,8246	0,8218	0,8192	0,8165	0,8139	0,8113	0,8087	0,8062	0,8037	0,8012	0,7987	0,7962	0,7938	0,7914
62,9	0,8375	0,8347	0,8318	0,829	0,8263	0,8235	0,8208	0,8181	0,8155	0,8129	0,8103	0,8077	0,8052	0,8026	0,8001	0,7977	0,7952	0,7928	0,7904
63	0,8365	0,8336	0,8308	0,828	0,8252	0,8225	0,8198	0,8171	0,8145	0,8118	0,8093	0,8067	0,8041	0,8016	0,7991	0,7967	0,7942	0,7918	0,7894
63,1	0,8355	0,8326	0,8298	0,827	0,8242	0,8215	0,8188	0,8161	0,8134	0,8108	0,8082	0,8057	0,8031	0,8006	0,7981	0,7956	0,7932	0,7908	0,7884
63,2	0,8345	0,8316	0,8288	0,826	0,8232	0,8205	0,8178	0,8151	0,8124	0,8098	0,8072	0,8046	0,8021	0,7996	0,7971	0,7946	0,7922	0,7898	0,7874
63,3	0,8334	0,8306	0,8277	0,8249	0,8222	0,8194	0,8167	0,8141	0,8114	0,8088	0,8062	0,8036	0,8011	0,7986	0,7961	0,7936	0,7912	0,7888	0,7864
63,4	0,8324	0,8295	0,8267	0,8239	0,8212	0,8184	0,8157	0,813	0,8104	0,8078	0,8052	0,8026	0,8001	0,7976	0,7951	0,7926	0,7902	0,7877	0,7853
63,5	0,8314	0,8285	0,8257	0,8229	0,8201	0,8174	0,8147	0,812	0,8094	0,8068	0,8042	0,8016	0,7991	0,7965	0,794	0,7916	0,7891	0,7867	0,7843
63,6	0,8303	0,8275	0,8247	0,8219	0,8191	0,8164	0,8137	0,811	0,8083	0,8057	0,8031	0,8006	0,798	0,7955	0,793	0,7906	0,7881	0,7857	0,7833
63,7	0,8293	0,8265	0,8236	0,8208	0,8181	0,8154	0,8127	0,81	0,8073	0,8047	0,8021	0,7996	0,797	0,7945	0,792	0,7896	0,7871	0,7847	0,7823
63,8	0,8283	0,8254	0,8226	0,8198	0,8171	0,8143	0,8116	0,809	0,8063	0,8037	0,8011	0,7985	0,796	0,7935	0,791	0,7885	0,7861	0,7837	0,7813
63,9	0,8273	0,8244	0,8216	0,8188	0,816	0,8133	0,8106	0,8079	0,8053	0,8027	0,8001	0,7975	0,795	0,7925	0,79	0,7875	0,7851	0,7827	0,7803

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
60,5	0,8124	0,81	0,8077	0,8053	0,803	0,8008	0,7985	0,7963	0,794	0,7918	0,7896	0,7875	0,7853	0,7832	0,7811	0,779	0,7769	0,7749	0,7728
60,6	0,8114	0,809	0,8067	0,8043	0,802	0,7997	0,7975	0,7952	0,793	0,7908	0,7886	0,7865	0,7843	0,7822	0,7801	0,778	0,7759	0,7739	0,7718
60,7	0,8103	0,808	0,8056	0,8033	0,801	0,7987	0,7965	0,7942	0,792	0,7898	0,7876	0,7855	0,7833	0,7812	0,7791	0,777	0,7749	0,7728	0,7708
60,8	0,8093	0,807	0,8046	0,8023	0,8	0,7977	0,7955	0,7932	0,791	0,7888	0,7866	0,7844	0,7823	0,7802	0,7781	0,776	0,7739	0,7718	0,7698
60,9	0,8083	0,806	0,8036	0,8013	0,799	0,7967	0,7944	0,7922	0,79	0,7878	0,7856	0,7834	0,7813	0,7792	0,7771	0,775	0,7729	0,7708	0,7688
61	0,8073	0,8049	0,8026	0,8003	0,798	0,7957	0,7934	0,7912	0,789	0,7868	0,7846	0,7824	0,7803	0,7782	0,7761	0,774	0,7719	0,7698	0,7678
61,1	0,8063	0,8039	0,8016	0,7993	0,797	0,7947	0,7924	0,7902	0,788	0,7858	0,7836	0,7814	0,7793	0,7772	0,775	0,773	0,7709	0,7688	0,7668
61,2	0,8053	0,8029	0,8006	0,7982	0,7959	0,7937	0,7914	0,7892	0,787	0,7848	0,7826	0,7804	0,7783	0,7761	0,774	0,7719	0,7699	0,7678	0,7658
61,3	0,8043	0,8019	0,7996	0,7972	0,7949	0,7927	0,7904	0,7882	0,7859	0,7837	0,7816	0,7794	0,7773	0,7751	0,773	0,7709	0,7689	0,7668	0,7648
61,4	0,8032	0,8009	0,7985	0,7962	0,7939	0,7916	0,7894	0,7872	0,7849	0,7827	0,7806	0,7784	0,7763	0,7741	0,772	0,7699	0,7679	0,7658	0,7638
61,5	0,8022	0,7999	0,7975	0,7952	0,7929	0,7906	0,7884	0,7861	0,7839	0,7817	0,7795	0,7774	0,7752	0,7731	0,771	0,7689	0,7669	0,7648	0,7628
61,6	0,8012	0,7989	0,7965	0,7942	0,7919	0,7896	0,7874	0,7851	0,7829	0,7807	0,7785	0,7764	0,7742	0,7721	0,77	0,7679	0,7659	0,7638	0,7618
61,7	0,8002	0,7978	0,7955	0,7932	0,7909	0,7886	0,7864	0,7841	0,7819	0,7797	0,7775	0,7754	0,7732	0,7711	0,769	0,7669	0,7648	0,7628	0,7608
61,8	0,7992	0,7968	0,7945	0,7922	0,7899	0,7876	0,7853	0,7831	0,7809	0,7787	0,7765	0,7744	0,7722	0,7701	0,768	0,7659	0,7638	0,7618	0,7598
61,9	0,7982	0,7958	0,7935	0,7912	0,7889	0,7866	0,7843	0,7821	0,7799	0,7777	0,7755	0,7734	0,7712	0,7691	0,767	0,7649	0,7628	0,7608	0,7587
62	0,7972	0,7948	0,7925	0,7901	0,7879	0,7856	0,7833	0,7811	0,7789	0,7767	0,7745	0,7724	0,7702	0,7681	0,766	0,7639	0,7618	0,7598	0,7577
62,1	0,7961	0,7938	0,7914	0,7891	0,7868	0,7846	0,7823	0,7801	0,7779	0,7757	0,7735	0,7713	0,7692	0,7671	0,765	0,7629	0,7608	0,7588	0,7567
62,2	0,7951	0,7928	0,7904	0,7881	0,7858	0,7836	0,7813	0,7791	0,7769	0,7747	0,7725	0,7703	0,7682	0,7661	0,764	0,7619	0,7598	0,7578	0,7557
62,3	0,7941	0,7918	0,7894	0,7871	0,7848	0,7825	0,7803	0,7781	0,7759	0,7737	0,7715	0,7693	0,7672	0,7651	0,763	0,7609	0,7588	0,7568	0,7547
62,4	0,7931	0,7907	0,7884	0,7861	0,7838	0,7815	0,7793	0,7771	0,7748	0,7726	0,7705	0,7683	0,7662	0,7641	0,762	0,7599	0,7578	0,7558	0,7537
62,5	0,7921	0,7897	0,7874	0,7851	0,7828	0,7805	0,7783	0,776	0,7738	0,7716	0,7695	0,7673	0,7652	0,7631	0,761	0,7589	0,7568	0,7548	0,7527
62,6	0,7911	0,7887	0,7864	0,7841	0,7818	0,7795	0,7773	0,775	0,7728	0,7706	0,7685	0,7663	0,7642	0,7621	0,76	0,7579	0,7558	0,7538	0,7517
62,7	0,7901	0,7877	0,7854	0,7831	0,7808	0,7785	0,7763	0,774	0,7718	0,7696	0,7675	0,7653	0,7632	0,761	0,759	0,7569	0,7548	0,7528	0,7507
62,8	0,789	0,7867	0,7844	0,7821	0,7798	0,7775	0,7752	0,773	0,7708	0,7686	0,7664	0,7643	0,7622	0,76	0,7579	0,7559	0,7538	0,7518	0,7497
62,9	0,788	0,7857	0,7834	0,781	0,7788	0,7765	0,7742	0,772	0,7698	0,7676	0,7654	0,7633	0,7612	0,759	0,7569	0,7549	0,7528	0,7507	0,7487
63	0,787	0,7847	0,7823	0,78	0,7777	0,7755	0,7732	0,771	0,7688	0,7666	0,7644	0,7623	0,7601	0,758	0,7559	0,7539	0,7518	0,7497	0,7477
63,1	0,786	0,7837	0,7813	0,779	0,7767	0,7745	0,7722	0,77	0,7678	0,7656	0,7634	0,7613	0,7591	0,757	0,7549	0,7529	0,7508	0,7487	0,7467
63,2	0,785	0,7826	0,7803	0,778	0,7757	0,7735	0,7712	0,769	0,7668	0,7646	0,7624	0,7603	0,7581	0,756	0,7539	0,7518	0,7498	0,7477	0,7457
63,3	0,784	0,7816	0,7793	0,777	0,7747	0,7724	0,7702	0,768	0,7658	0,7636	0,7614	0,7593	0,7571	0,755	0,7529	0,7508	0,7488	0,7467	0,7447
63,4	0,783	0,7806	0,7783	0,776	0,7737	0,7714	0,7692	0,767	0,7648	0,7626	0,7604	0,7583	0,7561	0,754	0,7519	0,7498	0,7478	0,7457	0,7437
63,5	0,782	0,7796	0,7773	0,775	0,7727	0,7704	0,7682	0,766	0,7638	0,7616	0,7594	0,7572	0,7551	0,753	0,7509	0,7488	0,7468	0,7447	0,7427
63,6	0,7809	0,7786	0,7763	0,774	0,7717	0,7694	0,7672	0,7649	0,7627	0,7606	0,7584	0,7562	0,7541	0,752	0,7499	0,7478	0,7458	0,7437	0,7417
63,7	0,7799	0,7776	0,7753	0,773	0,7707	0,7684	0,7662	0,7639	0,7617	0,7595	0,7574	0,7552	0,7531	0,751	0,7489	0,7468	0,7448	0,7427	0,7407
63,8	0,7789	0,7766	0,7742	0,7719	0,7697	0,7674	0,7652	0,7629	0,7607	0,7585	0,7564	0,7542	0,7521	0,75	0,7479	0,7458	0,7438	0,7417	0,7397
63,9	0,7779	0,7756	0,7732	0,7709	0,7686	0,7664	0,7641	0,7619	0,7597	0,7575	0,7554	0,7532	0,7511	0,749	0,7469	0,7448	0,7428	0,7407	0,7387

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
60,5	0,7708	0,7688	0,7668	0,7648	0,7628	0,7609	0,759	0,757	0,7551	0,7532	0,7514	0,7495	0,7476	0,7458	0,744	0,7422	0,7404	0,7386	0,7368
60,6	0,7698	0,7678	0,7658	0,7638	0,7618	0,7599	0,758	0,756	0,7541	0,7522	0,7504	0,7485	0,7466	0,7448	0,743	0,7412	0,7394	0,7376	0,7358
60,7	0,7688	0,7668	0,7648	0,7628	0,7608	0,7589	0,757	0,755	0,7531	0,7512	0,7494	0,7475	0,7456	0,7438	0,742	0,7402	0,7384	0,7366	0,7348
60,8	0,7678	0,7658	0,7638	0,7618	0,7598	0,7579	0,7559	0,754	0,7521	0,7502	0,7484	0,7465	0,7447	0,7428	0,741	0,7392	0,7374	0,7356	0,7338
60,9	0,7668	0,7648	0,7628	0,7608	0,7588	0,7569	0,7549	0,753	0,7511	0,7492	0,7474	0,7455	0,7437	0,7418	0,74	0,7382	0,7364	0,7346	0,7328
61	0,7658	0,7638	0,7618	0,7598	0,7578	0,7559	0,7539	0,752	0,7501	0,7482	0,7464	0,7445	0,7427	0,7408	0,739	0,7372	0,7354	0,7336	0,7318
61,1	0,7648	0,7628	0,7608	0,7588	0,7568	0,7549	0,7529	0,751	0,7491	0,7472	0,7454	0,7435	0,7417	0,7398	0,738	0,7362	0,7344	0,7326	0,7308
61,2	0,7638	0,7618	0,7598	0,7578	0,7558	0,7539	0,7519	0,75	0,7481	0,7462	0,7444	0,7425	0,7407	0,7388	0,737	0,7352	0,7334	0,7316	0,7298
61,3	0,7628	0,7607	0,7588	0,7568	0,7548	0,7529	0,7509	0,749	0,7471	0,7452	0,7434	0,7415	0,7397	0,7378	0,736	0,7342	0,7324	0,7306	0,7289
61,4	0,7617	0,7597	0,7578	0,7558	0,7538	0,7519	0,7499	0,748	0,7461	0,7442	0,7424	0,7405	0,7387	0,7368	0,735	0,7332	0,7314	0,7296	0,7279
61,5	0,7607	0,7587	0,7567	0,7548	0,7528	0,7509	0,7489	0,747	0,7451	0,7432	0,7414	0,7395	0,7377	0,7358	0,734	0,7322	0,7304	0,7286	0,7269
61,6	0,7597	0,7577	0,7557	0,7538	0,7518	0,7499	0,7479	0,746	0,7441	0,7422	0,7404	0,7385	0,7367	0,7348	0,733	0,7312	0,7294	0,7276	0,7259
61,7	0,7587	0,7567	0,7547	0,7528	0,7508	0,7489	0,7469	0,745	0,7431	0,7412	0,7394	0,7375	0,7357	0,7338	0,732	0,7302	0,7284	0,7266	0,7249
61,8	0,7577	0,7557	0,7537	0,7518	0,7498	0,7479	0,7459	0,744	0,7421	0,7402	0,7384	0,7365	0,7347	0,7328	0,731	0,7292	0,7274	0,7256	0,7239
61,9	0,7567	0,7547	0,7527	0,7508	0,7488	0,7469	0,7449	0,743	0,7411	0,7392	0,7374	0,7355	0,7337	0,7318	0,73	0,7282	0,7264	0,7247	0,7229
62	0,7557	0,7537	0,7517	0,7498	0,7478	0,7459	0,7439	0,742	0,7401	0,7382	0,7364	0,7345	0,7327	0,7308	0,729	0,7272	0,7254	0,7237	0,7219
62,1	0,7547	0,7527	0,7507	0,7488	0,7468	0,7449	0,7429	0,741	0,7391	0,7372	0,7354	0,7335	0,7317	0,7298	0,728	0,7262	0,7244	0,7227	0,7209
62,2	0,7537	0,7517	0,7497	0,7478	0,7458	0,7439	0,7419	0,74	0,7381	0,7362	0,7344	0,7325	0,7307	0,7289	0,727	0,7252	0,7234	0,7217	0,7199
62,3	0,7527	0,7507	0,7487	0,7468	0,7448	0,7429	0,7409	0,739	0,7371	0,7352	0,7334	0,7315	0,7297	0,7279	0,726	0,7242	0,7225	0,7207	0,7189
62,4	0,7517	0,7497	0,7477	0,7458	0,7438	0,7419	0,7399	0,738	0,7361	0,7343	0,7324	0,7305	0,7287	0,7269	0,725	0,7232	0,7215	0,7197	0,7179
62,5	0,7507	0,7487	0,7467	0,7448	0,7428	0,7409	0,7389	0,737	0,7351	0,7333	0,7314	0,7295	0,7277	0,7259	0,724	0,7222	0,7205	0,7187	0,7169
62,6	0,7497	0,7477	0,7457	0,7438	0,7418	0,7399	0,7379	0,736	0,7341	0,7323	0,7304	0,7285	0,7267	0,7249	0,7231	0,7213	0,7195	0,7177	0,7159
62,7	0,7487	0,7467	0,7447	0,7428	0,7408	0,7389	0,7369	0,735	0,7331	0,7313	0,7294	0,7275	0,7257	0,7239	0,7221	0,7203	0,7185	0,7167	0,7149
62,8	0,7477	0,7457	0,7437	0,7418	0,7398	0,7379	0,7359	0,734	0,7321	0,7303	0,7284	0,7265	0,7247	0,7229	0,7211	0,7193	0,7175	0,7157	0,7139
62,9	0,7467	0,7447	0,7427	0,7408	0,7388	0,7369	0,7349	0,733	0,7311	0,7293	0,7274	0,7255	0,7237	0,7219	0,7201	0,7183	0,7165	0,7147	0,7129
63	0,7457	0,7437	0,7417	0,7398	0,7378	0,7359	0,7339	0,732	0,7301	0,7283	0,7264	0,7245	0,7227	0,7209	0,7191	0,7173	0,7155	0,7137	0,7119
63,1	0,7447	0,7427	0,7407	0,7388	0,7368	0,7349	0,7329	0,731	0,7291	0,7273	0,7254	0,7235	0,7217	0,7199	0,7181	0,7163	0,7145	0,7127	0,711
63,2	0,7437	0,7417	0,7397	0,7377	0,7358	0,7339	0,7319	0,73	0,7281	0,7263	0,7244	0,7226	0,7207	0,7189	0,7171	0,7153	0,7135	0,7117	0,71
63,3	0,7427	0,7407	0,7387	0,7367	0,7348	0,7329	0,7309	0,729	0,7271	0,7253	0,7234	0,7216	0,7197	0,7179	0,7161	0,7143	0,7125	0,7107	0,709
63,4	0,7417	0,7397	0,7377	0,7357	0,7338	0,7319	0,7299	0,728	0,7261	0,7243	0,7224	0,7206	0,7187	0,7169	0,7151	0,7133	0,7115	0,7097	0,708
63,5	0,7407	0,7387	0,7367	0,7347	0,7328	0,7309	0,7289	0,727	0,7251	0,7233	0,7214	0,7196	0,7177	0,7159	0,7141	0,7123	0,7105	0,7087	0,707
63,6	0,7397	0,7377	0,7357	0,7337	0,7318	0,7299	0,7279	0,726	0,7241	0,7223	0,7204	0,7186	0,7167	0,7149	0,7131	0,7113	0,7095	0,7077	0,706
63,7	0,7387	0,7367	0,7347	0,7327	0,7308	0,7289	0,7269	0,725	0,7232	0,7213	0,7194	0,7176	0,7157	0,7139	0,7121	0,7103	0,7085	0,7067	0,705
63,8	0,7377	0,7357	0,7337	0,7317	0,7298	0,7279	0,7259	0,724	0,7222	0,7203	0,7184	0,7166	0,7147	0,7129	0,7111	0,7093	0,7075	0,7058	0,704
63,9	0,7367	0,7347	0,7327	0,7307	0,7288	0,7269	0,7249	0,723	0,7212	0,7193	0,7174	0,7156	0,7137	0,7119	0,7101	0,7083	0,7065	0,7048	0,703

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
60,5	0,7351	0,7333	0,7316	0,7298	0,7281	0,7264	0,7247	0,7231
60,6	0,7341	0,7323	0,7306	0,7289	0,7271	0,7254	0,7238	0,7221
60,7	0,7331	0,7313	0,7296	0,7279	0,7261	0,7244	0,7228	0,7211
60,8	0,7321	0,7303	0,7286	0,7269	0,7252	0,7235	0,7218	0,7201
60,9	0,7311	0,7293	0,7276	0,7259	0,7242	0,7225	0,7208	0,7191
61	0,7301	0,7283	0,7266	0,7249	0,7232	0,7215	0,7198	0,7181
61,1	0,7291	0,7273	0,7256	0,7239	0,7222	0,7205	0,7188	0,7171
61,2	0,7281	0,7263	0,7246	0,7229	0,7212	0,7195	0,7178	0,7161
61,3	0,7271	0,7254	0,7236	0,7219	0,7202	0,7185	0,7168	0,7151
61,4	0,7261	0,7244	0,7226	0,7209	0,7192	0,7175	0,7158	0,7141
61,5	0,7251	0,7234	0,7216	0,7199	0,7182	0,7165	0,7148	0,7131
61,6	0,7241	0,7224	0,7206	0,7189	0,7172	0,7155	0,7138	0,7122
61,7	0,7231	0,7214	0,7196	0,7179	0,7162	0,7145	0,7128	0,7112
61,8	0,7221	0,7204	0,7187	0,7169	0,7152	0,7135	0,7118	0,7102
61,9	0,7211	0,7194	0,7177	0,7159	0,7142	0,7125	0,7109	0,7092
62	0,7201	0,7184	0,7167	0,7149	0,7132	0,7115	0,7099	0,7082
62,1	0,7191	0,7174	0,7157	0,714	0,7122	0,7106	0,7089	0,7072
62,2	0,7181	0,7164	0,7147	0,713	0,7113	0,7096	0,7079	0,7062
62,3	0,7172	0,7154	0,7137	0,712	0,7103	0,7086	0,7069	0,7052
62,4	0,7162	0,7144	0,7127	0,711	0,7093	0,7076	0,7059	0,7042
62,5	0,7152	0,7134	0,7117	0,71	0,7083	0,7066	0,7049	0,7032
62,6	0,7142	0,7124	0,7107	0,709	0,7073	0,7056	0,7039	0,7022
62,7	0,7132	0,7114	0,7097	0,708	0,7063	0,7046	0,7029	0,7013
62,8	0,7122	0,7104	0,7087	0,707	0,7053	0,7036	0,7019	0,7003
62,9	0,7112	0,7095	0,7077	0,706	0,7043	0,7026	0,7009	0,6993
63	0,7102	0,7085	0,7067	0,705	0,7033	0,7016	0,6999	0,6983
63,1	0,7092	0,7075	0,7057	0,704	0,7023	0,7006	0,699	0,6973
63,2	0,7082	0,7065	0,7048	0,703	0,7013	0,6996	0,698	0,6963
63,3	0,7072	0,7055	0,7038	0,702	0,7003	0,6987	0,697	0,6953
63,4	0,7062	0,7045	0,7028	0,7011	0,6994	0,6977	0,696	0,6943
63,5	0,7052	0,7035	0,7018	0,7001	0,6984	0,6967	0,695	0,6933
63,6	0,7042	0,7025	0,7008	0,6991	0,6974	0,6957	0,694	0,6923
63,7	0,7032	0,7015	0,6998	0,6981	0,6964	0,6947	0,693	0,6913
63,8	0,7022	0,7005	0,6988	0,6971	0,6954	0,6937	0,692	0,6904
63,9	0,7013	0,6995	0,6978	0,6961	0,6944	0,6927	0,691	0,6894

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
64	1,3529	1,3297	1,3086	1,2891	1,271	1,2542	1,2385	1,2237	1,2098	1,1966	1,1841	1,1722	1,1608	1,1499	1,1395	1,1296	1,12	1,1108	1,1019
64,1	1,3518	1,3286	1,3074	1,2879	1,2699	1,2531	1,2374	1,2226	1,2086	1,1955	1,1829	1,171	1,1597	1,1488	1,1384	1,1285	1,1189	1,1097	1,1008
64,2	1,3506	1,3274	1,3063	1,2868	1,2687	1,2519	1,2362	1,2215	1,2075	1,1943	1,1818	1,1699	1,1586	1,1477	1,1373	1,1274	1,1178	1,1086	1,0997
64,3	1,3494	1,3263	1,3051	1,2856	1,2676	1,2508	1,2351	1,2203	1,2064	1,1932	1,1807	1,1688	1,1575	1,1466	1,1362	1,1263	1,1167	1,1075	1,0986
64,4	1,3483	1,3251	1,304	1,2845	1,2665	1,2497	1,234	1,2192	1,2053	1,1921	1,1796	1,1677	1,1564	1,1455	1,1351	1,1252	1,1156	1,1064	1,0975
64,5	1,3471	1,324	1,3028	1,2833	1,2653	1,2485	1,2328	1,2181	1,2041	1,191	1,1785	1,1666	1,1552	1,1444	1,134	1,1241	1,1145	1,1053	1,0964
64,6	1,3459	1,3228	1,3017	1,2822	1,2642	1,2474	1,2317	1,2169	1,203	1,1899	1,1774	1,1655	1,1541	1,1433	1,1329	1,1229	1,1134	1,1042	1,0953
64,7	1,3448	1,3216	1,3005	1,2811	1,263	1,2463	1,2306	1,2158	1,2019	1,1887	1,1762	1,1644	1,153	1,1422	1,1318	1,1218	1,1123	1,1031	1,0942
64,8	1,3436	1,3205	1,2994	1,2799	1,2619	1,2451	1,2294	1,2147	1,2008	1,1876	1,1751	1,1632	1,1519	1,1411	1,1307	1,1207	1,1112	1,102	1,0931
64,9	1,3425	1,3193	1,2982	1,2788	1,2608	1,244	1,2283	1,2136	1,1996	1,1865	1,174	1,1621	1,1508	1,14	1,1296	1,1196	1,1101	1,1009	1,092
65	1,3413	1,3182	1,2971	1,2776	1,2596	1,2429	1,2272	1,2124	1,1985	1,1854	1,1729	1,161	1,1497	1,1389	1,1285	1,1185	1,109	1,0998	1,0909
65,1	1,3401	1,317	1,2959	1,2765	1,2585	1,2417	1,226	1,2113	1,1974	1,1843	1,1718	1,1599	1,1486	1,1377	1,1274	1,1174	1,1079	1,0987	1,0898
65,2	1,339	1,3159	1,2948	1,2753	1,2573	1,2406	1,2249	1,2102	1,1963	1,1831	1,1707	1,1588	1,1475	1,1366	1,1263	1,1163	1,1068	1,0976	1,0887
65,3	1,3378	1,3147	1,2936	1,2742	1,2562	1,2394	1,2238	1,209	1,1952	1,182	1,1695	1,1577	1,1464	1,1355	1,1252	1,1152	1,1057	1,0965	1,0876
65,4	1,3367	1,3136	1,2925	1,273	1,2551	1,2383	1,2226	1,2079	1,194	1,1809	1,1684	1,1566	1,1452	1,1344	1,1241	1,1141	1,1046	1,0954	1,0865
65,5	1,3355	1,3124	1,2913	1,2719	1,2539	1,2372	1,2215	1,2068	1,1929	1,1798	1,1673	1,1554	1,1441	1,1333	1,123	1,113	1,1035	1,0943	1,0854
65,6	1,3343	1,3112	1,2902	1,2708	1,2528	1,236	1,2204	1,2057	1,1918	1,1787	1,1662	1,1543	1,143	1,1322	1,1219	1,1119	1,1024	1,0932	1,0843
65,7	1,3332	1,3101	1,289	1,2696	1,2516	1,2349	1,2193	1,2045	1,1907	1,1775	1,1651	1,1532	1,1419	1,1311	1,1208	1,1108	1,1013	1,0921	1,0832
65,8	1,332	1,3089	1,2879	1,2685	1,2505	1,2338	1,2181	1,2034	1,1895	1,1764	1,164	1,1521	1,1408	1,13	1,1197	1,1097	1,1002	1,091	1,0822
65,9	1,3308	1,3078	1,2867	1,2673	1,2494	1,2326	1,217	1,2023	1,1884	1,1753	1,1628	1,151	1,1397	1,1289	1,1185	1,1086	1,0991	1,0899	1,0811
66	1,3297	1,3066	1,2856	1,2662	1,2482	1,2315	1,2159	1,2012	1,1873	1,1742	1,1617	1,1499	1,1386	1,1278	1,1174	1,1075	1,098	1,0888	1,08
66,1	1,3285	1,3055	1,2844	1,265	1,2471	1,2304	1,2147	1,2	1,1862	1,1731	1,1606	1,1488	1,1375	1,1267	1,1163	1,1064	1,0969	1,0877	1,0789
66,2	1,3274	1,3043	1,2833	1,2639	1,246	1,2292	1,2136	1,1989	1,1851	1,1719	1,1595	1,1477	1,1364	1,1256	1,1152	1,1053	1,0958	1,0866	1,0778
66,3	1,3262	1,3032	1,2821	1,2628	1,2448	1,2281	1,2125	1,1978	1,1839	1,1708	1,1584	1,1465	1,1353	1,1245	1,1141	1,1042	1,0947	1,0855	1,0767
66,4	1,3251	1,302	1,281	1,2616	1,2437	1,227	1,2113	1,1967	1,1828	1,1697	1,1573	1,1454	1,1341	1,1234	1,113	1,1031	1,0936	1,0844	1,0756
66,5	1,3239	1,3009	1,2798	1,2605	1,2425	1,2258	1,2102	1,1955	1,1817	1,1686	1,1562	1,1443	1,133	1,1223	1,1119	1,102	1,0925	1,0833	1,0745
66,6	1,3227	1,2997	1,2787	1,2593	1,2414	1,2247	1,2091	1,1944	1,1806	1,1675	1,155	1,1432	1,1319	1,1211	1,1108	1,1009	1,0914	1,0822	1,0734
66,7	1,3216	1,2986	1,2775	1,2582	1,2403	1,2236	1,208	1,1933	1,1794	1,1663	1,1539	1,1421	1,1308	1,12	1,1097	1,0998	1,0903	1,0811	1,0723
66,8	1,3204	1,2974	1,2764	1,257	1,2391	1,2224	1,2068	1,1922	1,1783	1,1652	1,1528	1,141	1,1297	1,1189	1,1086	1,0987	1,0892	1,08	1,0712
66,9	1,3193	1,2963	1,2752	1,2559	1,238	1,2213	1,2057	1,191	1,1772	1,1641	1,1517	1,1399	1,1286	1,1178	1,1075	1,0976	1,0881	1,0789	1,0701
67	1,3181	1,2951	1,2741	1,2548	1,2369	1,2202	1,2046	1,1899	1,1761	1,163	1,1506	1,1388	1,1275	1,1167	1,1064	1,0965	1,087	1,0778	1,069
67,1	1,3169	1,2939	1,2729	1,2536	1,2357	1,219	1,2034	1,1888	1,175	1,1619	1,1495	1,1376	1,1264	1,1156	1,1053	1,0954	1,0859	1,0767	1,0679
67,2	1,3158	1,2928	1,2718	1,2525	1,2346	1,2179	1,2023	1,1877	1,1738	1,1608	1,1483	1,1365	1,1253	1,1145	1,1042	1,0943	1,0848	1,0757	1,0668
67,3	1,3146	1,2916	1,2707	1,2513	1,2334	1,2168	1,2012	1,1865	1,1727	1,1596	1,1472	1,1354	1,1242	1,1134	1,1031	1,0932	1,0837	1,0746	1,0657
67,4	1,3135	1,2905	1,2695	1,2502	1,2323	1,2156	1,2001	1,1854	1,1716	1,1585	1,1461	1,1343	1,1231	1,1123	1,102	1,0921	1,0826	1,0735	1,0646

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
64	1,0933	1,085	1,077	1,0692	1,0617	1,0544	1,0473	1,0404	1,0336	1,0271	1,0207	1,0145	1,0085	1,0026	0,9968	0,9912	0,9857	0,9803	0,975
64,1	1,0922	1,0839	1,0759	1,0681	1,0606	1,0533	1,0462	1,0393	1,0326	1,026	1,0197	1,0135	1,0074	1,0015	0,9957	0,9901	0,9846	0,9792	0,9739
64,2	1,0911	1,0828	1,0748	1,067	1,0595	1,0522	1,0451	1,0382	1,0315	1,025	1,0186	1,0124	1,0063	1,0004	0,9947	0,989	0,9835	0,9781	0,9729
64,3	1,09	1,0817	1,0737	1,0659	1,0584	1,0511	1,044	1,0371	1,0304	1,0239	1,0175	1,0113	1,0053	0,9994	0,9936	0,988	0,9825	0,9771	0,9718
64,4	1,0889	1,0806	1,0726	1,0649	1,0573	1,05	1,0429	1,036	1,0293	1,0228	1,0164	1,0102	1,0042	0,9983	0,9925	0,9869	0,9814	0,976	0,9707
64,5	1,0878	1,0795	1,0715	1,0638	1,0562	1,0489	1,0418	1,035	1,0283	1,0217	1,0154	1,0092	1,0031	0,9972	0,9915	0,9858	0,9803	0,9749	0,9697
64,6	1,0867	1,0784	1,0704	1,0627	1,0552	1,0479	1,0408	1,0339	1,0272	1,0207	1,0143	1,0081	1,0021	0,9962	0,9904	0,9848	0,9793	0,9739	0,9686
64,7	1,0856	1,0774	1,0693	1,0616	1,0541	1,0468	1,0397	1,0328	1,0261	1,0196	1,0132	1,007	1,001	0,9951	0,9893	0,9837	0,9782	0,9728	0,9675
64,8	1,0845	1,0763	1,0683	1,0605	1,053	1,0457	1,0386	1,0317	1,025	1,0185	1,0121	1,006	0,9999	0,994	0,9883	0,9826	0,9771	0,9717	0,9665
64,9	1,0834	1,0752	1,0672	1,0594	1,0519	1,0446	1,0375	1,0306	1,0239	1,0174	1,0111	1,0049	0,9988	0,9929	0,9872	0,9816	0,9761	0,9707	0,9654
65	1,0824	1,0741	1,0661	1,0583	1,0508	1,0435	1,0364	1,0296	1,0229	1,0163	1,01	1,0038	0,9978	0,9919	0,9861	0,9805	0,975	0,9696	0,9644
65,1	1,0813	1,073	1,065	1,0572	1,0497	1,0424	1,0354	1,0285	1,0218	1,0153	1,0089	1,0027	0,9967	0,9908	0,9851	0,9794	0,9739	0,9686	0,9633
65,2	1,0802	1,0719	1,0639	1,0562	1,0486	1,0414	1,0343	1,0274	1,0207	1,0142	1,0079	1,0017	0,9956	0,9897	0,984	0,9784	0,9729	0,9675	0,9622
65,3	1,0791	1,0708	1,0628	1,0551	1,0476	1,0403	1,0332	1,0263	1,0196	1,0131	1,0068	1,0006	0,9946	0,9887	0,9829	0,9773	0,9718	0,9664	0,9612
65,4	1,078	1,0697	1,0617	1,054	1,0465	1,0392	1,0321	1,0252	1,0186	1,012	1,0057	0,9995	0,9935	0,9876	0,9819	0,9762	0,9707	0,9654	0,9601
65,5	1,0769	1,0686	1,0606	1,0529	1,0454	1,0381	1,031	1,0242	1,0175	1,011	1,0046	0,9984	0,9924	0,9865	0,9808	0,9752	0,9697	0,9643	0,959
65,6	1,0758	1,0675	1,0595	1,0518	1,0443	1,037	1,03	1,0231	1,0164	1,0099	1,0036	0,9974	0,9913	0,9855	0,9797	0,9741	0,9686	0,9632	0,958
65,7	1,0747	1,0664	1,0585	1,0507	1,0432	1,0359	1,0289	1,022	1,0153	1,0088	1,0025	0,9963	0,9903	0,9844	0,9786	0,973	0,9675	0,9622	0,9569
65,8	1,0736	1,0654	1,0574	1,0496	1,0421	1,0349	1,0278	1,0209	1,0142	1,0077	1,0014	0,9952	0,9892	0,9833	0,9776	0,972	0,9665	0,9611	0,9559
65,9	1,0725	1,0643	1,0563	1,0486	1,0411	1,0338	1,0267	1,0199	1,0132	1,0067	1,0003	0,9942	0,9881	0,9823	0,9765	0,9709	0,9654	0,96	0,9548
66	1,0714	1,0632	1,0552	1,0475	1,04	1,0327	1,0256	1,0188	1,0121	1,0056	0,9993	0,9931	0,9871	0,9812	0,9754	0,9698	0,9643	0,959	0,9537
66,1	1,0703	1,0621	1,0541	1,0464	1,0389	1,0316	1,0246	1,0177	1,011	1,0045	0,9982	0,992	0,986	0,9801	0,9744	0,9688	0,9633	0,9579	0,9527
66,2	1,0692	1,061	1,053	1,0453	1,0378	1,0305	1,0235	1,0166	1,0099	1,0034	0,9971	0,9909	0,9849	0,979	0,9733	0,9677	0,9622	0,9569	0,9516
66,3	1,0681	1,0599	1,0519	1,0442	1,0367	1,0295	1,0224	1,0155	1,0089	1,0024	0,996	0,9899	0,9839	0,978	0,9722	0,9666	0,9612	0,9558	0,9505
66,4	1,0671	1,0588	1,0508	1,0431	1,0356	1,0284	1,0213	1,0145	1,0078	1,0013	0,995	0,9888	0,9828	0,9769	0,9712	0,9656	0,9601	0,9547	0,9495
66,5	1,066	1,0577	1,0498	1,042	1,0346	1,0273	1,0202	1,0134	1,0067	1,0002	0,9939	0,9877	0,9817	0,9758	0,9701	0,9645	0,959	0,9537	0,9484
66,6	1,0649	1,0566	1,0487	1,0409	1,0335	1,0262	1,0192	1,0123	1,0056	0,9991	0,9928	0,9867	0,9806	0,9748	0,969	0,9634	0,958	0,9526	0,9474
66,7	1,0638	1,0555	1,0476	1,0399	1,0324	1,0251	1,0181	1,0112	1,0046	0,9981	0,9917	0,9856	0,9796	0,9737	0,968	0,9624	0,9569	0,9515	0,9463
66,8	1,0627	1,0545	1,0465	1,0388	1,0313	1,024	1,017	1,0101	1,0035	0,997	0,9907	0,9845	0,9785	0,9726	0,9669	0,9613	0,9558	0,9505	0,9452
66,9	1,0616	1,0534	1,0454	1,0377	1,0302	1,023	1,0159	1,0091	1,0024	0,9959	0,9896	0,9834	0,9774	0,9716	0,9658	0,9602	0,9548	0,9494	0,9442
67	1,0605	1,0523	1,0443	1,0366	1,0291	1,0219	1,0148	1,008	1,0013	0,9948	0,9885	0,9824	0,9764	0,9705	0,9648	0,9592	0,9537	0,9483	0,9431
67,1	1,0594	1,0512	1,0432	1,0355	1,028	1,0208	1,0138	1,0069	1,0002	0,9938	0,9874	0,9813	0,9753	0,9694	0,9637	0,9581	0,9526	0,9473	0,942
67,2	1,0583	1,0501	1,0421	1,0344	1,027	1,0197	1,0127	1,0058	0,9992	0,9927	0,9864	0,9802	0,9742	0,9684	0,9626	0,957	0,9516	0,9462	0,941
67,3	1,0572	1,049	1,0411	1,0333	1,0259	1,0186	1,0116	1,0047	0,9981	0,9916	0,9853	0,9791	0,9731	0,9673	0,9616	0,956	0,9505	0,9451	0,9399
67,4	1,0561	1,0479	1,04	1,0323	1,0248	1,0175	1,0105	1,0037	0,997	0,9905	0,9842	0,9781	0,9721	0,9662	0,9605	0,9549	0,9494	0,9441	0,9388

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
64	0,9698	0,9647	0,9598	0,9549	0,9502	0,9455	0,9409	0,9364	0,9319	0,9276	0,9233	0,9191	0,915	0,9109	0,9069	0,903	0,8991	0,8953	0,8915
64,1	0,9688	0,9637	0,9587	0,9539	0,9491	0,9444	0,9398	0,9353	0,9309	0,9265	0,9223	0,9181	0,9139	0,9099	0,9059	0,9019	0,898	0,8942	0,8905
64,2	0,9677	0,9626	0,9577	0,9528	0,948	0,9434	0,9388	0,9343	0,9298	0,9255	0,9212	0,917	0,9129	0,9088	0,9048	0,9009	0,897	0,8932	0,8894
64,3	0,9666	0,9616	0,9566	0,9517	0,947	0,9423	0,9377	0,9332	0,9288	0,9244	0,9202	0,916	0,9118	0,9078	0,9038	0,8998	0,896	0,8921	0,8884
64,4	0,9656	0,9605	0,9556	0,9507	0,9459	0,9413	0,9367	0,9322	0,9277	0,9234	0,9191	0,9149	0,9108	0,9067	0,9027	0,8988	0,8949	0,8911	0,8873
64,5	0,9645	0,9594	0,9545	0,9496	0,9449	0,9402	0,9356	0,9311	0,9267	0,9223	0,9181	0,9139	0,9097	0,9057	0,9017	0,8977	0,8939	0,8901	0,8863
64,6	0,9634	0,9584	0,9534	0,9486	0,9438	0,9391	0,9346	0,9301	0,9256	0,9213	0,917	0,9128	0,9087	0,9046	0,9006	0,8967	0,8928	0,889	0,8853
64,7	0,9624	0,9573	0,9524	0,9475	0,9428	0,9381	0,9335	0,929	0,9246	0,9202	0,916	0,9118	0,9076	0,9036	0,8996	0,8957	0,8918	0,888	0,8842
64,8	0,9613	0,9563	0,9513	0,9465	0,9417	0,937	0,9324	0,9279	0,9235	0,9192	0,9149	0,9107	0,9066	0,9025	0,8985	0,8946	0,8907	0,8869	0,8832
64,9	0,9603	0,9552	0,9503	0,9454	0,9406	0,936	0,9314	0,9269	0,9225	0,9181	0,9139	0,9097	0,9055	0,9015	0,8975	0,8936	0,8897	0,8859	0,8821
65	0,9592	0,9541	0,9492	0,9443	0,9396	0,9349	0,9303	0,9258	0,9214	0,9171	0,9128	0,9086	0,9045	0,9004	0,8965	0,8925	0,8887	0,8849	0,8811
65,1	0,9581	0,9531	0,9481	0,9433	0,9385	0,9339	0,9293	0,9248	0,9204	0,916	0,9118	0,9076	0,9035	0,8994	0,8954	0,8915	0,8876	0,8838	0,8801
65,2	0,9571	0,952	0,9471	0,9422	0,9375	0,9328	0,9282	0,9237	0,9193	0,915	0,9107	0,9065	0,9024	0,8983	0,8944	0,8904	0,8866	0,8828	0,879
65,3	0,956	0,951	0,946	0,9412	0,9364	0,9318	0,9272	0,9227	0,9183	0,9139	0,9097	0,9055	0,9014	0,8973	0,8933	0,8894	0,8855	0,8817	0,878
65,4	0,955	0,9499	0,945	0,9401	0,9354	0,9307	0,9261	0,9216	0,9172	0,9129	0,9086	0,9044	0,9003	0,8963	0,8923	0,8883	0,8845	0,8807	0,8769
65,5	0,9539	0,9488	0,9439	0,9391	0,9343	0,9296	0,9251	0,9206	0,9162	0,9118	0,9076	0,9034	0,8993	0,8952	0,8912	0,8873	0,8834	0,8796	0,8759
65,6	0,9528	0,9478	0,9428	0,938	0,9333	0,9286	0,924	0,9195	0,9151	0,9108	0,9065	0,9023	0,8982	0,8942	0,8902	0,8863	0,8824	0,8786	0,8749
65,7	0,9518	0,9467	0,9418	0,9369	0,9322	0,9275	0,923	0,9185	0,9141	0,9097	0,9055	0,9013	0,8972	0,8931	0,8891	0,8852	0,8814	0,8776	0,8738
65,8	0,9507	0,9457	0,9407	0,9359	0,9311	0,9265	0,9219	0,9174	0,913	0,9087	0,9044	0,9002	0,8961	0,8921	0,8881	0,8842	0,8803	0,8765	0,8728
65,9	0,9496	0,9446	0,9397	0,9348	0,9301	0,9254	0,9209	0,9164	0,912	0,9076	0,9034	0,8992	0,8951	0,891	0,887	0,8831	0,8793	0,8755	0,8717
66	0,9486	0,9435	0,9386	0,9338	0,929	0,9244	0,9198	0,9153	0,9109	0,9066	0,9023	0,8981	0,894	0,89	0,886	0,8821	0,8782	0,8744	0,8707
66,1	0,9475	0,9425	0,9376	0,9327	0,928	0,9233	0,9187	0,9143	0,9099	0,9055	0,9013	0,8971	0,893	0,8889	0,885	0,881	0,8772	0,8734	0,8696
66,2	0,9465	0,9414	0,9365	0,9317	0,9269	0,9223	0,9177	0,9132	0,9088	0,9045	0,9002	0,896	0,8919	0,8879	0,8839	0,88	0,8761	0,8723	0,8686
66,3	0,9454	0,9404	0,9354	0,9306	0,9259	0,9212	0,9166	0,9122	0,9078	0,9034	0,8992	0,895	0,8909	0,8868	0,8829	0,8789	0,8751	0,8713	0,8676
66,4	0,9443	0,9393	0,9344	0,9295	0,9248	0,9202	0,9156	0,9111	0,9067	0,9024	0,8981	0,8939	0,8898	0,8858	0,8818	0,8779	0,874	0,8703	0,8665
66,5	0,9433	0,9382	0,9333	0,9285	0,9237	0,9191	0,9145	0,91	0,9056	0,9013	0,8971	0,8929	0,8888	0,8847	0,8808	0,8769	0,873	0,8692	0,8655
66,6	0,9422	0,9372	0,9323	0,9274	0,9227	0,918	0,9135	0,909	0,9046	0,9003	0,896	0,8918	0,8877	0,8837	0,8797	0,8758	0,872	0,8682	0,8644
66,7	0,9412	0,9361	0,9312	0,9264	0,9216	0,917	0,9124	0,9079	0,9035	0,8992	0,895	0,8908	0,8867	0,8826	0,8787	0,8748	0,8709	0,8671	0,8634
66,8	0,9401	0,9351	0,9301	0,9253	0,9206	0,9159	0,9114	0,9069	0,9025	0,8982	0,8939	0,8897	0,8856	0,8816	0,8776	0,8737	0,8699	0,8661	0,8623
66,9	0,939	0,934	0,9291	0,9243	0,9195	0,9149	0,9103	0,9058	0,9014	0,8971	0,8929	0,8887	0,8846	0,8806	0,8766	0,8727	0,8688	0,865	0,8613
67	0,938	0,9329	0,928	0,9232	0,9185	0,9138	0,9093	0,9048	0,9004	0,8961	0,8918	0,8876	0,8835	0,8795	0,8755	0,8716	0,8678	0,864	0,8603
67,1	0,9369	0,9319	0,927	0,9221	0,9174	0,9128	0,9082	0,9037	0,8993	0,895	0,8908	0,8866	0,8825	0,8785	0,8745	0,8706	0,8667	0,8629	0,8592
67,2	0,9358	0,9308	0,9259	0,9211	0,9163	0,9117	0,9071	0,9027	0,8983	0,894	0,8897	0,8855	0,8814	0,8774	0,8734	0,8695	0,8657	0,8619	0,8582
67,3	0,9348	0,9298	0,9248	0,92	0,9153	0,9106	0,9061	0,9016	0,8972	0,8929	0,8887	0,8845	0,8804	0,8764	0,8724	0,8685	0,8646	0,8609	0,8571
67,4	0,9337	0,9287	0,9238	0,919	0,9142	0,9096	0,905	0,9006	0,8962	0,8919	0,8876	0,8834	0,8793	0,8753	0,8713	0,8674	0,8636	0,8598	0,8561

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
64	0,8878	0,8842	0,8806	0,877	0,8735	0,8701	0,8667	0,8633	0,86	0,8568	0,8535	0,8503	0,8472	0,8441	0,841	0,838	0,835	0,8321	0,8291
64,1	0,8868	0,8831	0,8795	0,876	0,8725	0,869	0,8656	0,8623	0,859	0,8557	0,8525	0,8493	0,8462	0,8431	0,84	0,837	0,834	0,831	0,8281
64,2	0,8857	0,8821	0,8785	0,8749	0,8715	0,868	0,8646	0,8613	0,858	0,8547	0,8515	0,8483	0,8451	0,842	0,839	0,836	0,833	0,83	0,8271
64,3	0,8847	0,881	0,8775	0,8739	0,8704	0,867	0,8636	0,8602	0,8569	0,8537	0,8504	0,8473	0,8441	0,841	0,8379	0,8349	0,8319	0,829	0,8261
64,4	0,8836	0,88	0,8764	0,8729	0,8694	0,8659	0,8625	0,8592	0,8559	0,8526	0,8494	0,8462	0,8431	0,84	0,8369	0,8339	0,8309	0,828	0,825
64,5	0,8826	0,879	0,8754	0,8718	0,8683	0,8649	0,8615	0,8582	0,8549	0,8516	0,8484	0,8452	0,8421	0,839	0,8359	0,8329	0,8299	0,8269	0,824
64,6	0,8816	0,8779	0,8743	0,8708	0,8673	0,8639	0,8605	0,8571	0,8538	0,8506	0,8473	0,8442	0,841	0,8379	0,8349	0,8318	0,8288	0,8259	0,823
64,7	0,8805	0,8769	0,8733	0,8698	0,8663	0,8628	0,8594	0,8561	0,8528	0,8495	0,8463	0,8431	0,84	0,8369	0,8338	0,8308	0,8278	0,8249	0,822
64,8	0,8795	0,8758	0,8723	0,8687	0,8652	0,8618	0,8584	0,8551	0,8517	0,8485	0,8453	0,8421	0,839	0,8359	0,8328	0,8298	0,8268	0,8238	0,8209
64,9	0,8784	0,8748	0,8712	0,8677	0,8642	0,8608	0,8574	0,854	0,8507	0,8475	0,8442	0,8411	0,8379	0,8348	0,8318	0,8288	0,8258	0,8228	0,8199
65	0,8774	0,8738	0,8702	0,8666	0,8632	0,8597	0,8563	0,853	0,8497	0,8464	0,8432	0,84	0,8369	0,8338	0,8307	0,8277	0,8247	0,8218	0,8189
65,1	0,8764	0,8727	0,8691	0,8656	0,8621	0,8587	0,8553	0,8519	0,8486	0,8454	0,8422	0,839	0,8359	0,8328	0,8297	0,8267	0,8237	0,8208	0,8179
65,2	0,8753	0,8717	0,8681	0,8646	0,8611	0,8576	0,8543	0,8509	0,8476	0,8444	0,8411	0,838	0,8348	0,8317	0,8287	0,8257	0,8227	0,8197	0,8168
65,3	0,8743	0,8706	0,8671	0,8635	0,86	0,8566	0,8532	0,8499	0,8466	0,8433	0,8401	0,8369	0,8338	0,8307	0,8277	0,8246	0,8217	0,8187	0,8158
65,4	0,8732	0,8696	0,866	0,8625	0,859	0,8556	0,8522	0,8488	0,8455	0,8423	0,8391	0,8359	0,8328	0,8297	0,8266	0,8236	0,8206	0,8177	0,8148
65,5	0,8722	0,8686	0,865	0,8615	0,858	0,8545	0,8512	0,8478	0,8445	0,8413	0,838	0,8349	0,8317	0,8287	0,8256	0,8226	0,8196	0,8167	0,8137
65,6	0,8712	0,8675	0,8639	0,8604	0,8569	0,8535	0,8501	0,8468	0,8435	0,8402	0,837	0,8338	0,8307	0,8276	0,8246	0,8216	0,8186	0,8156	0,8127
65,7	0,8701	0,8665	0,8629	0,8594	0,8559	0,8525	0,8491	0,8457	0,8424	0,8392	0,836	0,8328	0,8297	0,8266	0,8235	0,8205	0,8175	0,8146	0,8117
65,8	0,8691	0,8654	0,8619	0,8583	0,8549	0,8514	0,848	0,8447	0,8414	0,8382	0,835	0,8318	0,8287	0,8256	0,8225	0,8195	0,8165	0,8136	0,8107
65,9	0,868	0,8644	0,8608	0,8573	0,8538	0,8504	0,847	0,8437	0,8404	0,8371	0,8339	0,8307	0,8276	0,8245	0,8215	0,8185	0,8155	0,8125	0,8096
66	0,867	0,8634	0,8598	0,8563	0,8528	0,8494	0,846	0,8426	0,8393	0,8361	0,8329	0,8297	0,8266	0,8235	0,8205	0,8174	0,8145	0,8115	0,8086
66,1	0,866	0,8623	0,8588	0,8552	0,8517	0,8483	0,8449	0,8416	0,8383	0,8351	0,8319	0,8287	0,8256	0,8225	0,8194	0,8164	0,8134	0,8105	0,8076
66,2	0,8649	0,8613	0,8577	0,8542	0,8507	0,8473	0,8439	0,8406	0,8373	0,834	0,8308	0,8277	0,8245	0,8214	0,8184	0,8154	0,8124	0,8095	0,8066
66,3	0,8639	0,8602	0,8567	0,8531	0,8497	0,8462	0,8429	0,8395	0,8362	0,833	0,8298	0,8266	0,8235	0,8204	0,8174	0,8144	0,8114	0,8084	0,8055
66,4	0,8628	0,8592	0,8556	0,8521	0,8486	0,8452	0,8418	0,8385	0,8352	0,832	0,8288	0,8256	0,8225	0,8194	0,8163	0,8133	0,8103	0,8074	0,8045
66,5	0,8618	0,8582	0,8546	0,8511	0,8476	0,8442	0,8408	0,8375	0,8342	0,8309	0,8277	0,8246	0,8214	0,8183	0,8153	0,8123	0,8093	0,8064	0,8035
66,6	0,8608	0,8571	0,8536	0,85	0,8466	0,8431	0,8398	0,8364	0,8331	0,8299	0,8267	0,8235	0,8204	0,8173	0,8143	0,8113	0,8083	0,8054	0,8024
66,7	0,8597	0,8561	0,8525	0,849	0,8455	0,8421	0,8387	0,8354	0,8321	0,8289	0,8257	0,8225	0,8194	0,8163	0,8132	0,8102	0,8073	0,8043	0,8014
66,8	0,8587	0,855	0,8515	0,848	0,8445	0,8411	0,8377	0,8344	0,8311	0,8278	0,8246	0,8215	0,8183	0,8153	0,8122	0,8092	0,8062	0,8033	0,8004
66,9	0,8576	0,854	0,8504	0,8469	0,8434	0,84	0,8366	0,8333	0,83	0,8268	0,8236	0,8204	0,8173	0,8142	0,8112	0,8082	0,8052	0,8023	0,7994
67	0,8566	0,853	0,8494	0,8459	0,8424	0,839	0,8356	0,8323	0,829	0,8258	0,8226	0,8194	0,8163	0,8132	0,8101	0,8071	0,8042	0,8012	0,7983
67,1	0,8555	0,8519	0,8484	0,8448	0,8414	0,8379	0,8346	0,8312	0,828	0,8247	0,8215	0,8184	0,8152	0,8122	0,8091	0,8061	0,8031	0,8002	0,7973
67,2	0,8545	0,8509	0,8473	0,8438	0,8403	0,8369	0,8335	0,8302	0,8269	0,8237	0,8205	0,8173	0,8142	0,8111	0,8081	0,8051	0,8021	0,7992	0,7963
67,3	0,8535	0,8498	0,8463	0,8428	0,8393	0,8359	0,8325	0,8292	0,8259	0,8226	0,8194	0,8163	0,8132	0,8101	0,8071	0,8041	0,8011	0,7982	0,7953
67,4	0,8524	0,8488	0,8452	0,8417	0,8382	0,8348	0,8315	0,8281	0,8248	0,8216	0,8184	0,8153	0,8121	0,8091	0,806	0,803	0,8001	0,7971	0,7942

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
64	0,8262	0,8234	0,8206	0,8178	0,815	0,8123	0,8096	0,8069	0,8043	0,8017	0,7991	0,7965	0,794	0,7915	0,789	0,7865	0,7841	0,7817	0,7793
64,1	0,8252	0,8224	0,8195	0,8168	0,814	0,8113	0,8086	0,8059	0,8033	0,8006	0,798	0,7955	0,7929	0,7904	0,788	0,7855	0,7831	0,7806	0,7783
64,2	0,8242	0,8213	0,8185	0,8157	0,813	0,8102	0,8075	0,8049	0,8022	0,7996	0,797	0,7945	0,7919	0,7894	0,7869	0,7845	0,782	0,7796	0,7772
64,3	0,8232	0,8203	0,8175	0,8147	0,812	0,8092	0,8065	0,8039	0,8012	0,7986	0,796	0,7935	0,7909	0,7884	0,7859	0,7835	0,781	0,7786	0,7762
64,4	0,8221	0,8193	0,8165	0,8137	0,8109	0,8082	0,8055	0,8028	0,8002	0,7976	0,795	0,7924	0,7899	0,7874	0,7849	0,7824	0,78	0,7776	0,7752
64,5	0,8211	0,8183	0,8155	0,8127	0,8099	0,8072	0,8045	0,8018	0,7992	0,7966	0,794	0,7914	0,7889	0,7864	0,7839	0,7814	0,779	0,7766	0,7742
64,6	0,8201	0,8172	0,8144	0,8116	0,8089	0,8062	0,8035	0,8008	0,7982	0,7955	0,793	0,7904	0,7879	0,7854	0,7829	0,7804	0,778	0,7756	0,7732
64,7	0,8191	0,8162	0,8134	0,8106	0,8079	0,8051	0,8024	0,7998	0,7971	0,7945	0,7919	0,7894	0,7868	0,7843	0,7819	0,7794	0,777	0,7746	0,7722
64,8	0,818	0,8152	0,8124	0,8096	0,8068	0,8041	0,8014	0,7988	0,7961	0,7935	0,7909	0,7884	0,7858	0,7833	0,7808	0,7784	0,776	0,7735	0,7712
64,9	0,817	0,8142	0,8114	0,8086	0,8058	0,8031	0,8004	0,7977	0,7951	0,7925	0,7899	0,7873	0,7848	0,7823	0,7798	0,7774	0,7749	0,7725	0,7701
65	0,816	0,8131	0,8103	0,8075	0,8048	0,8021	0,7994	0,7967	0,7941	0,7915	0,7889	0,7863	0,7838	0,7813	0,7788	0,7764	0,7739	0,7715	0,7691
65,1	0,815	0,8121	0,8093	0,8065	0,8038	0,801	0,7984	0,7957	0,7931	0,7904	0,7879	0,7853	0,7828	0,7803	0,7778	0,7753	0,7729	0,7705	0,7681
65,2	0,8139	0,8111	0,8083	0,8055	0,8027	0,8	0,7973	0,7947	0,792	0,7894	0,7868	0,7843	0,7818	0,7793	0,7768	0,7743	0,7719	0,7695	0,7671
65,3	0,8129	0,8101	0,8073	0,8045	0,8017	0,799	0,7963	0,7937	0,791	0,7884	0,7858	0,7833	0,7807	0,7782	0,7758	0,7733	0,7709	0,7685	0,7661
65,4	0,8119	0,8091	0,8062	0,8035	0,8007	0,798	0,7953	0,7926	0,79	0,7874	0,7848	0,7823	0,7797	0,7772	0,7747	0,7723	0,7699	0,7675	0,7651
65,5	0,8109	0,808	0,8052	0,8024	0,7997	0,797	0,7943	0,7916	0,789	0,7864	0,7838	0,7812	0,7787	0,7762	0,7737	0,7713	0,7688	0,7664	0,7641
65,6	0,8098	0,807	0,8042	0,8014	0,7987	0,7959	0,7932	0,7906	0,788	0,7853	0,7828	0,7802	0,7777	0,7752	0,7727	0,7703	0,7678	0,7654	0,763
65,7	0,8088	0,806	0,8032	0,8004	0,7976	0,7949	0,7922	0,7896	0,7869	0,7843	0,7817	0,7792	0,7767	0,7742	0,7717	0,7692	0,7668	0,7644	0,762
65,8	0,8078	0,8049	0,8021	0,7994	0,7966	0,7939	0,7912	0,7885	0,7859	0,7833	0,7807	0,7782	0,7757	0,7732	0,7707	0,7682	0,7658	0,7634	0,761
65,9	0,8068	0,8039	0,8011	0,7983	0,7956	0,7929	0,7902	0,7875	0,7849	0,7823	0,7797	0,7772	0,7746	0,7721	0,7697	0,7672	0,7648	0,7624	0,76
66	0,8057	0,8029	0,8001	0,7973	0,7946	0,7918	0,7892	0,7865	0,7839	0,7813	0,7787	0,7761	0,7736	0,7711	0,7686	0,7662	0,7638	0,7614	0,759
66,1	0,8047	0,8019	0,7991	0,7963	0,7935	0,7908	0,7881	0,7855	0,7828	0,7802	0,7777	0,7751	0,7726	0,7701	0,7676	0,7652	0,7628	0,7603	0,758
66,2	0,8037	0,8008	0,798	0,7953	0,7925	0,7898	0,7871	0,7845	0,7818	0,7792	0,7766	0,7741	0,7716	0,7691	0,7666	0,7642	0,7617	0,7593	0,757
66,3	0,8027	0,7998	0,797	0,7942	0,7915	0,7888	0,7861	0,7834	0,7808	0,7782	0,7756	0,7731	0,7706	0,7681	0,7656	0,7631	0,7607	0,7583	0,7559
66,4	0,8016	0,7988	0,796	0,7932	0,7905	0,7878	0,7851	0,7824	0,7798	0,7772	0,7746	0,7721	0,7695	0,767	0,7646	0,7621	0,7597	0,7573	0,7549
66,5	0,8006	0,7978	0,795	0,7922	0,7894	0,7867	0,784	0,7814	0,7788	0,7762	0,7736	0,771	0,7685	0,766	0,7636	0,7611	0,7587	0,7563	0,7539
66,6	0,7996	0,7967	0,7939	0,7912	0,7884	0,7857	0,783	0,7804	0,7777	0,7751	0,7726	0,77	0,7675	0,765	0,7625	0,7601	0,7577	0,7553	0,7529
66,7	0,7986	0,7957	0,7929	0,7901	0,7874	0,7847	0,782	0,7793	0,7767	0,7741	0,7715	0,769	0,7665	0,764	0,7615	0,7591	0,7566	0,7542	0,7519
66,8	0,7975	0,7947	0,7919	0,7891	0,7864	0,7837	0,781	0,7783	0,7757	0,7731	0,7705	0,768	0,7655	0,763	0,7605	0,7581	0,7556	0,7532	0,7509
66,9	0,7965	0,7937	0,7909	0,7881	0,7853	0,7826	0,78	0,7773	0,7747	0,7721	0,7695	0,767	0,7644	0,7619	0,7595	0,757	0,7546	0,7522	0,7498
67	0,7955	0,7926	0,7898	0,7871	0,7843	0,7816	0,7789	0,7763	0,7737	0,7711	0,7685	0,7659	0,7634	0,7609	0,7585	0,756	0,7536	0,7512	0,7488
67,1	0,7944	0,7916	0,7888	0,786	0,7833	0,7806	0,7779	0,7753	0,7726	0,77	0,7675	0,7649	0,7624	0,7599	0,7574	0,755	0,7526	0,7502	0,7478
67,2	0,7934	0,7906	0,7878	0,785	0,7823	0,7796	0,7769	0,7742	0,7716	0,769	0,7664	0,7639	0,7614	0,7589	0,7564	0,754	0,7516	0,7492	0,7468
67,3	0,7924	0,7896	0,7868	0,784	0,7812	0,7785	0,7759	0,7732	0,7706	0,768	0,7654	0,7629	0,7604	0,7579	0,7554	0,753	0,7505	0,7481	0,7458
67,4	0,7914	0,7885	0,7857	0,783	0,7802	0,7775	0,7748	0,7722	0,7696	0,767	0,7644	0,7619	0,7593	0,7569	0,7544	0,7519	0,7495	0,7471	0,7448

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
64	0,7769	0,7745	0,7722	0,7699	0,7676	0,7654	0,7631	0,7609	0,7587	0,7565	0,7544	0,7522	0,7501	0,748	0,7459	0,7438	0,7417	0,7397	0,7377
64,1	0,7759	0,7735	0,7712	0,7689	0,7666	0,7644	0,7621	0,7599	0,7577	0,7555	0,7534	0,7512	0,7491	0,747	0,7449	0,7428	0,7407	0,7387	0,7367
64,2	0,7749	0,7725	0,7702	0,7679	0,7656	0,7634	0,7611	0,7589	0,7567	0,7545	0,7523	0,7502	0,7481	0,746	0,7439	0,7418	0,7397	0,7377	0,7357
64,3	0,7739	0,7715	0,7692	0,7669	0,7646	0,7623	0,7601	0,7579	0,7557	0,7535	0,7513	0,7492	0,7471	0,745	0,7429	0,7408	0,7387	0,7367	0,7347
64,4	0,7728	0,7705	0,7682	0,7659	0,7636	0,7613	0,7591	0,7569	0,7547	0,7525	0,7503	0,7482	0,7461	0,744	0,7419	0,7398	0,7377	0,7357	0,7337
64,5	0,7718	0,7695	0,7672	0,7649	0,7626	0,7603	0,7581	0,7559	0,7537	0,7515	0,7493	0,7472	0,7451	0,7429	0,7409	0,7388	0,7367	0,7347	0,7327
64,6	0,7708	0,7685	0,7662	0,7639	0,7616	0,7593	0,7571	0,7549	0,7527	0,7505	0,7483	0,7462	0,744	0,7419	0,7399	0,7378	0,7357	0,7337	0,7317
64,7	0,7698	0,7675	0,7651	0,7628	0,7606	0,7583	0,7561	0,7538	0,7516	0,7495	0,7473	0,7452	0,743	0,7409	0,7388	0,7368	0,7347	0,7327	0,7307
64,8	0,7688	0,7664	0,7641	0,7618	0,7596	0,7573	0,7551	0,7528	0,7506	0,7485	0,7463	0,7442	0,742	0,7399	0,7378	0,7358	0,7337	0,7317	0,7297
64,9	0,7678	0,7654	0,7631	0,7608	0,7585	0,7563	0,754	0,7518	0,7496	0,7475	0,7453	0,7432	0,741	0,7389	0,7368	0,7348	0,7327	0,7307	0,7287
65	0,7668	0,7644	0,7621	0,7598	0,7575	0,7553	0,753	0,7508	0,7486	0,7464	0,7443	0,7421	0,74	0,7379	0,7358	0,7338	0,7317	0,7297	0,7276
65,1	0,7658	0,7634	0,7611	0,7588	0,7565	0,7543	0,752	0,7498	0,7476	0,7454	0,7433	0,7411	0,739	0,7369	0,7348	0,7328	0,7307	0,7287	0,7266
65,2	0,7647	0,7624	0,7601	0,7578	0,7555	0,7533	0,751	0,7488	0,7466	0,7444	0,7423	0,7401	0,738	0,7359	0,7338	0,7317	0,7297	0,7277	0,7256
65,3	0,7637	0,7614	0,7591	0,7568	0,7545	0,7522	0,75	0,7478	0,7456	0,7434	0,7413	0,7391	0,737	0,7349	0,7328	0,7307	0,7287	0,7267	0,7246
65,4	0,7627	0,7604	0,7581	0,7558	0,7535	0,7512	0,749	0,7468	0,7446	0,7424	0,7403	0,7381	0,736	0,7339	0,7318	0,7297	0,7277	0,7257	0,7236
65,5	0,7617	0,7594	0,757	0,7547	0,7525	0,7502	0,748	0,7458	0,7436	0,7414	0,7392	0,7371	0,735	0,7329	0,7308	0,7287	0,7267	0,7246	0,7226
65,6	0,7607	0,7583	0,756	0,7537	0,7515	0,7492	0,747	0,7448	0,7426	0,7404	0,7382	0,7361	0,734	0,7319	0,7298	0,7277	0,7257	0,7236	0,7216
65,7	0,7597	0,7573	0,755	0,7527	0,7505	0,7482	0,746	0,7438	0,7416	0,7394	0,7372	0,7351	0,733	0,7309	0,7288	0,7267	0,7247	0,7226	0,7206
65,8	0,7587	0,7563	0,754	0,7517	0,7494	0,7472	0,745	0,7427	0,7405	0,7384	0,7362	0,7341	0,732	0,7299	0,7278	0,7257	0,7237	0,7216	0,7196
65,9	0,7576	0,7553	0,753	0,7507	0,7484	0,7462	0,7439	0,7417	0,7395	0,7374	0,7352	0,7331	0,731	0,7289	0,7268	0,7247	0,7227	0,7206	0,7186
66	0,7566	0,7543	0,752	0,7497	0,7474	0,7452	0,7429	0,7407	0,7385	0,7364	0,7342	0,7321	0,7299	0,7278	0,7258	0,7237	0,7217	0,7196	0,7176
66,1	0,7556	0,7533	0,751	0,7487	0,7464	0,7442	0,7419	0,7397	0,7375	0,7353	0,7332	0,7311	0,7289	0,7268	0,7248	0,7227	0,7206	0,7186	0,7166
66,2	0,7546	0,7523	0,75	0,7477	0,7454	0,7431	0,7409	0,7387	0,7365	0,7343	0,7322	0,73	0,7279	0,7258	0,7238	0,7217	0,7196	0,7176	0,7156
66,3	0,7536	0,7512	0,7489	0,7466	0,7444	0,7421	0,7399	0,7377	0,7355	0,7333	0,7312	0,729	0,7269	0,7248	0,7227	0,7207	0,7186	0,7166	0,7146
66,4	0,7526	0,7502	0,7479	0,7456	0,7434	0,7411	0,7389	0,7367	0,7345	0,7323	0,7302	0,728	0,7259	0,7238	0,7217	0,7197	0,7176	0,7156	0,7136
66,5	0,7516	0,7492	0,7469	0,7446	0,7424	0,7401	0,7379	0,7357	0,7335	0,7313	0,7292	0,727	0,7249	0,7228	0,7207	0,7187	0,7166	0,7146	0,7126
66,6	0,7505	0,7482	0,7459	0,7436	0,7413	0,7391	0,7369	0,7347	0,7325	0,7303	0,7281	0,726	0,7239	0,7218	0,7197	0,7177	0,7156	0,7136	0,7116
66,7	0,7495	0,7472	0,7449	0,7426	0,7403	0,7381	0,7358	0,7336	0,7315	0,7293	0,7271	0,725	0,7229	0,7208	0,7187	0,7166	0,7146	0,7126	0,7106
66,8	0,7485	0,7462	0,7439	0,7416	0,7393	0,7371	0,7348	0,7326	0,7304	0,7283	0,7261	0,724	0,7219	0,7198	0,7177	0,7156	0,7136	0,7116	0,7096
66,9	0,7475	0,7452	0,7429	0,7406	0,7383	0,7361	0,7338	0,7316	0,7294	0,7273	0,7251	0,723	0,7209	0,7188	0,7167	0,7146	0,7126	0,7106	0,7085
67	0,7465	0,7441	0,7418	0,7395	0,7373	0,735	0,7328	0,7306	0,7284	0,7262	0,7241	0,722	0,7199	0,7178	0,7157	0,7136	0,7116	0,7096	0,7075
67,1	0,7455	0,7431	0,7408	0,7385	0,7363	0,734	0,7318	0,7296	0,7274	0,7252	0,7231	0,721	0,7188	0,7168	0,7147	0,7126	0,7106	0,7085	0,7065
67,2	0,7444	0,7421	0,7398	0,7375	0,7353	0,733	0,7308	0,7286	0,7264	0,7242	0,7221	0,7199	0,7178	0,7157	0,7137	0,7116	0,7096	0,7075	0,7055
67,3	0,7434	0,7411	0,7388	0,7365	0,7342	0,732	0,7298	0,7276	0,7254	0,7232	0,7211	0,7189	0,7168	0,7147	0,7127	0,7106	0,7086	0,7065	0,7045
67,4	0,7424	0,7401	0,7378	0,7355	0,7332	0,731	0,7288	0,7266	0,7244	0,7222	0,7201	0,7179	0,7158	0,7137	0,7116	0,7096	0,7075	0,7055	0,7035

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
64	0,7357	0,7337	0,7317	0,7297	0,7278	0,7259	0,7239	0,722	0,7202	0,7183	0,7164	0,7146	0,7127	0,7109	0,7091	0,7073	0,7055	0,7038	0,702
64,1	0,7347	0,7327	0,7307	0,7287	0,7268	0,7249	0,7229	0,721	0,7192	0,7173	0,7154	0,7136	0,7117	0,7099	0,7081	0,7063	0,7045	0,7028	0,701
64,2	0,7337	0,7317	0,7297	0,7277	0,7258	0,7239	0,7219	0,72	0,7182	0,7163	0,7144	0,7126	0,7107	0,7089	0,7071	0,7053	0,7035	0,7018	0,7
64,3	0,7327	0,7307	0,7287	0,7267	0,7248	0,7229	0,7209	0,719	0,7172	0,7153	0,7134	0,7116	0,7097	0,7079	0,7061	0,7043	0,7025	0,7008	0,699
64,4	0,7317	0,7297	0,7277	0,7257	0,7238	0,7219	0,7199	0,718	0,7162	0,7143	0,7124	0,7106	0,7087	0,7069	0,7051	0,7033	0,7016	0,6998	0,698
64,5	0,7307	0,7287	0,7267	0,7247	0,7228	0,7209	0,7189	0,717	0,7152	0,7133	0,7114	0,7096	0,7078	0,7059	0,7041	0,7023	0,7006	0,6988	0,697
64,6	0,7297	0,7277	0,7257	0,7237	0,7218	0,7199	0,7179	0,716	0,7142	0,7123	0,7104	0,7086	0,7068	0,7049	0,7031	0,7013	0,6996	0,6978	0,696
64,7	0,7287	0,7267	0,7247	0,7227	0,7208	0,7189	0,7169	0,715	0,7132	0,7113	0,7094	0,7076	0,7058	0,7039	0,7021	0,7003	0,6986	0,6968	0,695
64,8	0,7277	0,7257	0,7237	0,7217	0,7198	0,7179	0,7159	0,714	0,7122	0,7103	0,7084	0,7066	0,7048	0,7029	0,7011	0,6993	0,6976	0,6958	0,694
64,9	0,7266	0,7247	0,7227	0,7207	0,7188	0,7169	0,7149	0,713	0,7112	0,7093	0,7074	0,7056	0,7038	0,7019	0,7001	0,6984	0,6966	0,6948	0,6931
65	0,7256	0,7237	0,7217	0,7197	0,7178	0,7159	0,7139	0,712	0,7102	0,7083	0,7064	0,7046	0,7028	0,7009	0,6991	0,6974	0,6956	0,6938	0,6921
65,1	0,7246	0,7227	0,7207	0,7187	0,7168	0,7149	0,7129	0,711	0,7092	0,7073	0,7054	0,7036	0,7018	0,6999	0,6981	0,6964	0,6946	0,6928	0,6911
65,2	0,7236	0,7217	0,7197	0,7177	0,7158	0,7139	0,7119	0,71	0,7082	0,7063	0,7044	0,7026	0,7008	0,699	0,6972	0,6954	0,6936	0,6918	0,6901
65,3	0,7226	0,7206	0,7187	0,7167	0,7148	0,7129	0,7109	0,709	0,7072	0,7053	0,7034	0,7016	0,6998	0,698	0,6962	0,6944	0,6926	0,6908	0,6891
65,4	0,7216	0,7196	0,7177	0,7157	0,7138	0,7119	0,7099	0,708	0,7062	0,7043	0,7024	0,7006	0,6988	0,697	0,6952	0,6934	0,6916	0,6898	0,6881
65,5	0,7206	0,7186	0,7167	0,7147	0,7128	0,7108	0,7089	0,707	0,7052	0,7033	0,7014	0,6996	0,6978	0,696	0,6942	0,6924	0,6906	0,6888	0,6871
65,6	0,7196	0,7176	0,7157	0,7137	0,7118	0,7098	0,7079	0,706	0,7042	0,7023	0,7004	0,6986	0,6968	0,695	0,6932	0,6914	0,6896	0,6878	0,6861
65,7	0,7186	0,7166	0,7147	0,7127	0,7108	0,7088	0,7069	0,705	0,7032	0,7013	0,6994	0,6976	0,6958	0,694	0,6922	0,6904	0,6886	0,6868	0,6851
65,8	0,7176	0,7156	0,7137	0,7117	0,7098	0,7078	0,7059	0,704	0,7022	0,7003	0,6984	0,6966	0,6948	0,693	0,6912	0,6894	0,6876	0,6858	0,6841
65,9	0,7166	0,7146	0,7127	0,7107	0,7088	0,7068	0,7049	0,703	0,7012	0,6993	0,6974	0,6956	0,6938	0,692	0,6902	0,6884	0,6866	0,6848	0,6831
66	0,7156	0,7136	0,7117	0,7097	0,7078	0,7058	0,7039	0,702	0,7002	0,6983	0,6964	0,6946	0,6928	0,691	0,6892	0,6874	0,6856	0,6838	0,6821
66,1	0,7146	0,7126	0,7106	0,7087	0,7068	0,7048	0,7029	0,701	0,6992	0,6973	0,6954	0,6936	0,6918	0,69	0,6882	0,6864	0,6846	0,6828	0,6811
66,2	0,7136	0,7116	0,7096	0,7077	0,7058	0,7038	0,7019	0,7	0,6982	0,6963	0,6944	0,6926	0,6908	0,689	0,6872	0,6854	0,6836	0,6819	0,6801
66,3	0,7126	0,7106	0,7086	0,7067	0,7048	0,7028	0,7009	0,699	0,6972	0,6953	0,6934	0,6916	0,6898	0,688	0,6862	0,6844	0,6826	0,6809	0,6791
66,4	0,7116	0,7096	0,7076	0,7057	0,7037	0,7018	0,6999	0,698	0,6962	0,6943	0,6924	0,6906	0,6888	0,687	0,6852	0,6834	0,6816	0,6799	0,6781
66,5	0,7106	0,7086	0,7066	0,7047	0,7027	0,7008	0,6989	0,697	0,6952	0,6933	0,6914	0,6896	0,6878	0,686	0,6842	0,6824	0,6806	0,6789	0,6771
66,6	0,7096	0,7076	0,7056	0,7037	0,7017	0,6998	0,6979	0,696	0,6941	0,6923	0,6904	0,6886	0,6868	0,685	0,6832	0,6814	0,6796	0,6779	0,6761
66,7	0,7086	0,7066	0,7046	0,7027	0,7007	0,6988	0,6969	0,695	0,6931	0,6913	0,6894	0,6876	0,6858	0,684	0,6822	0,6804	0,6786	0,6769	0,6751
66,8	0,7076	0,7056	0,7036	0,7017	0,6997	0,6978	0,6959	0,694	0,6921	0,6903	0,6884	0,6866	0,6848	0,683	0,6812	0,6794	0,6776	0,6759	0,6741
66,9	0,7066	0,7046	0,7026	0,7007	0,6987	0,6968	0,6949	0,693	0,6911	0,6893	0,6874	0,6856	0,6838	0,682	0,6802	0,6784	0,6766	0,6749	0,6731
67	0,7055	0,7036	0,7016	0,6997	0,6977	0,6958	0,6939	0,692	0,6901	0,6883	0,6864	0,6846	0,6828	0,681	0,6792	0,6774	0,6756	0,6739	0,6721
67,1	0,7045	0,7026	0,7006	0,6987	0,6967	0,6948	0,6929	0,691	0,6891	0,6873	0,6854	0,6836	0,6818	0,68	0,6782	0,6764	0,6746	0,6729	0,6711
67,2	0,7035	0,7016	0,6996	0,6976	0,6957	0,6938	0,6919	0,69	0,6881	0,6863	0,6844	0,6826	0,6808	0,679	0,6772	0,6754	0,6736	0,6719	0,6701
67,3	0,7025	0,7005	0,6986	0,6966	0,6947	0,6928	0,6909	0,689	0,6871	0,6853	0,6834	0,6816	0,6798	0,678	0,6762	0,6744	0,6726	0,6709	0,6691
67,4	0,7015	0,6995	0,6976	0,6956	0,6937	0,6918	0,6899	0,688	0,6861	0,6843	0,6824	0,6806	0,6788	0,677	0,6752	0,6734	0,6716	0,6699	0,6681

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
64	0,7003	0,6985	0,6968	0,6951	0,6934	0,6917	0,69	0,6884
64,1	0,6993	0,6975	0,6958	0,6941	0,6924	0,6907	0,689	0,6874
64,2	0,6983	0,6965	0,6948	0,6931	0,6914	0,6897	0,6881	0,6864
64,3	0,6973	0,6955	0,6938	0,6921	0,6904	0,6887	0,6871	0,6854
64,4	0,6963	0,6946	0,6928	0,6911	0,6894	0,6877	0,6861	0,6844
64,5	0,6953	0,6936	0,6918	0,6901	0,6884	0,6868	0,6851	0,6834
64,6	0,6943	0,6926	0,6908	0,6891	0,6874	0,6858	0,6841	0,6824
64,7	0,6933	0,6916	0,6899	0,6881	0,6865	0,6848	0,6831	0,6814
64,8	0,6923	0,6906	0,6889	0,6872	0,6855	0,6838	0,6821	0,6804
64,9	0,6913	0,6896	0,6879	0,6862	0,6845	0,6828	0,6811	0,6794
65	0,6903	0,6886	0,6869	0,6852	0,6835	0,6818	0,6801	0,6785
65,1	0,6893	0,6876	0,6859	0,6842	0,6825	0,6808	0,6791	0,6775
65,2	0,6883	0,6866	0,6849	0,6832	0,6815	0,6798	0,6781	0,6765
65,3	0,6873	0,6856	0,6839	0,6822	0,6805	0,6788	0,6771	0,6755
65,4	0,6863	0,6846	0,6829	0,6812	0,6795	0,6778	0,6761	0,6745
65,5	0,6853	0,6836	0,6819	0,6802	0,6785	0,6768	0,6752	0,6735
65,6	0,6843	0,6826	0,6809	0,6792	0,6775	0,6758	0,6742	0,6725
65,7	0,6833	0,6816	0,6799	0,6782	0,6765	0,6748	0,6732	0,6715
65,8	0,6824	0,6806	0,6789	0,6772	0,6755	0,6738	0,6722	0,6705
65,9	0,6814	0,6796	0,6779	0,6762	0,6745	0,6728	0,6712	0,6695
66	0,6804	0,6786	0,6769	0,6752	0,6735	0,6719	0,6702	0,6685
66,1	0,6794	0,6776	0,6759	0,6742	0,6725	0,6709	0,6692	0,6675
66,2	0,6784	0,6766	0,6749	0,6732	0,6715	0,6699	0,6682	0,6665
66,3	0,6774	0,6756	0,6739	0,6722	0,6705	0,6689	0,6672	0,6655
66,4	0,6764	0,6746	0,6729	0,6712	0,6695	0,6679	0,6662	0,6646
66,5	0,6754	0,6737	0,6719	0,6702	0,6686	0,6669	0,6652	0,6636
66,6	0,6744	0,6727	0,6709	0,6692	0,6676	0,6659	0,6642	0,6626
66,7	0,6734	0,6717	0,6699	0,6682	0,6666	0,6649	0,6632	0,6616
66,8	0,6724	0,6707	0,6689	0,6673	0,6656	0,6639	0,6622	0,6606
66,9	0,6714	0,6697	0,668	0,6663	0,6646	0,6629	0,6612	0,6596
67	0,6704	0,6687	0,667	0,6653	0,6636	0,6619	0,6602	0,6586
67,1	0,6694	0,6677	0,666	0,6643	0,6626	0,6609	0,6592	0,6576
67,2	0,6684	0,6667	0,665	0,6633	0,6616	0,6599	0,6582	0,6566
67,3	0,6674	0,6657	0,664	0,6623	0,6606	0,6589	0,6572	0,6556
67,4	0,6664	0,6647	0,663	0,6613	0,6596	0,6579	0,6562	0,6546

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
67,5	1,3123	1,2893	1,2684	1,2491	1,2312	1,2145	1,1989	1,1843	1,1705	1,1574	1,145	1,1332	1,1219	1,1112	1,1009	1,091	1,0815	1,0724	1,0635
67,6	1,3112	1,2882	1,2672	1,2479	1,23	1,2134	1,1978	1,1832	1,1694	1,1563	1,1439	1,1321	1,1208	1,1101	1,0998	1,0899	1,0804	1,0713	1,0625
67,7	1,31	1,287	1,2661	1,2468	1,2289	1,2123	1,1967	1,182	1,1682	1,1552	1,1428	1,131	1,1197	1,109	1,0987	1,0888	1,0793	1,0702	1,0614
67,8	1,3088	1,2859	1,2649	1,2456	1,2278	1,2111	1,1955	1,1809	1,1671	1,1541	1,1417	1,1299	1,1186	1,1079	1,0976	1,0877	1,0782	1,0691	1,0603
67,9	1,3077	1,2847	1,2638	1,2445	1,2266	1,21	1,1944	1,1798	1,166	1,1529	1,1405	1,1288	1,1175	1,1068	1,0965	1,0866	1,0771	1,068	1,0592
68	1,3065	1,2836	1,2626	1,2433	1,2255	1,2089	1,1933	1,1787	1,1649	1,1518	1,1394	1,1276	1,1164	1,1057	1,0954	1,0855	1,076	1,0669	1,0581
68,1	1,3054	1,2824	1,2615	1,2422	1,2244	1,2077	1,1922	1,1775	1,1637	1,1507	1,1383	1,1265	1,1153	1,1046	1,0943	1,0844	1,0749	1,0658	1,057
68,2	1,3042	1,2813	1,2603	1,2411	1,2232	1,2066	1,191	1,1764	1,1626	1,1496	1,1372	1,1254	1,1142	1,1034	1,0932	1,0833	1,0738	1,0647	1,0559
68,3	1,3031	1,2801	1,2592	1,2399	1,2221	1,2055	1,1899	1,1753	1,1615	1,1485	1,1361	1,1243	1,1131	1,1023	1,0921	1,0822	1,0727	1,0636	1,0548
68,4	1,3019	1,279	1,258	1,2388	1,2209	1,2043	1,1888	1,1742	1,1604	1,1473	1,135	1,1232	1,112	1,1012	1,091	1,0811	1,0716	1,0625	1,0537
68,5	1,3007	1,2778	1,2569	1,2376	1,2198	1,2032	1,1876	1,173	1,1593	1,1462	1,1339	1,1221	1,1109	1,1001	1,0898	1,08	1,0705	1,0614	1,0526
68,6	1,2996	1,2767	1,2558	1,2365	1,2187	1,2021	1,1865	1,1719	1,1581	1,1451	1,1327	1,121	1,1097	1,099	1,0887	1,0789	1,0694	1,0603	1,0515
68,7	1,2984	1,2755	1,2546	1,2354	1,2175	1,2009	1,1854	1,1708	1,157	1,144	1,1316	1,1199	1,1086	1,0979	1,0876	1,0778	1,0683	1,0592	1,0504
68,8	1,2973	1,2744	1,2535	1,2342	1,2164	1,1998	1,1843	1,1697	1,1559	1,1429	1,1305	1,1187	1,1075	1,0968	1,0865	1,0767	1,0672	1,0581	1,0493
68,9	1,2961	1,2732	1,2523	1,2331	1,2153	1,1987	1,1831	1,1685	1,1548	1,1417	1,1294	1,1176	1,1064	1,0957	1,0854	1,0756	1,0661	1,057	1,0482
69	1,295	1,2721	1,2512	1,2319	1,2141	1,1975	1,182	1,1674	1,1537	1,1406	1,1283	1,1165	1,1053	1,0946	1,0843	1,0745	1,065	1,0559	1,0471
69,1	1,2938	1,2709	1,25	1,2308	1,213	1,1964	1,1809	1,1663	1,1525	1,1395	1,1272	1,1154	1,1042	1,0935	1,0832	1,0734	1,0639	1,0548	1,046
69,2	1,2926	1,2698	1,2489	1,2297	1,2118	1,1953	1,1797	1,1652	1,1514	1,1384	1,126	1,1143	1,1031	1,0924	1,0821	1,0723	1,0628	1,0537	1,0449
69,3	1,2915	1,2686	1,2477	1,2285	1,2107	1,1941	1,1786	1,164	1,1503	1,1373	1,1249	1,1132	1,102	1,0913	1,081	1,0712	1,0617	1,0526	1,0438
69,4	1,2903	1,2675	1,2466	1,2274	1,2096	1,193	1,1775	1,1629	1,1492	1,1362	1,1238	1,1121	1,1009	1,0902	1,0799	1,0701	1,0606	1,0515	1,0427
69,5	1,2892	1,2663	1,2454	1,2262	1,2084	1,1919	1,1764	1,1618	1,148	1,135	1,1227	1,1109	1,0998	1,089	1,0788	1,069	1,0595	1,0504	1,0416
69,6	1,288	1,2652	1,2443	1,2251	1,2073	1,1907	1,1752	1,1607	1,1469	1,1339	1,1216	1,1098	1,0986	1,0879	1,0777	1,0679	1,0584	1,0493	1,0405
69,7	1,2869	1,264	1,2431	1,2239	1,2062	1,1896	1,1741	1,1595	1,1458	1,1328	1,1205	1,1087	1,0975	1,0868	1,0766	1,0667	1,0573	1,0482	1,0394
69,8	1,2857	1,2629	1,242	1,2228	1,205	1,1885	1,173	1,1584	1,1447	1,1317	1,1193	1,1076	1,0964	1,0857	1,0755	1,0656	1,0562	1,0471	1,0383
69,9	1,2845	1,2617	1,2409	1,2217	1,2039	1,1873	1,1718	1,1573	1,1435	1,1306	1,1182	1,1065	1,0953	1,0846	1,0744	1,0645	1,0551	1,046	1,0372
70	1,2834	1,2606	1,2397	1,2205	1,2027	1,1862	1,1707	1,1561	1,1424	1,1294	1,1171	1,1054	1,0942	1,0835	1,0733	1,0634	1,054	1,0449	1,0361
70,1	1,2822	1,2594	1,2386	1,2194	1,2016	1,1851	1,1696	1,155	1,1413	1,1283	1,116	1,1043	1,0931	1,0824	1,0722	1,0623	1,0529	1,0438	1,035
70,2	1,2811	1,2582	1,2374	1,2182	1,2005	1,1839	1,1684	1,1539	1,1402	1,1272	1,1149	1,1031	1,092	1,0813	1,071	1,0612	1,0518	1,0427	1,0339
70,3	1,2799	1,2571	1,2363	1,2171	1,1993	1,1828	1,1673	1,1528	1,1391	1,1261	1,1138	1,102	1,0909	1,0802	1,0699	1,0601	1,0507	1,0416	1,0328
70,4	1,2787	1,2559	1,2351	1,2159	1,1982	1,1817	1,1662	1,1516	1,1379	1,1249	1,1126	1,1009	1,0897	1,0791	1,0688	1,059	1,0496	1,0405	1,0317
70,5	1,2776	1,2548	1,234	1,2148	1,1971	1,1805	1,165	1,1505	1,1368	1,1238	1,1115	1,0998	1,0886	1,0779	1,0677	1,0579	1,0485	1,0394	1,0306
70,6	1,2764	1,2536	1,2328	1,2137	1,1959	1,1794	1,1639	1,1494	1,1357	1,1227	1,1104	1,0987	1,0875	1,0768	1,0666	1,0568	1,0474	1,0383	1,0296
70,7	1,2753	1,2525	1,2317	1,2125	1,1948	1,1782	1,1628	1,1483	1,1346	1,1216	1,1093	1,0976	1,0864	1,0757	1,0655	1,0557	1,0463	1,0372	1,0285
70,8	1,2741	1,2513	1,2305	1,2114	1,1936	1,1771	1,1617	1,1471	1,1334	1,1205	1,1082	1,0965	1,0853	1,0746	1,0644	1,0546	1,0452	1,0361	1,0273
70,9	1,273	1,2502	1,2294	1,2102	1,1925	1,176	1,1605	1,146	1,1323	1,1193	1,107	1,0953	1,0842	1,0735	1,0633	1,0535	1,0441	1,035	1,0262

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
67,5	1,055	1,0468	1,0389	1,0312	1,0237	1,0165	1,0094	1,0026	0,9959	0,9895	0,9831	0,977	0,971	0,9651	0,9594	0,9538	0,9484	0,943	0,9378
67,6	1,054	1,0457	1,0378	1,0301	1,0226	1,0154	1,0083	1,0015	0,9949	0,9884	0,9821	0,9759	0,9699	0,9641	0,9584	0,9528	0,9473	0,942	0,9367
67,7	1,0529	1,0446	1,0367	1,029	1,0215	1,0143	1,0073	1,0004	0,9938	0,9873	0,981	0,9749	0,9689	0,963	0,9573	0,9517	0,9462	0,9409	0,9357
67,8	1,0518	1,0436	1,0356	1,0279	1,0205	1,0132	1,0062	0,9993	0,9927	0,9862	0,9799	0,9738	0,9678	0,9619	0,9562	0,9506	0,9452	0,9398	0,9346
67,9	1,0507	1,0425	1,0345	1,0268	1,0194	1,0121	1,0051	0,9983	0,9916	0,9852	0,9788	0,9727	0,9667	0,9609	0,9551	0,9496	0,9441	0,9388	0,9335
68	1,0496	1,0414	1,0334	1,0257	1,0183	1,011	1,004	0,9972	0,9905	0,9841	0,9778	0,9716	0,9656	0,9598	0,9541	0,9485	0,943	0,9377	0,9325
68,1	1,0485	1,0403	1,0323	1,0247	1,0172	1,01	1,0029	0,9961	0,9895	0,983	0,9767	0,9706	0,9646	0,9587	0,953	0,9474	0,942	0,9366	0,9314
68,2	1,0474	1,0392	1,0313	1,0236	1,0161	1,0089	1,0019	0,995	0,9884	0,9819	0,9756	0,9695	0,9635	0,9576	0,9519	0,9464	0,9409	0,9356	0,9303
68,3	1,0463	1,0381	1,0302	1,0225	1,015	1,0078	1,0008	0,9939	0,9873	0,9808	0,9745	0,9684	0,9624	0,9566	0,9509	0,9453	0,9398	0,9345	0,9293
68,4	1,0452	1,037	1,0291	1,0214	1,0139	1,0067	0,9997	0,9929	0,9862	0,9798	0,9735	0,9673	0,9613	0,9555	0,9498	0,9442	0,9388	0,9334	0,9282
68,5	1,0441	1,0359	1,028	1,0203	1,0129	1,0056	0,9986	0,9918	0,9851	0,9787	0,9724	0,9663	0,9603	0,9544	0,9487	0,9431	0,9377	0,9324	0,9271
68,6	1,043	1,0348	1,0269	1,0192	1,0118	1,0045	0,9975	0,9907	0,9841	0,9776	0,9713	0,9652	0,9592	0,9534	0,9477	0,9421	0,9366	0,9313	0,9261
68,7	1,0419	1,0337	1,0258	1,0181	1,0107	1,0035	0,9964	0,9896	0,983	0,9765	0,9702	0,9641	0,9581	0,9523	0,9466	0,941	0,9356	0,9302	0,925
68,8	1,0408	1,0326	1,0247	1,017	1,0096	1,0024	0,9954	0,9885	0,9819	0,9755	0,9692	0,963	0,9571	0,9512	0,9455	0,9399	0,9345	0,9292	0,9239
68,9	1,0397	1,0315	1,0236	1,0159	1,0085	1,0013	0,9943	0,9875	0,9808	0,9744	0,9681	0,962	0,956	0,9501	0,9444	0,9389	0,9334	0,9281	0,9229
69	1,0386	1,0305	1,0225	1,0149	1,0074	1,0002	0,9932	0,9864	0,9798	0,9733	0,967	0,9609	0,9549	0,9491	0,9434	0,9378	0,9323	0,927	0,9218
69,1	1,0376	1,0294	1,0214	1,0138	1,0063	0,9991	0,9921	0,9853	0,9787	0,9722	0,9659	0,9598	0,9538	0,948	0,9423	0,9367	0,9313	0,926	0,9207
69,2	1,0365	1,0283	1,0204	1,0127	1,0052	0,998	0,991	0,9842	0,9776	0,9711	0,9649	0,9587	0,9528	0,9469	0,9412	0,9357	0,9302	0,9249	0,9197
69,3	1,0354	1,0272	1,0193	1,0116	1,0042	0,9969	0,9899	0,9831	0,9765	0,9701	0,9638	0,9577	0,9517	0,9458	0,9401	0,9346	0,9291	0,9238	0,9186
69,4	1,0343	1,0261	1,0182	1,0105	1,0031	0,9959	0,9889	0,9821	0,9754	0,969	0,9627	0,9566	0,9506	0,9448	0,9391	0,9335	0,9281	0,9227	0,9175
69,5	1,0332	1,025	1,0171	1,0094	1,002	0,9948	0,9878	0,981	0,9743	0,9679	0,9616	0,9555	0,9495	0,9437	0,938	0,9324	0,927	0,9217	0,9165
69,6	1,0321	1,0239	1,016	1,0083	1,0009	0,9937	0,9867	0,9799	0,9733	0,9668	0,9605	0,9544	0,9485	0,9426	0,9369	0,9314	0,9259	0,9206	0,9154
69,7	1,031	1,0228	1,0149	1,0072	0,9998	0,9926	0,9856	0,9788	0,9722	0,9657	0,9595	0,9533	0,9474	0,9415	0,9359	0,9303	0,9249	0,9195	0,9143
69,8	1,0299	1,0217	1,0138	1,0061	0,9987	0,9915	0,9845	0,9777	0,9711	0,9647	0,9584	0,9523	0,9463	0,9405	0,9348	0,9292	0,9238	0,9185	0,9133
69,9	1,0288	1,0206	1,0127	1,0051	0,9976	0,9904	0,9834	0,9766	0,97	0,9636	0,9573	0,9512	0,9452	0,9394	0,9337	0,9282	0,9227	0,9174	0,9122
70	1,0277	1,0195	1,0116	1,004	0,9965	0,9893	0,9823	0,9755	0,9689	0,9625	0,9562	0,9501	0,9441	0,9383	0,9326	0,9271	0,9216	0,9163	0,9111
70,1	1,0266	1,0184	1,0105	1,0029	0,9955	0,9883	0,9813	0,9745	0,9679	0,9614	0,9551	0,949	0,9431	0,9372	0,9316	0,926	0,9206	0,9153	0,9101
70,2	1,0255	1,0173	1,0094	1,0018	0,9944	0,9872	0,9802	0,9734	0,9668	0,9603	0,9541	0,948	0,942	0,9362	0,9305	0,9249	0,9195	0,9142	0,909
70,3	1,0244	1,0162	1,0083	1,0007	0,9933	0,9861	0,9791	0,9723	0,9657	0,9593	0,953	0,9469	0,9409	0,9351	0,9294	0,9239	0,9184	0,9131	0,9079
70,4	1,0233	1,0151	1,0072	0,9996	0,9922	0,985	0,978	0,9712	0,9646	0,9582	0,9519	0,9458	0,9398	0,934	0,9283	0,9228	0,9174	0,912	0,9068
70,5	1,0222	1,014	1,0062	0,9985	0,9911	0,9839	0,9769	0,9701	0,9635	0,9571	0,9508	0,9447	0,9388	0,9329	0,9273	0,9217	0,9163	0,911	0,9058
70,6	1,0211	1,0129	1,0051	0,9974	0,99	0,9828	0,9758	0,969	0,9624	0,956	0,9497	0,9436	0,9377	0,9319	0,9262	0,9206	0,9152	0,9099	0,9047
70,7	1,02	1,0119	1,004	0,9963	0,9889	0,9817	0,9747	0,968	0,9613	0,9549	0,9487	0,9426	0,9366	0,9308	0,9251	0,9196	0,9141	0,9088	0,9036
70,8	1,0189	1,0108	1,0029	0,9952	0,9878	0,9806	0,9736	0,9669	0,9603	0,9538	0,9476	0,9415	0,9355	0,9297	0,924	0,9185	0,9131	0,9078	0,9026
70,9	1,0178	1,0097	1,0018	0,9941	0,9867	0,9795	0,9726	0,9658	0,9592	0,9528	0,9465	0,9404	0,9344	0,9286	0,9229	0,9174	0,912	0,9067	0,9015

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
67,5	0,9327	0,9276	0,9227	0,9179	0,9132	0,9085	0,904	0,8995	0,8951	0,8908	0,8866	0,8824	0,8783	0,8743	0,8703	0,8664	0,8626	0,8588	0,855
67,6	0,9316	0,9266	0,9217	0,9168	0,9121	0,9075	0,9029	0,8985	0,8941	0,8898	0,8855	0,8813	0,8772	0,8732	0,8693	0,8653	0,8615	0,8577	0,854
67,7	0,9305	0,9255	0,9206	0,9158	0,9111	0,9064	0,9019	0,8974	0,893	0,8887	0,8845	0,8803	0,8762	0,8722	0,8682	0,8643	0,8605	0,8567	0,853
67,8	0,9295	0,9245	0,9195	0,9147	0,91	0,9054	0,9008	0,8963	0,892	0,8876	0,8834	0,8792	0,8751	0,8711	0,8672	0,8633	0,8594	0,8556	0,8519
67,9	0,9284	0,9234	0,9185	0,9137	0,9089	0,9043	0,8998	0,8953	0,8909	0,8866	0,8824	0,8782	0,8741	0,8701	0,8661	0,8622	0,8584	0,8546	0,8509
68	0,9273	0,9223	0,9174	0,9126	0,9079	0,9032	0,8987	0,8942	0,8898	0,8855	0,8813	0,8771	0,873	0,869	0,8651	0,8612	0,8573	0,8535	0,8498
68,1	0,9263	0,9213	0,9164	0,9115	0,9068	0,9022	0,8976	0,8932	0,8888	0,8845	0,8803	0,8761	0,872	0,868	0,864	0,8601	0,8563	0,8525	0,8488
68,2	0,9252	0,9202	0,9153	0,9105	0,9058	0,9011	0,8966	0,8921	0,8877	0,8834	0,8792	0,875	0,8709	0,8669	0,863	0,8591	0,8552	0,8514	0,8477
68,3	0,9242	0,9191	0,9142	0,9094	0,9047	0,9001	0,8955	0,8911	0,8867	0,8824	0,8781	0,874	0,8699	0,8659	0,8619	0,858	0,8542	0,8504	0,8467
68,4	0,9231	0,9181	0,9132	0,9084	0,9036	0,899	0,8945	0,89	0,8856	0,8813	0,8771	0,8729	0,8688	0,8648	0,8609	0,857	0,8531	0,8494	0,8456
68,5	0,922	0,917	0,9121	0,9073	0,9026	0,898	0,8934	0,889	0,8846	0,8803	0,876	0,8719	0,8678	0,8638	0,8598	0,8559	0,8521	0,8483	0,8446
68,6	0,921	0,916	0,9111	0,9062	0,9015	0,8969	0,8924	0,8879	0,8835	0,8792	0,875	0,8708	0,8667	0,8627	0,8588	0,8549	0,851	0,8473	0,8435
68,7	0,9199	0,9149	0,91	0,9052	0,9005	0,8958	0,8913	0,8868	0,8825	0,8782	0,8739	0,8698	0,8657	0,8617	0,8577	0,8538	0,85	0,8462	0,8425
68,8	0,9188	0,9138	0,9089	0,9041	0,8994	0,8948	0,8902	0,8858	0,8814	0,8771	0,8729	0,8687	0,8646	0,8606	0,8567	0,8528	0,8489	0,8452	0,8415
68,9	0,9178	0,9128	0,9079	0,9031	0,8983	0,8937	0,8892	0,8847	0,8803	0,876	0,8718	0,8677	0,8636	0,8596	0,8556	0,8517	0,8479	0,8441	0,8404
69	0,9167	0,9117	0,9068	0,902	0,8973	0,8927	0,8881	0,8837	0,8793	0,875	0,8708	0,8666	0,8625	0,8585	0,8546	0,8507	0,8468	0,8431	0,8394
69,1	0,9156	0,9106	0,9057	0,9009	0,8962	0,8916	0,8871	0,8826	0,8782	0,8739	0,8697	0,8656	0,8615	0,8575	0,8535	0,8496	0,8458	0,842	0,8383
69,2	0,9146	0,9096	0,9047	0,8999	0,8952	0,8905	0,886	0,8816	0,8772	0,8729	0,8687	0,8645	0,8604	0,8564	0,8525	0,8486	0,8447	0,841	0,8373
69,3	0,9135	0,9085	0,9036	0,8988	0,8941	0,8895	0,8849	0,8805	0,8761	0,8718	0,8676	0,8635	0,8594	0,8554	0,8514	0,8475	0,8437	0,8399	0,8362
69,4	0,9124	0,9074	0,9025	0,8977	0,893	0,8884	0,8839	0,8794	0,8751	0,8708	0,8665	0,8624	0,8583	0,8543	0,8504	0,8465	0,8426	0,8389	0,8352
69,5	0,9114	0,9064	0,9015	0,8967	0,892	0,8874	0,8828	0,8784	0,874	0,8697	0,8655	0,8613	0,8573	0,8532	0,8493	0,8454	0,8416	0,8378	0,8341
69,6	0,9103	0,9053	0,9004	0,8956	0,8909	0,8863	0,8818	0,8773	0,8729	0,8687	0,8644	0,8603	0,8562	0,8522	0,8482	0,8444	0,8405	0,8368	0,8331
69,7	0,9092	0,9042	0,8994	0,8946	0,8899	0,8852	0,8807	0,8763	0,8719	0,8676	0,8634	0,8592	0,8552	0,8511	0,8472	0,8433	0,8395	0,8357	0,832
69,8	0,9082	0,9032	0,8983	0,8935	0,8888	0,8842	0,8796	0,8752	0,8708	0,8665	0,8623	0,8582	0,8541	0,8501	0,8461	0,8423	0,8384	0,8347	0,831
69,9	0,9071	0,9021	0,8972	0,8924	0,8877	0,8831	0,8786	0,8741	0,8698	0,8655	0,8613	0,8571	0,853	0,849	0,8451	0,8412	0,8374	0,8336	0,8299
70	0,906	0,901	0,8962	0,8914	0,8867	0,882	0,8775	0,8731	0,8687	0,8644	0,8602	0,8561	0,852	0,848	0,844	0,8402	0,8363	0,8326	0,8289
70,1	0,905	0,9	0,8951	0,8903	0,8856	0,881	0,8765	0,872	0,8676	0,8634	0,8591	0,855	0,8509	0,8469	0,843	0,8391	0,8353	0,8315	0,8278
70,2	0,9039	0,8989	0,894	0,8892	0,8845	0,8799	0,8754	0,871	0,8666	0,8623	0,8581	0,8539	0,8499	0,8459	0,8419	0,838	0,8342	0,8305	0,8268
70,3	0,9028	0,8978	0,893	0,8882	0,8835	0,8789	0,8743	0,8699	0,8655	0,8612	0,857	0,8529	0,8488	0,8448	0,8409	0,837	0,8332	0,8294	0,8257
70,4	0,9018	0,8968	0,8919	0,8871	0,8824	0,8778	0,8733	0,8688	0,8645	0,8602	0,856	0,8518	0,8478	0,8438	0,8398	0,8359	0,8321	0,8284	0,8247
70,5	0,9007	0,8957	0,8908	0,886	0,8813	0,8767	0,8722	0,8678	0,8634	0,8591	0,8549	0,8508	0,8467	0,8427	0,8388	0,8349	0,8311	0,8273	0,8236
70,6	0,8996	0,8946	0,8898	0,885	0,8803	0,8757	0,8711	0,8667	0,8623	0,8581	0,8539	0,8497	0,8456	0,8416	0,8377	0,8338	0,83	0,8263	0,8226
70,7	0,8985	0,8936	0,8887	0,8839	0,8792	0,8746	0,8701	0,8656	0,8613	0,857	0,8528	0,8487	0,8446	0,8406	0,8366	0,8328	0,829	0,8252	0,8215
70,8	0,8975	0,8925	0,8876	0,8828	0,8781	0,8735	0,869	0,8646	0,8602	0,8559	0,8517	0,8476	0,8435	0,8395	0,8356	0,8317	0,8279	0,8241	0,8204
70,9	0,8964	0,8914	0,8865	0,8818	0,8771	0,8725	0,8679	0,8635	0,8592	0,8549	0,8507	0,8465	0,8425	0,8385	0,8345	0,8307	0,8268	0,8231	0,8194

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
67,5	0,8514	0,8478	0,8442	0,8407	0,8372	0,8338	0,8304	0,8271	0,8238	0,8206	0,8174	0,8142	0,8111	0,808	0,805	0,802	0,799	0,7961	0,7932
67,6	0,8503	0,8467	0,8431	0,8396	0,8362	0,8328	0,8294	0,8261	0,8228	0,8195	0,8163	0,8132	0,8101	0,807	0,804	0,801	0,798	0,7951	0,7922
67,7	0,8493	0,8457	0,8421	0,8386	0,8351	0,8317	0,8283	0,825	0,8217	0,8185	0,8153	0,8122	0,809	0,806	0,8029	0,7999	0,797	0,794	0,7911
67,8	0,8482	0,8446	0,8411	0,8376	0,8341	0,8307	0,8273	0,824	0,8207	0,8175	0,8143	0,8111	0,808	0,8049	0,8019	0,7989	0,7959	0,793	0,7901
67,9	0,8472	0,8436	0,84	0,8365	0,833	0,8296	0,8263	0,8229	0,8197	0,8164	0,8132	0,8101	0,807	0,8039	0,8009	0,7979	0,7949	0,792	0,7891
68	0,8462	0,8425	0,839	0,8355	0,832	0,8286	0,8252	0,8219	0,8186	0,8154	0,8122	0,809	0,8059	0,8029	0,7998	0,7968	0,7939	0,7909	0,788
68,1	0,8451	0,8415	0,8379	0,8344	0,831	0,8276	0,8242	0,8209	0,8176	0,8144	0,8112	0,808	0,8049	0,8018	0,7988	0,7958	0,7928	0,7899	0,787
68,2	0,8441	0,8405	0,8369	0,8334	0,8299	0,8265	0,8231	0,8198	0,8166	0,8133	0,8101	0,807	0,8039	0,8008	0,7978	0,7948	0,7918	0,7889	0,786
68,3	0,843	0,8394	0,8358	0,8323	0,8289	0,8255	0,8221	0,8188	0,8155	0,8123	0,8091	0,8059	0,8028	0,7998	0,7967	0,7937	0,7908	0,7878	0,7849
68,4	0,842	0,8384	0,8348	0,8313	0,8278	0,8244	0,8211	0,8177	0,8145	0,8112	0,8081	0,8049	0,8018	0,7987	0,7957	0,7927	0,7897	0,7868	0,7839
68,5	0,8409	0,8373	0,8338	0,8303	0,8268	0,8234	0,82	0,8167	0,8134	0,8102	0,807	0,8039	0,8008	0,7977	0,7947	0,7917	0,7887	0,7858	0,7829
68,6	0,8399	0,8363	0,8327	0,8292	0,8258	0,8223	0,819	0,8157	0,8124	0,8092	0,806	0,8028	0,7997	0,7967	0,7936	0,7906	0,7877	0,7847	0,7819
68,7	0,8388	0,8352	0,8317	0,8282	0,8247	0,8213	0,8179	0,8146	0,8114	0,8081	0,8049	0,8018	0,7987	0,7956	0,7926	0,7896	0,7866	0,7837	0,7808
68,8	0,8378	0,8342	0,8306	0,8271	0,8237	0,8203	0,8169	0,8136	0,8103	0,8071	0,8039	0,8008	0,7976	0,7946	0,7915	0,7886	0,7856	0,7827	0,7798
68,9	0,8367	0,8331	0,8296	0,8261	0,8226	0,8192	0,8159	0,8125	0,8093	0,8061	0,8029	0,7997	0,7966	0,7935	0,7905	0,7875	0,7846	0,7816	0,7788
69	0,8357	0,8321	0,8285	0,825	0,8216	0,8182	0,8148	0,8115	0,8082	0,805	0,8018	0,7987	0,7956	0,7925	0,7895	0,7865	0,7835	0,7806	0,7777
69,1	0,8347	0,831	0,8275	0,824	0,8205	0,8171	0,8138	0,8105	0,8072	0,804	0,8008	0,7976	0,7945	0,7915	0,7884	0,7855	0,7825	0,7796	0,7767
69,2	0,8336	0,83	0,8265	0,8229	0,8195	0,8161	0,8127	0,8094	0,8062	0,8029	0,7997	0,7966	0,7935	0,7904	0,7874	0,7844	0,7815	0,7785	0,7757
69,3	0,8326	0,829	0,8254	0,8219	0,8185	0,8151	0,8117	0,8084	0,8051	0,8019	0,7987	0,7956	0,7925	0,7894	0,7864	0,7834	0,7804	0,7775	0,7746
69,4	0,8315	0,8279	0,8244	0,8209	0,8174	0,814	0,8107	0,8073	0,8041	0,8008	0,7977	0,7945	0,7914	0,7884	0,7853	0,7823	0,7794	0,7765	0,7736
69,5	0,8305	0,8269	0,8233	0,8198	0,8164	0,813	0,8096	0,8063	0,803	0,7998	0,7966	0,7935	0,7904	0,7873	0,7843	0,7813	0,7784	0,7754	0,7725
69,6	0,8294	0,8258	0,8223	0,8188	0,8153	0,8119	0,8086	0,8053	0,802	0,7988	0,7956	0,7924	0,7893	0,7863	0,7833	0,7803	0,7773	0,7744	0,7715
69,7	0,8284	0,8248	0,8212	0,8177	0,8143	0,8109	0,8075	0,8042	0,8009	0,7977	0,7945	0,7914	0,7883	0,7852	0,7822	0,7792	0,7763	0,7734	0,7705
69,8	0,8273	0,8237	0,8202	0,8167	0,8132	0,8098	0,8065	0,8032	0,7999	0,7967	0,7935	0,7904	0,7873	0,7842	0,7812	0,7782	0,7752	0,7723	0,7694
69,9	0,8263	0,8227	0,8191	0,8156	0,8122	0,8088	0,8054	0,8021	0,7989	0,7956	0,7925	0,7893	0,7862	0,7832	0,7801	0,7772	0,7742	0,7713	0,7684
70	0,8252	0,8216	0,8181	0,8146	0,8111	0,8077	0,8044	0,8011	0,7978	0,7946	0,7914	0,7883	0,7852	0,7821	0,7791	0,7761	0,7732	0,7703	0,7674
70,1	0,8242	0,8206	0,817	0,8135	0,8101	0,8067	0,8033	0,8	0,7968	0,7936	0,7904	0,7872	0,7841	0,7811	0,7781	0,7751	0,7721	0,7692	0,7663
70,2	0,8231	0,8195	0,816	0,8125	0,809	0,8056	0,8023	0,799	0,7957	0,7925	0,7893	0,7862	0,7831	0,78	0,777	0,774	0,7711	0,7682	0,7653
70,3	0,8221	0,8185	0,8149	0,8114	0,808	0,8046	0,8012	0,7979	0,7947	0,7915	0,7883	0,7852	0,7821	0,779	0,776	0,773	0,77	0,7671	0,7643
70,4	0,821	0,8174	0,8139	0,8104	0,8069	0,8035	0,8002	0,7969	0,7936	0,7904	0,7872	0,7841	0,781	0,778	0,7749	0,772	0,769	0,7661	0,7632
70,5	0,82	0,8164	0,8128	0,8093	0,8059	0,8025	0,7992	0,7958	0,7926	0,7894	0,7862	0,7831	0,78	0,7769	0,7739	0,7709	0,768	0,7651	0,7622
70,6	0,8189	0,8153	0,8118	0,8083	0,8048	0,8014	0,7981	0,7948	0,7915	0,7883	0,7852	0,782	0,7789	0,7759	0,7729	0,7699	0,7669	0,764	0,7611
70,7	0,8179	0,8143	0,8107	0,8072	0,8038	0,8004	0,7971	0,7938	0,7905	0,7873	0,7841	0,781	0,7779	0,7748	0,7718	0,7688	0,7659	0,763	0,7601
70,8	0,8168	0,8132	0,8097	0,8062	0,8027	0,7994	0,796	0,7927	0,7894	0,7862	0,7831	0,7799	0,7768	0,7738	0,7708	0,7678	0,7648	0,7619	0,7591
70,9	0,8157	0,8122	0,8086	0,8051	0,8017	0,7983	0,795	0,7917	0,7884	0,7852	0,782	0,7789	0,7758	0,7727	0,7697	0,7667	0,7638	0,7609	0,758

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
67,5	0,7903	0,7875	0,7847	0,7819	0,7792	0,7765	0,7738	0,7712	0,7685	0,7659	0,7634	0,7608	0,7583	0,7558	0,7534	0,7509	0,7485	0,7461	0,7437
67,6	0,7893	0,7865	0,7837	0,7809	0,7782	0,7755	0,7728	0,7701	0,7675	0,7649	0,7624	0,7598	0,7573	0,7548	0,7523	0,7499	0,7475	0,7451	0,7427
67,7	0,7883	0,7854	0,7826	0,7799	0,7771	0,7744	0,7718	0,7691	0,7665	0,7639	0,7613	0,7588	0,7563	0,7538	0,7513	0,7489	0,7465	0,7441	0,7417
67,8	0,7872	0,7844	0,7816	0,7788	0,7761	0,7734	0,7707	0,7681	0,7655	0,7629	0,7603	0,7578	0,7553	0,7528	0,7503	0,7479	0,7454	0,7431	0,7407
67,9	0,7862	0,7834	0,7806	0,7778	0,7751	0,7724	0,7697	0,7671	0,7644	0,7618	0,7593	0,7567	0,7542	0,7517	0,7493	0,7468	0,7444	0,742	0,7397
68	0,7852	0,7824	0,7796	0,7768	0,7741	0,7714	0,7687	0,766	0,7634	0,7608	0,7583	0,7557	0,7532	0,7507	0,7483	0,7458	0,7434	0,741	0,7386
68,1	0,7842	0,7813	0,7785	0,7758	0,773	0,7703	0,7677	0,765	0,7624	0,7598	0,7572	0,7547	0,7522	0,7497	0,7472	0,7448	0,7424	0,74	0,7376
68,2	0,7831	0,7803	0,7775	0,7747	0,772	0,7693	0,7666	0,764	0,7614	0,7588	0,7562	0,7537	0,7512	0,7487	0,7462	0,7438	0,7414	0,739	0,7366
68,3	0,7821	0,7793	0,7765	0,7737	0,771	0,7683	0,7656	0,763	0,7603	0,7577	0,7552	0,7527	0,7501	0,7477	0,7452	0,7428	0,7403	0,738	0,7356
68,4	0,7811	0,7782	0,7754	0,7727	0,7699	0,7672	0,7646	0,7619	0,7593	0,7567	0,7542	0,7516	0,7491	0,7466	0,7442	0,7417	0,7393	0,7369	0,7346
68,5	0,78	0,7772	0,7744	0,7716	0,7689	0,7662	0,7635	0,7609	0,7583	0,7557	0,7531	0,7506	0,7481	0,7456	0,7431	0,7407	0,7383	0,7359	0,7335
68,6	0,779	0,7762	0,7734	0,7706	0,7679	0,7652	0,7625	0,7599	0,7573	0,7547	0,7521	0,7496	0,7471	0,7446	0,7421	0,7397	0,7373	0,7349	0,7325
68,7	0,778	0,7751	0,7724	0,7696	0,7669	0,7642	0,7615	0,7588	0,7562	0,7536	0,7511	0,7486	0,746	0,7436	0,7411	0,7387	0,7363	0,7339	0,7315
68,8	0,7769	0,7741	0,7713	0,7686	0,7658	0,7631	0,7605	0,7578	0,7552	0,7526	0,7501	0,7475	0,745	0,7425	0,7401	0,7376	0,7352	0,7328	0,7305
68,9	0,7759	0,7731	0,7703	0,7675	0,7648	0,7621	0,7594	0,7568	0,7542	0,7516	0,749	0,7465	0,744	0,7415	0,7391	0,7366	0,7342	0,7318	0,7295
69	0,7749	0,772	0,7693	0,7665	0,7638	0,7611	0,7584	0,7558	0,7532	0,7506	0,748	0,7455	0,743	0,7405	0,738	0,7356	0,7332	0,7308	0,7284
69,1	0,7738	0,771	0,7682	0,7655	0,7627	0,76	0,7574	0,7547	0,7521	0,7495	0,747	0,7444	0,7419	0,7395	0,737	0,7346	0,7322	0,7298	0,7274
69,2	0,7728	0,77	0,7672	0,7644	0,7617	0,759	0,7563	0,7537	0,7511	0,7485	0,746	0,7434	0,7409	0,7384	0,736	0,7335	0,7311	0,7288	0,7264
69,3	0,7718	0,7689	0,7662	0,7634	0,7607	0,758	0,7553	0,7527	0,7501	0,7475	0,7449	0,7424	0,7399	0,7374	0,735	0,7325	0,7301	0,7277	0,7254
69,4	0,7707	0,7679	0,7651	0,7624	0,7596	0,757	0,7543	0,7516	0,749	0,7465	0,7439	0,7414	0,7389	0,7364	0,7339	0,7315	0,7291	0,7267	0,7243
69,5	0,7697	0,7669	0,7641	0,7613	0,7586	0,7559	0,7533	0,7506	0,748	0,7454	0,7429	0,7403	0,7378	0,7354	0,7329	0,7305	0,7281	0,7257	0,7233
69,6	0,7687	0,7658	0,7631	0,7603	0,7576	0,7549	0,7522	0,7496	0,747	0,7444	0,7418	0,7393	0,7368	0,7343	0,7319	0,7294	0,727	0,7247	0,7223
69,7	0,7676	0,7648	0,762	0,7593	0,7565	0,7539	0,7512	0,7486	0,7459	0,7434	0,7408	0,7383	0,7358	0,7333	0,7308	0,7284	0,726	0,7236	0,7213
69,8	0,7666	0,7638	0,761	0,7582	0,7555	0,7528	0,7502	0,7475	0,7449	0,7423	0,7398	0,7373	0,7347	0,7323	0,7298	0,7274	0,725	0,7226	0,7202
69,9	0,7656	0,7627	0,76	0,7572	0,7545	0,7518	0,7491	0,7465	0,7439	0,7413	0,7387	0,7362	0,7337	0,7312	0,7288	0,7264	0,724	0,7216	0,7192
70	0,7645	0,7617	0,7589	0,7562	0,7534	0,7508	0,7481	0,7455	0,7429	0,7403	0,7377	0,7352	0,7327	0,7302	0,7278	0,7253	0,7229	0,7206	0,7182
70,1	0,7635	0,7607	0,7579	0,7551	0,7524	0,7497	0,7471	0,7444	0,7418	0,7392	0,7367	0,7342	0,7317	0,7292	0,7267	0,7243	0,7219	0,7195	0,7172
70,2	0,7624	0,7596	0,7569	0,7541	0,7514	0,7487	0,746	0,7434	0,7408	0,7382	0,7357	0,7331	0,7306	0,7282	0,7257	0,7233	0,7209	0,7185	0,7161
70,3	0,7614	0,7586	0,7558	0,7531	0,7503	0,7477	0,745	0,7424	0,7398	0,7372	0,7346	0,7321	0,7296	0,7271	0,7247	0,7222	0,7198	0,7175	0,7151
70,4	0,7604	0,7576	0,7548	0,752	0,7493	0,7466	0,744	0,7413	0,7387	0,7361	0,7336	0,7311	0,7286	0,7261	0,7236	0,7212	0,7188	0,7164	0,7141
70,5	0,7593	0,7565	0,7537	0,751	0,7483	0,7456	0,7429	0,7403	0,7377	0,7351	0,7326	0,73	0,7275	0,7251	0,7226	0,7202	0,7178	0,7154	0,7131
70,6	0,7583	0,7555	0,7527	0,75	0,7472	0,7445	0,7419	0,7393	0,7367	0,7341	0,7315	0,729	0,7265	0,724	0,7216	0,7192	0,7168	0,7144	0,712
70,7	0,7573	0,7544	0,7517	0,7489	0,7462	0,7435	0,7409	0,7382	0,7356	0,733	0,7305	0,728	0,7255	0,723	0,7206	0,7181	0,7157	0,7134	0,711
70,8	0,7562	0,7534	0,7506	0,7479	0,7452	0,7425	0,7398	0,7372	0,7346	0,732	0,7295	0,7269	0,7244	0,722	0,7195	0,7171	0,7147	0,7123	0,71
70,9	0,7552	0,7524	0,7496	0,7468	0,7441	0,7414	0,7388	0,7361	0,7335	0,731	0,7284	0,7259	0,7234	0,7209	0,7185	0,7161	0,7137	0,7113	0,7089

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
67,5	0,7414	0,7391	0,7368	0,7345	0,7322	0,73	0,7277	0,7255	0,7234	0,7212	0,719	0,7169	0,7148	0,7127	0,7106	0,7086	0,7065	0,7045	0,7025
67,6	0,7404	0,738	0,7357	0,7335	0,7312	0,729	0,7267	0,7245	0,7223	0,7202	0,718	0,7159	0,7138	0,7117	0,7096	0,7076	0,7055	0,7035	0,7015
67,7	0,7394	0,737	0,7347	0,7324	0,7302	0,7279	0,7257	0,7235	0,7213	0,7192	0,717	0,7149	0,7128	0,7107	0,7086	0,7066	0,7045	0,7025	0,7005
67,8	0,7383	0,736	0,7337	0,7314	0,7292	0,7269	0,7247	0,7225	0,7203	0,7181	0,716	0,7139	0,7118	0,7097	0,7076	0,7055	0,7035	0,7015	0,6995
67,9	0,7373	0,735	0,7327	0,7304	0,7281	0,7259	0,7237	0,7215	0,7193	0,7171	0,715	0,7129	0,7108	0,7087	0,7066	0,7045	0,7025	0,7005	0,6985
68	0,7363	0,734	0,7317	0,7294	0,7271	0,7249	0,7227	0,7205	0,7183	0,7161	0,714	0,7119	0,7097	0,7077	0,7056	0,7035	0,7015	0,6995	0,6975
68,1	0,7353	0,733	0,7307	0,7284	0,7261	0,7239	0,7217	0,7194	0,7173	0,7151	0,713	0,7108	0,7087	0,7066	0,7046	0,7025	0,7005	0,6985	0,6964
68,2	0,7343	0,7319	0,7296	0,7274	0,7251	0,7229	0,7206	0,7184	0,7163	0,7141	0,7119	0,7098	0,7077	0,7056	0,7036	0,7015	0,6995	0,6974	0,6954
68,3	0,7332	0,7309	0,7286	0,7263	0,7241	0,7218	0,7196	0,7174	0,7152	0,7131	0,7109	0,7088	0,7067	0,7046	0,7025	0,7005	0,6984	0,6964	0,6944
68,4	0,7322	0,7299	0,7276	0,7253	0,7231	0,7208	0,7186	0,7164	0,7142	0,7121	0,7099	0,7078	0,7057	0,7036	0,7015	0,6995	0,6974	0,6954	0,6934
68,5	0,7312	0,7289	0,7266	0,7243	0,722	0,7198	0,7176	0,7154	0,7132	0,711	0,7089	0,7068	0,7047	0,7026	0,7005	0,6985	0,6964	0,6944	0,6924
68,6	0,7302	0,7279	0,7256	0,7233	0,721	0,7188	0,7166	0,7144	0,7122	0,71	0,7079	0,7058	0,7037	0,7016	0,6995	0,6974	0,6954	0,6934	0,6914
68,7	0,7292	0,7268	0,7245	0,7223	0,72	0,7178	0,7156	0,7134	0,7112	0,709	0,7069	0,7048	0,7026	0,7006	0,6985	0,6964	0,6944	0,6924	0,6904
68,8	0,7281	0,7258	0,7235	0,7212	0,719	0,7167	0,7145	0,7123	0,7102	0,708	0,7059	0,7037	0,7016	0,6995	0,6975	0,6954	0,6934	0,6914	0,6894
68,9	0,7271	0,7248	0,7225	0,7202	0,718	0,7157	0,7135	0,7113	0,7091	0,707	0,7048	0,7027	0,7006	0,6985	0,6965	0,6944	0,6924	0,6904	0,6884
69	0,7261	0,7238	0,7215	0,7192	0,7169	0,7147	0,7125	0,7103	0,7081	0,706	0,7038	0,7017	0,6996	0,6975	0,6954	0,6934	0,6914	0,6893	0,6873
69,1	0,7251	0,7228	0,7205	0,7182	0,7159	0,7137	0,7115	0,7093	0,7071	0,7049	0,7028	0,7007	0,6986	0,6965	0,6944	0,6924	0,6903	0,6883	0,6863
69,2	0,7241	0,7217	0,7194	0,7172	0,7149	0,7127	0,7105	0,7083	0,7061	0,7039	0,7018	0,6997	0,6976	0,6955	0,6934	0,6914	0,6893	0,6873	0,6853
69,3	0,723	0,7207	0,7184	0,7161	0,7139	0,7117	0,7094	0,7072	0,7051	0,7029	0,7008	0,6987	0,6965	0,6945	0,6924	0,6903	0,6883	0,6863	0,6843
69,4	0,722	0,7197	0,7174	0,7151	0,7129	0,7106	0,7084	0,7062	0,704	0,7019	0,6998	0,6976	0,6955	0,6934	0,6914	0,6893	0,6873	0,6853	0,6833
69,5	0,721	0,7187	0,7164	0,7141	0,7118	0,7096	0,7074	0,7052	0,703	0,7009	0,6987	0,6966	0,6945	0,6924	0,6904	0,6883	0,6863	0,6843	0,6823
69,6	0,72	0,7176	0,7153	0,7131	0,7108	0,7086	0,7064	0,7042	0,702	0,6999	0,6977	0,6956	0,6935	0,6914	0,6893	0,6873	0,6853	0,6833	0,6813
69,7	0,7189	0,7166	0,7143	0,7121	0,7098	0,7076	0,7054	0,7032	0,701	0,6988	0,6967	0,6946	0,6925	0,6904	0,6883	0,6863	0,6843	0,6822	0,6802
69,8	0,7179	0,7156	0,7133	0,711	0,7088	0,7065	0,7043	0,7021	0,7	0,6978	0,6957	0,6936	0,6915	0,6894	0,6873	0,6853	0,6832	0,6812	0,6792
69,9	0,7169	0,7146	0,7123	0,71	0,7078	0,7055	0,7033	0,7011	0,6989	0,6968	0,6947	0,6925	0,6904	0,6884	0,6863	0,6842	0,6822	0,6802	0,6782
70	0,7159	0,7135	0,7112	0,709	0,7067	0,7045	0,7023	0,7001	0,6979	0,6958	0,6936	0,6915	0,6894	0,6873	0,6853	0,6832	0,6812	0,6792	0,6772
70,1	0,7148	0,7125	0,7102	0,708	0,7057	0,7035	0,7013	0,6991	0,6969	0,6947	0,6926	0,6905	0,6884	0,6863	0,6843	0,6822	0,6802	0,6782	0,6762
70,2	0,7138	0,7115	0,7092	0,7069	0,7047	0,7024	0,7002	0,698	0,6959	0,6937	0,6916	0,6895	0,6874	0,6853	0,6832	0,6812	0,6792	0,6771	0,6751
70,3	0,7128	0,7105	0,7082	0,7059	0,7037	0,7014	0,6992	0,697	0,6949	0,6927	0,6906	0,6885	0,6864	0,6843	0,6822	0,6802	0,6781	0,6761	0,6741
70,4	0,7117	0,7094	0,7071	0,7049	0,7026	0,7004	0,6982	0,696	0,6938	0,6917	0,6895	0,6874	0,6853	0,6833	0,6812	0,6791	0,6771	0,6751	0,6731
70,5	0,7107	0,7084	0,7061	0,7039	0,7016	0,6994	0,6972	0,695	0,6928	0,6907	0,6885	0,6864	0,6843	0,6822	0,6802	0,6781	0,6761	0,6741	0,6721
70,6	0,7097	0,7074	0,7051	0,7028	0,7006	0,6983	0,6961	0,694	0,6918	0,6896	0,6875	0,6854	0,6833	0,6812	0,6791	0,6771	0,6751	0,6731	0,6711
70,7	0,7087	0,7064	0,7041	0,7018	0,6995	0,6973	0,6951	0,6929	0,6908	0,6886	0,6865	0,6844	0,6823	0,6802	0,6781	0,6761	0,6741	0,672	0,6701
70,8	0,7076	0,7053	0,703	0,7008	0,6985	0,6963	0,6941	0,6919	0,6897	0,6876	0,6854	0,6833	0,6812	0,6792	0,6771	0,6751	0,673	0,671	0,669
70,9	0,7066	0,7043	0,702	0,6997	0,6975	0,6953	0,6931	0,6909	0,6887	0,6866	0,6844	0,6823	0,6802	0,6781	0,6761	0,674	0,672	0,67	0,668

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
67,5	0,7005	0,6985	0,6966	0,6946	0,6927	0,6908	0,6889	0,687	0,6851	0,6833	0,6814	0,6796	0,6778	0,676	0,6742	0,6724	0,6706	0,6689	0,6671
67,6	0,6995	0,6975	0,6956	0,6936	0,6917	0,6898	0,6879	0,686	0,6841	0,6823	0,6804	0,6786	0,6768	0,675	0,6732	0,6714	0,6696	0,6679	0,6661
67,7	0,6985	0,6965	0,6946	0,6926	0,6907	0,6888	0,6869	0,685	0,6831	0,6812	0,6794	0,6776	0,6758	0,6739	0,6722	0,6704	0,6686	0,6669	0,6651
67,8	0,6975	0,6955	0,6935	0,6916	0,6897	0,6878	0,6859	0,684	0,6821	0,6802	0,6784	0,6766	0,6748	0,6729	0,6712	0,6694	0,6676	0,6659	0,6641
67,9	0,6965	0,6945	0,6925	0,6906	0,6887	0,6868	0,6849	0,683	0,6811	0,6792	0,6774	0,6756	0,6737	0,6719	0,6702	0,6684	0,6666	0,6649	0,6631
68	0,6955	0,6935	0,6915	0,6896	0,6877	0,6857	0,6838	0,682	0,6801	0,6782	0,6764	0,6746	0,6727	0,6709	0,6691	0,6674	0,6656	0,6639	0,6621
68,1	0,6945	0,6925	0,6905	0,6886	0,6867	0,6847	0,6828	0,681	0,6791	0,6772	0,6754	0,6736	0,6717	0,6699	0,6681	0,6664	0,6646	0,6629	0,6611
68,2	0,6934	0,6915	0,6895	0,6876	0,6856	0,6837	0,6818	0,6799	0,6781	0,6762	0,6744	0,6725	0,6707	0,6689	0,6671	0,6654	0,6636	0,6618	0,6601
68,3	0,6924	0,6905	0,6885	0,6866	0,6846	0,6827	0,6808	0,6789	0,6771	0,6752	0,6734	0,6715	0,6697	0,6679	0,6661	0,6644	0,6626	0,6608	0,6591
68,4	0,6914	0,6895	0,6875	0,6856	0,6836	0,6817	0,6798	0,6779	0,6761	0,6742	0,6724	0,6705	0,6687	0,6669	0,6651	0,6634	0,6616	0,6598	0,6581
68,5	0,6904	0,6884	0,6865	0,6845	0,6826	0,6807	0,6788	0,6769	0,6751	0,6732	0,6714	0,6695	0,6677	0,6659	0,6641	0,6624	0,6606	0,6588	0,6571
68,6	0,6894	0,6874	0,6855	0,6835	0,6816	0,6797	0,6778	0,6759	0,674	0,6722	0,6704	0,6685	0,6667	0,6649	0,6631	0,6613	0,6596	0,6578	0,6561
68,7	0,6884	0,6864	0,6845	0,6825	0,6806	0,6787	0,6768	0,6749	0,673	0,6712	0,6693	0,6675	0,6657	0,6639	0,6621	0,6603	0,6586	0,6568	0,6551
68,8	0,6874	0,6854	0,6835	0,6815	0,6796	0,6777	0,6758	0,6739	0,672	0,6702	0,6683	0,6665	0,6647	0,6629	0,6611	0,6593	0,6576	0,6558	0,6541
68,9	0,6864	0,6844	0,6824	0,6805	0,6786	0,6767	0,6748	0,6729	0,671	0,6692	0,6673	0,6655	0,6637	0,6619	0,6601	0,6583	0,6566	0,6548	0,6531
69	0,6854	0,6834	0,6814	0,6795	0,6776	0,6757	0,6738	0,6719	0,67	0,6682	0,6663	0,6645	0,6627	0,6609	0,6591	0,6573	0,6556	0,6538	0,6521
69,1	0,6843	0,6824	0,6804	0,6785	0,6766	0,6746	0,6727	0,6709	0,669	0,6671	0,6653	0,6635	0,6617	0,6599	0,6581	0,6563	0,6546	0,6528	0,6511
69,2	0,6833	0,6814	0,6794	0,6775	0,6755	0,6736	0,6717	0,6699	0,668	0,6661	0,6643	0,6625	0,6607	0,6589	0,6571	0,6553	0,6535	0,6518	0,6501
69,3	0,6823	0,6803	0,6784	0,6765	0,6745	0,6726	0,6707	0,6688	0,667	0,6651	0,6633	0,6615	0,6597	0,6579	0,6561	0,6543	0,6525	0,6508	0,6491
69,4	0,6813	0,6793	0,6774	0,6754	0,6735	0,6716	0,6697	0,6678	0,666	0,6641	0,6623	0,6605	0,6586	0,6568	0,6551	0,6533	0,6515	0,6498	0,648
69,5	0,6803	0,6783	0,6764	0,6744	0,6725	0,6706	0,6687	0,6668	0,665	0,6631	0,6613	0,6594	0,6576	0,6558	0,6541	0,6523	0,6505	0,6488	0,647
69,6	0,6793	0,6773	0,6753	0,6734	0,6715	0,6696	0,6677	0,6658	0,6639	0,6621	0,6603	0,6584	0,6566	0,6548	0,653	0,6513	0,6495	0,6478	0,646
69,7	0,6783	0,6763	0,6743	0,6724	0,6705	0,6686	0,6667	0,6648	0,6629	0,6611	0,6592	0,6574	0,6556	0,6538	0,652	0,6503	0,6485	0,6468	0,645
69,8	0,6772	0,6753	0,6733	0,6714	0,6695	0,6676	0,6657	0,6638	0,6619	0,6601	0,6582	0,6564	0,6546	0,6528	0,651	0,6493	0,6475	0,6457	0,644
69,9	0,6762	0,6743	0,6723	0,6704	0,6684	0,6665	0,6646	0,6628	0,6609	0,6591	0,6572	0,6554	0,6536	0,6518	0,65	0,6482	0,6465	0,6447	0,643
70	0,6752	0,6732	0,6713	0,6694	0,6674	0,6655	0,6636	0,6618	0,6599	0,658	0,6562	0,6544	0,6526	0,6508	0,649	0,6472	0,6455	0,6437	0,642
70,1	0,6742	0,6722	0,6703	0,6683	0,6664	0,6645	0,6626	0,6607	0,6589	0,657	0,6552	0,6534	0,6516	0,6498	0,648	0,6462	0,6445	0,6427	0,641
70,2	0,6732	0,6712	0,6693	0,6673	0,6654	0,6635	0,6616	0,6597	0,6579	0,656	0,6542	0,6524	0,6506	0,6488	0,647	0,6452	0,6435	0,6417	0,64
70,3	0,6721	0,6702	0,6682	0,6663	0,6644	0,6625	0,6606	0,6587	0,6569	0,655	0,6532	0,6514	0,6495	0,6477	0,646	0,6442	0,6424	0,6407	0,639
70,4	0,6711	0,6692	0,6672	0,6653	0,6634	0,6615	0,6596	0,6577	0,6558	0,654	0,6522	0,6503	0,6485	0,6467	0,645	0,6432	0,6414	0,6397	0,638
70,5	0,6701	0,6681	0,6662	0,6643	0,6623	0,6604	0,6586	0,6567	0,6548	0,653	0,6511	0,6493	0,6475	0,6457	0,6439	0,6422	0,6404	0,6387	0,6369
70,6	0,6691	0,6671	0,6652	0,6633	0,6613	0,6594	0,6575	0,6557	0,6538	0,652	0,6501	0,6483	0,6465	0,6447	0,6429	0,6412	0,6394	0,6377	0,6359
70,7	0,6681	0,6661	0,6642	0,6622	0,6603	0,6584	0,6565	0,6546	0,6528	0,6509	0,6491	0,6473	0,6455	0,6437	0,6419	0,6401	0,6384	0,6366	0,6349
70,8	0,6671	0,6651	0,6631	0,6612	0,6593	0,6574	0,6555	0,6536	0,6518	0,6499	0,6481	0,6463	0,6445	0,6427	0,6409	0,6391	0,6374	0,6356	0,6339
70,9	0,666	0,6641	0,6621	0,6602	0,6583	0,6564	0,6545	0,6526	0,6508	0,6489	0,6471	0,6453	0,6435	0,6417	0,6399	0,6381	0,6364	0,6346	0,6329

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
67,5	0,6654	0,6637	0,662	0,6603	0,6586	0,6569	0,6552	0,6536
67,6	0,6644	0,6627	0,661	0,6593	0,6576	0,6559	0,6542	0,6526
67,7	0,6634	0,6617	0,66	0,6583	0,6566	0,6549	0,6532	0,6516
67,8	0,6624	0,6607	0,659	0,6573	0,6556	0,6539	0,6522	0,6506
67,9	0,6614	0,6597	0,658	0,6563	0,6546	0,6529	0,6513	0,6496
68	0,6604	0,6587	0,657	0,6553	0,6536	0,6519	0,6503	0,6486
68,1	0,6594	0,6577	0,656	0,6543	0,6526	0,6509	0,6493	0,6476
68,2	0,6584	0,6567	0,655	0,6533	0,6516	0,6499	0,6483	0,6466
68,3	0,6574	0,6557	0,654	0,6523	0,6506	0,6489	0,6473	0,6456
68,4	0,6564	0,6547	0,653	0,6513	0,6496	0,6479	0,6463	0,6446
68,5	0,6554	0,6537	0,652	0,6503	0,6486	0,6469	0,6452	0,6436
68,6	0,6544	0,6527	0,6509	0,6493	0,6476	0,6459	0,6442	0,6426
68,7	0,6534	0,6516	0,6499	0,6483	0,6466	0,6449	0,6432	0,6416
68,8	0,6524	0,6506	0,6489	0,6472	0,6456	0,6439	0,6422	0,6406
68,9	0,6514	0,6496	0,6479	0,6462	0,6446	0,6429	0,6412	0,6396
69	0,6503	0,6486	0,6469	0,6452	0,6436	0,6419	0,6402	0,6386
69,1	0,6493	0,6476	0,6459	0,6442	0,6426	0,6409	0,6392	0,6376
69,2	0,6483	0,6466	0,6449	0,6432	0,6416	0,6399	0,6382	0,6366
69,3	0,6473	0,6456	0,6439	0,6422	0,6406	0,6389	0,6372	0,6356
69,4	0,6463	0,6446	0,6429	0,6412	0,6395	0,6379	0,6362	0,6346
69,5	0,6453	0,6436	0,6419	0,6402	0,6385	0,6369	0,6352	0,6336
69,6	0,6443	0,6426	0,6409	0,6392	0,6375	0,6359	0,6342	0,6326
69,7	0,6433	0,6416	0,6399	0,6382	0,6365	0,6349	0,6332	0,6316
69,8	0,6423	0,6406	0,6389	0,6372	0,6355	0,6339	0,6322	0,6306
69,9	0,6413	0,6396	0,6379	0,6362	0,6345	0,6328	0,6312	0,6296
70	0,6403	0,6386	0,6369	0,6352	0,6335	0,6318	0,6302	0,6285
70,1	0,6393	0,6376	0,6359	0,6342	0,6325	0,6308	0,6292	0,6275
70,2	0,6383	0,6365	0,6348	0,6332	0,6315	0,6298	0,6282	0,6265
70,3	0,6372	0,6355	0,6338	0,6322	0,6305	0,6288	0,6272	0,6255
70,4	0,6362	0,6345	0,6328	0,6311	0,6295	0,6278	0,6262	0,6245
70,5	0,6352	0,6335	0,6318	0,6301	0,6285	0,6268	0,6251	0,6235
70,6	0,6342	0,6325	0,6308	0,6291	0,6274	0,6258	0,6241	0,6225
70,7	0,6332	0,6315	0,6298	0,6281	0,6264	0,6248	0,6231	0,6215
70,8	0,6322	0,6305	0,6288	0,6271	0,6254	0,6238	0,6221	0,6205
70,9	0,6312	0,6295	0,6278	0,6261	0,6244	0,6228	0,6211	0,6195

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
71	1,2718	1,249	1,2282	1,2091	1,1914	1,1748	1,1594	1,1449	1,1312	1,1182	1,1059	1,0942	1,0831	1,0724	1,0622	1,0524	1,043	1,0339	1,0251
71,1	1,2706	1,2479	1,2271	1,2079	1,1902	1,1737	1,1583	1,1437	1,13	1,1171	1,1048	1,0931	1,0819	1,0713	1,0611	1,0513	1,0418	1,0328	1,024
71,2	1,2695	1,2467	1,2259	1,2068	1,1891	1,1726	1,1571	1,1426	1,1289	1,116	1,1037	1,092	1,0808	1,0702	1,06	1,0502	1,0407	1,0317	1,0229
71,3	1,2683	1,2456	1,2248	1,2056	1,1879	1,1714	1,156	1,1415	1,1278	1,1148	1,1026	1,0909	1,0797	1,069	1,0588	1,049	1,0396	1,0306	1,0218
71,4	1,2672	1,2444	1,2236	1,2045	1,1868	1,1703	1,1549	1,1403	1,1267	1,1137	1,1014	1,0897	1,0786	1,0679	1,0577	1,0479	1,0385	1,0295	1,0207
71,5	1,266	1,2432	1,2225	1,2034	1,1856	1,1692	1,1537	1,1392	1,1255	1,1126	1,1003	1,0886	1,0775	1,0668	1,0566	1,0468	1,0374	1,0284	1,0196
71,6	1,2648	1,2421	1,2213	1,2022	1,1845	1,168	1,1526	1,1381	1,1244	1,1115	1,0992	1,0875	1,0764	1,0657	1,0555	1,0457	1,0363	1,0273	1,0185
71,7	1,2637	1,2409	1,2202	1,2011	1,1834	1,1669	1,1515	1,137	1,1233	1,1103	1,0981	1,0864	1,0752	1,0646	1,0544	1,0446	1,0352	1,0262	1,0174
71,8	1,2625	1,2398	1,219	1,1999	1,1822	1,1657	1,1503	1,1358	1,1222	1,1092	1,0969	1,0853	1,0741	1,0635	1,0533	1,0435	1,0341	1,025	1,0163
71,9	1,2613	1,2386	1,2179	1,1988	1,1811	1,1646	1,1492	1,1347	1,121	1,1081	1,0958	1,0841	1,073	1,0624	1,0522	1,0424	1,033	1,0239	1,0152
72	1,2602	1,2375	1,2167	1,1976	1,1799	1,1635	1,148	1,1336	1,1199	1,107	1,0947	1,083	1,0719	1,0612	1,0511	1,0413	1,0319	1,0228	1,0141
72,1	1,259	1,2363	1,2156	1,1965	1,1788	1,1623	1,1469	1,1324	1,1188	1,1058	1,0936	1,0819	1,0708	1,0601	1,0499	1,0402	1,0308	1,0217	1,013
72,2	1,2579	1,2352	1,2144	1,1953	1,1776	1,1612	1,1458	1,1313	1,1176	1,1047	1,0924	1,0808	1,0697	1,059	1,0488	1,0391	1,0297	1,0206	1,0119
72,3	1,2567	1,234	1,2133	1,1942	1,1765	1,16	1,1446	1,1302	1,1165	1,1036	1,0913	1,0797	1,0685	1,0579	1,0477	1,0379	1,0285	1,0195	1,0108
72,4	1,2555	1,2328	1,2121	1,193	1,1754	1,1589	1,1435	1,129	1,1154	1,1025	1,0902	1,0785	1,0674	1,0568	1,0466	1,0368	1,0274	1,0184	1,0097
72,5	1,2544	1,2317	1,211	1,1919	1,1742	1,1578	1,1424	1,1279	1,1142	1,1013	1,0891	1,0774	1,0663	1,0557	1,0455	1,0357	1,0263	1,0173	1,0086
72,6	1,2532	1,2305	1,2098	1,1907	1,1731	1,1566	1,1412	1,1268	1,1131	1,1002	1,0879	1,0763	1,0652	1,0545	1,0444	1,0346	1,0252	1,0162	1,0075
72,7	1,252	1,2294	1,2086	1,1896	1,1719	1,1555	1,1401	1,1256	1,112	1,0991	1,0868	1,0752	1,064	1,0534	1,0432	1,0335	1,0241	1,0151	1,0064
72,8	1,2509	1,2282	1,2075	1,1884	1,1708	1,1543	1,1389	1,1245	1,1108	1,0979	1,0857	1,074	1,0629	1,0523	1,0421	1,0324	1,023	1,014	1,0053
72,9	1,2497	1,227	1,2063	1,1873	1,1696	1,1532	1,1378	1,1233	1,1097	1,0968	1,0846	1,0729	1,0618	1,0512	1,041	1,0313	1,0219	1,0128	1,0041
73	1,2485	1,2259	1,2052	1,1861	1,1685	1,152	1,1367	1,1222	1,1086	1,0957	1,0834	1,0718	1,0607	1,0501	1,0399	1,0301	1,0208	1,0117	1,003
73,1	1,2474	1,2247	1,204	1,185	1,1673	1,1509	1,1355	1,1211	1,1074	1,0945	1,0823	1,0707	1,0596	1,0489	1,0388	1,029	1,0196	1,0106	1,0019
73,2	1,2462	1,2236	1,2029	1,1838	1,1662	1,1498	1,1344	1,1199	1,1063	1,0934	1,0812	1,0695	1,0584	1,0478	1,0377	1,0279	1,0185	1,0095	1,0008
73,3	1,2451	1,2224	1,2017	1,1827	1,165	1,1486	1,1332	1,1188	1,1052	1,0923	1,0801	1,0684	1,0573	1,0467	1,0365	1,0268	1,0174	1,0084	0,9997
73,4	1,2439	1,2212	1,2006	1,1815	1,1639	1,1475	1,1321	1,1177	1,104	1,0912	1,0789	1,0673	1,0562	1,0456	1,0354	1,0257	1,0163	1,0073	0,9986
73,5	1,2427	1,2201	1,1994	1,1804	1,1627	1,1463	1,131	1,1165	1,1029	1,09	1,0778	1,0662	1,0551	1,0445	1,0343	1,0246	1,0152	1,0062	0,9975
73,6	1,2415	1,2189	1,1982	1,1792	1,1616	1,1452	1,1298	1,1154	1,1018	1,0889	1,0767	1,065	1,0539	1,0433	1,0332	1,0234	1,0141	1,0051	0,9964
73,7	1,2404	1,2178	1,1971	1,1781	1,1604	1,144	1,1287	1,1142	1,1006	1,0878	1,0755	1,0639	1,0528	1,0422	1,0321	1,0223	1,0129	1,0039	0,9953
73,8	1,2392	1,2166	1,1959	1,1769	1,1593	1,1429	1,1275	1,1131	1,0995	1,0866	1,0744	1,0628	1,0517	1,0411	1,0309	1,0212	1,0118	1,0028	0,9941
73,9	1,238	1,2154	1,1948	1,1758	1,1581	1,1417	1,1264	1,112	1,0984	1,0855	1,0733	1,0616	1,0506	1,04	1,0298	1,0201	1,0107	1,0017	0,993
74	1,2369	1,2143	1,1936	1,1746	1,157	1,1406	1,1252	1,1108	1,0972	1,0844	1,0721	1,0605	1,0494	1,0388	1,0287	1,019	1,0096	1,0006	0,9919
74,1	1,2357	1,2131	1,1924	1,1734	1,1558	1,1394	1,1241	1,1097	1,0961	1,0832	1,071	1,0594	1,0483	1,0377	1,0276	1,0178	1,0085	0,9995	0,9908
74,2	1,2345	1,2119	1,1913	1,1723	1,1547	1,1383	1,123	1,1085	1,0949	1,0821	1,0699	1,0583	1,0472	1,0366	1,0264	1,0167	1,0074	0,9984	0,9897
74,3	1,2334	1,2108	1,1901	1,1711	1,1535	1,1371	1,1218	1,1074	1,0938	1,0809	1,0687	1,0571	1,046	1,0355	1,0253	1,0156	1,0062	0,9972	0,9886
74,4	1,2322	1,2096	1,189	1,17	1,1524	1,136	1,1207	1,1063	1,0927	1,0798	1,0676	1,056	1,0449	1,0343	1,0242	1,0145	1,0051	0,9961	0,9874

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
71	1,0167	1,0086	1,0007	0,993	0,9856	0,9784	0,9715	0,9647	0,9581	0,9517	0,9454	0,9393	0,9334	0,9275	0,9219	0,9163	0,9109	0,9056	0,9004
71,1	1,0156	1,0075	0,9996	0,9919	0,9845	0,9774	0,9704	0,9636	0,957	0,9506	0,9443	0,9382	0,9323	0,9265	0,9208	0,9153	0,9098	0,9045	0,8993
71,2	1,0145	1,0064	0,9985	0,9908	0,9834	0,9763	0,9693	0,9625	0,9559	0,9495	0,9432	0,9371	0,9312	0,9254	0,9197	0,9142	0,9088	0,9035	0,8983
71,3	1,0134	1,0053	0,9974	0,9898	0,9824	0,9752	0,9682	0,9614	0,9548	0,9484	0,9422	0,9361	0,9301	0,9243	0,9186	0,9131	0,9077	0,9024	0,8972
71,4	1,0123	1,0042	0,9963	0,9887	0,9813	0,9741	0,9671	0,9603	0,9537	0,9473	0,9411	0,935	0,929	0,9232	0,9176	0,912	0,9066	0,9013	0,8961
71,5	1,0112	1,0031	0,9952	0,9876	0,9802	0,973	0,966	0,9592	0,9527	0,9462	0,94	0,9339	0,9279	0,9221	0,9165	0,9109	0,9055	0,9002	0,895
71,6	1,0101	1,002	0,9941	0,9865	0,9791	0,9719	0,9649	0,9582	0,9516	0,9452	0,9389	0,9328	0,9269	0,9211	0,9154	0,9099	0,9044	0,8992	0,894
71,7	1,009	1,0009	0,993	0,9854	0,978	0,9708	0,9638	0,9571	0,9505	0,9441	0,9378	0,9317	0,9258	0,92	0,9143	0,9088	0,9034	0,8981	0,8929
71,8	1,0079	0,9998	0,9919	0,9843	0,9769	0,9697	0,9627	0,956	0,9494	0,943	0,9367	0,9306	0,9247	0,9189	0,9132	0,9077	0,9023	0,897	0,8918
71,9	1,0068	0,9987	0,9908	0,9832	0,9758	0,9686	0,9617	0,9549	0,9483	0,9419	0,9356	0,9296	0,9236	0,9178	0,9122	0,9066	0,9012	0,8959	0,8907
72	1,0057	0,9976	0,9897	0,9821	0,9747	0,9675	0,9606	0,9538	0,9472	0,9408	0,9346	0,9285	0,9225	0,9167	0,9111	0,9055	0,9001	0,8948	0,8897
72,1	1,0046	0,9965	0,9886	0,981	0,9736	0,9664	0,9595	0,9527	0,9461	0,9397	0,9335	0,9274	0,9214	0,9156	0,91	0,9045	0,899	0,8938	0,8886
72,2	1,0035	0,9954	0,9875	0,9799	0,9725	0,9653	0,9584	0,9516	0,945	0,9386	0,9324	0,9263	0,9204	0,9146	0,9089	0,9034	0,898	0,8927	0,8875
72,3	1,0024	0,9943	0,9864	0,9788	0,9714	0,9642	0,9573	0,9505	0,9439	0,9375	0,9313	0,9252	0,9193	0,9135	0,9078	0,9023	0,8969	0,8916	0,8864
72,4	1,0013	0,9932	0,9853	0,9777	0,9703	0,9631	0,9562	0,9494	0,9428	0,9364	0,9302	0,9241	0,9182	0,9124	0,9067	0,9012	0,8958	0,8905	0,8853
72,5	1,0002	0,992	0,9842	0,9766	0,9692	0,962	0,9551	0,9483	0,9417	0,9353	0,9291	0,923	0,9171	0,9113	0,9057	0,9001	0,8947	0,8894	0,8843
72,6	0,9991	0,9909	0,9831	0,9755	0,9681	0,9609	0,954	0,9472	0,9407	0,9343	0,928	0,9219	0,916	0,9102	0,9046	0,899	0,8936	0,8884	0,8832
72,7	0,998	0,9898	0,982	0,9744	0,967	0,9598	0,9529	0,9461	0,9396	0,9332	0,9269	0,9209	0,9149	0,9091	0,9035	0,898	0,8926	0,8873	0,8821
72,8	0,9969	0,9887	0,9809	0,9733	0,9659	0,9587	0,9518	0,945	0,9385	0,9321	0,9258	0,9198	0,9138	0,908	0,9024	0,8969	0,8915	0,8862	0,881
72,9	0,9957	0,9876	0,9798	0,9722	0,9648	0,9576	0,9507	0,9439	0,9374	0,931	0,9247	0,9187	0,9127	0,907	0,9013	0,8958	0,8904	0,8851	0,8799
73	0,9946	0,9865	0,9787	0,9711	0,9637	0,9565	0,9496	0,9428	0,9363	0,9299	0,9237	0,9176	0,9117	0,9059	0,9002	0,8947	0,8893	0,884	0,8789
73,1	0,9935	0,9854	0,9776	0,97	0,9626	0,9554	0,9485	0,9418	0,9352	0,9288	0,9226	0,9165	0,9106	0,9048	0,8991	0,8936	0,8882	0,8829	0,8778
73,2	0,9924	0,9843	0,9765	0,9689	0,9615	0,9543	0,9474	0,9407	0,9341	0,9277	0,9215	0,9154	0,9095	0,9037	0,898	0,8925	0,8871	0,8819	0,8767
73,3	0,9913	0,9832	0,9754	0,9678	0,9604	0,9532	0,9463	0,9396	0,933	0,9266	0,9204	0,9143	0,9084	0,9026	0,897	0,8914	0,886	0,8808	0,8756
73,4	0,9902	0,9821	0,9743	0,9667	0,9593	0,9521	0,9452	0,9385	0,9319	0,9255	0,9193	0,9132	0,9073	0,9015	0,8959	0,8904	0,885	0,8797	0,8745
73,5	0,9891	0,981	0,9731	0,9655	0,9582	0,951	0,9441	0,9374	0,9308	0,9244	0,9182	0,9121	0,9062	0,9004	0,8948	0,8893	0,8839	0,8786	0,8734
73,6	0,988	0,9799	0,972	0,9644	0,9571	0,9499	0,943	0,9363	0,9297	0,9233	0,9171	0,911	0,9051	0,8993	0,8937	0,8882	0,8828	0,8775	0,8723
73,7	0,9869	0,9788	0,9709	0,9633	0,956	0,9488	0,9419	0,9352	0,9286	0,9222	0,916	0,9099	0,904	0,8982	0,8926	0,8871	0,8817	0,8764	0,8713
73,8	0,9858	0,9777	0,9698	0,9622	0,9549	0,9477	0,9408	0,9341	0,9275	0,9211	0,9149	0,9088	0,9029	0,8971	0,8915	0,886	0,8806	0,8753	0,8702
73,9	0,9846	0,9765	0,9687	0,9611	0,9538	0,9466	0,9397	0,933	0,9264	0,92	0,9138	0,9077	0,9018	0,896	0,8904	0,8849	0,8795	0,8742	0,8691
74	0,9835	0,9754	0,9676	0,96	0,9527	0,9455	0,9386	0,9319	0,9253	0,9189	0,9127	0,9066	0,9007	0,895	0,8893	0,8838	0,8784	0,8732	0,868
74,1	0,9824	0,9743	0,9665	0,9589	0,9516	0,9444	0,9375	0,9308	0,9242	0,9178	0,9116	0,9055	0,8996	0,8939	0,8882	0,8827	0,8773	0,8721	0,8669
74,2	0,9813	0,9732	0,9654	0,9578	0,9504	0,9433	0,9364	0,9296	0,9231	0,9167	0,9105	0,9044	0,8985	0,8928	0,8871	0,8816	0,8762	0,871	0,8658
74,3	0,9802	0,9721	0,9643	0,9567	0,9493	0,9422	0,9353	0,9285	0,922	0,9156	0,9094	0,9033	0,8974	0,8917	0,886	0,8805	0,8751	0,8699	0,8647
74,4	0,9791	0,971	0,9632	0,9556	0,9482	0,9411	0,9342	0,9274	0,9209	0,9145	0,9083	0,9022	0,8963	0,8906	0,8849	0,8794	0,8741	0,8688	0,8636

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
71	0,8953	0,8904	0,8855	0,8807	0,876	0,8714	0,8669	0,8624	0,8581	0,8538	0,8496	0,8455	0,8414	0,8374	0,8335	0,8296	0,8258	0,822	0,8183
71,1	0,8943	0,8893	0,8844	0,8796	0,8749	0,8703	0,8658	0,8614	0,857	0,8527	0,8485	0,8444	0,8403	0,8363	0,8324	0,8285	0,8247	0,821	0,8173
71,2	0,8932	0,8882	0,8833	0,8786	0,8739	0,8693	0,8648	0,8603	0,856	0,8517	0,8475	0,8434	0,8393	0,8353	0,8314	0,8275	0,8237	0,8199	0,8162
71,3	0,8921	0,8871	0,8823	0,8775	0,8728	0,8682	0,8637	0,8593	0,8549	0,8506	0,8464	0,8423	0,8382	0,8342	0,8303	0,8264	0,8226	0,8189	0,8152
71,4	0,891	0,8861	0,8812	0,8764	0,8717	0,8671	0,8626	0,8582	0,8538	0,8496	0,8454	0,8412	0,8372	0,8332	0,8292	0,8254	0,8216	0,8178	0,8141
71,5	0,89	0,885	0,8801	0,8753	0,8707	0,8661	0,8615	0,8571	0,8528	0,8485	0,8443	0,8402	0,8361	0,8321	0,8282	0,8243	0,8205	0,8167	0,8131
71,6	0,8889	0,8839	0,879	0,8743	0,8696	0,865	0,8605	0,8561	0,8517	0,8474	0,8432	0,8391	0,835	0,831	0,8271	0,8232	0,8194	0,8157	0,812
71,7	0,8878	0,8828	0,878	0,8732	0,8685	0,8639	0,8594	0,855	0,8506	0,8464	0,8422	0,838	0,834	0,83	0,8261	0,8222	0,8184	0,8146	0,8109
71,8	0,8867	0,8818	0,8769	0,8721	0,8674	0,8629	0,8583	0,8539	0,8496	0,8453	0,8411	0,837	0,8329	0,8289	0,825	0,8211	0,8173	0,8136	0,8099
71,9	0,8857	0,8807	0,8758	0,8711	0,8664	0,8618	0,8573	0,8528	0,8485	0,8442	0,84	0,8359	0,8318	0,8279	0,8239	0,8201	0,8163	0,8125	0,8088
72	0,8846	0,8796	0,8748	0,87	0,8653	0,8607	0,8562	0,8518	0,8474	0,8432	0,839	0,8348	0,8308	0,8268	0,8229	0,819	0,8152	0,8115	0,8078
72,1	0,8835	0,8785	0,8737	0,8689	0,8642	0,8596	0,8551	0,8507	0,8464	0,8421	0,8379	0,8338	0,8297	0,8257	0,8218	0,8179	0,8141	0,8104	0,8067
72,2	0,8824	0,8775	0,8726	0,8678	0,8632	0,8586	0,8541	0,8496	0,8453	0,841	0,8368	0,8327	0,8287	0,8247	0,8207	0,8169	0,8131	0,8093	0,8056
72,3	0,8814	0,8764	0,8715	0,8668	0,8621	0,8575	0,853	0,8486	0,8442	0,84	0,8358	0,8316	0,8276	0,8236	0,8197	0,8158	0,812	0,8083	0,8046
72,4	0,8803	0,8753	0,8705	0,8657	0,861	0,8564	0,8519	0,8475	0,8432	0,8389	0,8347	0,8306	0,8265	0,8225	0,8186	0,8147	0,8109	0,8072	0,8035
72,5	0,8792	0,8742	0,8694	0,8646	0,8599	0,8553	0,8508	0,8464	0,8421	0,8378	0,8336	0,8295	0,8255	0,8215	0,8175	0,8137	0,8099	0,8061	0,8025
72,6	0,8781	0,8732	0,8683	0,8635	0,8589	0,8543	0,8498	0,8454	0,841	0,8367	0,8326	0,8284	0,8244	0,8204	0,8165	0,8126	0,8088	0,8051	0,8014
72,7	0,877	0,8721	0,8672	0,8625	0,8578	0,8532	0,8487	0,8443	0,8399	0,8357	0,8315	0,8274	0,8233	0,8193	0,8154	0,8116	0,8078	0,804	0,8003
72,8	0,876	0,871	0,8661	0,8614	0,8567	0,8521	0,8476	0,8432	0,8389	0,8346	0,8304	0,8263	0,8222	0,8183	0,8143	0,8105	0,8067	0,8029	0,7993
72,9	0,8749	0,8699	0,8651	0,8603	0,8556	0,851	0,8465	0,8421	0,8378	0,8335	0,8293	0,8252	0,8212	0,8172	0,8133	0,8094	0,8056	0,8019	0,7982
73	0,8738	0,8688	0,864	0,8592	0,8546	0,85	0,8455	0,8411	0,8367	0,8325	0,8283	0,8242	0,8201	0,8161	0,8122	0,8084	0,8046	0,8008	0,7971
73,1	0,8727	0,8678	0,8629	0,8581	0,8535	0,8489	0,8444	0,84	0,8356	0,8314	0,8272	0,8231	0,819	0,8151	0,8111	0,8073	0,8035	0,7998	0,7961
73,2	0,8716	0,8667	0,8618	0,8571	0,8524	0,8478	0,8433	0,8389	0,8346	0,8303	0,8261	0,822	0,818	0,814	0,8101	0,8062	0,8024	0,7987	0,795
73,3	0,8705	0,8656	0,8607	0,856	0,8513	0,8467	0,8422	0,8378	0,8335	0,8292	0,8251	0,8209	0,8169	0,8129	0,809	0,8051	0,8014	0,7976	0,7939
73,4	0,8695	0,8645	0,8597	0,8549	0,8502	0,8457	0,8412	0,8368	0,8324	0,8282	0,824	0,8199	0,8158	0,8118	0,8079	0,8041	0,8003	0,7965	0,7929
73,5	0,8684	0,8634	0,8586	0,8538	0,8492	0,8446	0,8401	0,8357	0,8313	0,8271	0,8229	0,8188	0,8147	0,8108	0,8069	0,803	0,7992	0,7955	0,7918
73,6	0,8673	0,8623	0,8575	0,8527	0,8481	0,8435	0,839	0,8346	0,8303	0,826	0,8218	0,8177	0,8137	0,8097	0,8058	0,8019	0,7981	0,7944	0,7907
73,7	0,8662	0,8613	0,8564	0,8517	0,847	0,8424	0,8379	0,8335	0,8292	0,8249	0,8208	0,8166	0,8126	0,8086	0,8047	0,8009	0,7971	0,7933	0,7897
73,8	0,8651	0,8602	0,8553	0,8506	0,8459	0,8413	0,8368	0,8324	0,8281	0,8239	0,8197	0,8156	0,8115	0,8076	0,8036	0,7998	0,796	0,7923	0,7886
73,9	0,864	0,8591	0,8542	0,8495	0,8448	0,8403	0,8358	0,8314	0,827	0,8228	0,8186	0,8145	0,8104	0,8065	0,8026	0,7987	0,7949	0,7912	0,7875
74	0,863	0,858	0,8532	0,8484	0,8437	0,8392	0,8347	0,8303	0,826	0,8217	0,8175	0,8134	0,8094	0,8054	0,8015	0,7976	0,7939	0,7901	0,7865
74,1	0,8619	0,8569	0,8521	0,8473	0,8427	0,8381	0,8336	0,8292	0,8249	0,8206	0,8164	0,8123	0,8083	0,8043	0,8004	0,7966	0,7928	0,7891	0,7854
74,2	0,8608	0,8558	0,851	0,8462	0,8416	0,837	0,8325	0,8281	0,8238	0,8195	0,8154	0,8113	0,8072	0,8032	0,7993	0,7955	0,7917	0,788	0,7843
74,3	0,8597	0,8547	0,8499	0,8451	0,8405	0,8359	0,8314	0,827	0,8227	0,8185	0,8143	0,8102	0,8061	0,8022	0,7983	0,7944	0,7906	0,7869	0,7832
74,4	0,8586	0,8537	0,8488	0,8441	0,8394	0,8348	0,8304	0,826	0,8216	0,8174	0,8132	0,8091	0,8051	0,8011	0,7972	0,7933	0,7896	0,7858	0,7822

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
71	0,8147	0,8111	0,8076	0,8041	0,8006	0,7973	0,7939	0,7906	0,7874	0,7841	0,781	0,7778	0,7747	0,7717	0,7687	0,7657	0,7628	0,7598	0,757
71,1	0,8136	0,8101	0,8065	0,803	0,7996	0,7962	0,7929	0,7896	0,7863	0,7831	0,7799	0,7768	0,7737	0,7706	0,7676	0,7647	0,7617	0,7588	0,7559
71,2	0,8126	0,809	0,8055	0,802	0,7985	0,7952	0,7918	0,7885	0,7853	0,782	0,7789	0,7757	0,7727	0,7696	0,7666	0,7636	0,7607	0,7578	0,7549
71,3	0,8115	0,8079	0,8044	0,8009	0,7975	0,7941	0,7908	0,7875	0,7842	0,781	0,7778	0,7747	0,7716	0,7686	0,7655	0,7626	0,7596	0,7567	0,7538
71,4	0,8105	0,8069	0,8034	0,7999	0,7964	0,793	0,7897	0,7864	0,7832	0,7799	0,7768	0,7737	0,7706	0,7675	0,7645	0,7615	0,7586	0,7557	0,7528
71,5	0,8094	0,8058	0,8023	0,7988	0,7954	0,792	0,7887	0,7854	0,7821	0,7789	0,7757	0,7726	0,7695	0,7665	0,7635	0,7605	0,7575	0,7546	0,7518
71,6	0,8084	0,8048	0,8012	0,7978	0,7943	0,7909	0,7876	0,7843	0,7811	0,7778	0,7747	0,7716	0,7685	0,7654	0,7624	0,7594	0,7565	0,7536	0,7507
71,7	0,8073	0,8037	0,8002	0,7967	0,7933	0,7899	0,7865	0,7833	0,78	0,7768	0,7736	0,7705	0,7674	0,7644	0,7614	0,7584	0,7554	0,7525	0,7497
71,8	0,8062	0,8027	0,7991	0,7957	0,7922	0,7888	0,7855	0,7822	0,779	0,7757	0,7726	0,7695	0,7664	0,7633	0,7603	0,7573	0,7544	0,7515	0,7486
71,9	0,8052	0,8016	0,7981	0,7946	0,7912	0,7878	0,7844	0,7811	0,7779	0,7747	0,7715	0,7684	0,7653	0,7623	0,7593	0,7563	0,7534	0,7504	0,7476
72	0,8041	0,8005	0,797	0,7935	0,7901	0,7867	0,7834	0,7801	0,7768	0,7736	0,7705	0,7674	0,7643	0,7612	0,7582	0,7552	0,7523	0,7494	0,7465
72,1	0,8031	0,7995	0,796	0,7925	0,7891	0,7857	0,7823	0,779	0,7758	0,7726	0,7694	0,7663	0,7632	0,7602	0,7572	0,7542	0,7513	0,7484	0,7455
72,2	0,802	0,7984	0,7949	0,7914	0,788	0,7846	0,7813	0,778	0,7747	0,7715	0,7684	0,7653	0,7622	0,7591	0,7561	0,7531	0,7502	0,7473	0,7444
72,3	0,8009	0,7974	0,7938	0,7904	0,7869	0,7836	0,7802	0,7769	0,7737	0,7705	0,7673	0,7642	0,7611	0,7581	0,7551	0,7521	0,7492	0,7463	0,7434
72,4	0,7999	0,7963	0,7928	0,7893	0,7859	0,7825	0,7792	0,7759	0,7726	0,7694	0,7663	0,7631	0,7601	0,757	0,754	0,751	0,7481	0,7452	0,7423
72,5	0,7988	0,7952	0,7917	0,7882	0,7848	0,7814	0,7781	0,7748	0,7716	0,7684	0,7652	0,7621	0,759	0,756	0,753	0,75	0,7471	0,7442	0,7413
72,6	0,7978	0,7942	0,7907	0,7872	0,7838	0,7804	0,7771	0,7738	0,7705	0,7673	0,7642	0,761	0,758	0,7549	0,7519	0,7489	0,746	0,7431	0,7402
72,7	0,7967	0,7931	0,7896	0,7861	0,7827	0,7793	0,776	0,7727	0,7695	0,7663	0,7631	0,76	0,7569	0,7539	0,7509	0,7479	0,745	0,7421	0,7392
72,8	0,7956	0,7921	0,7885	0,7851	0,7816	0,7783	0,7749	0,7716	0,7684	0,7652	0,762	0,7589	0,7558	0,7528	0,7498	0,7468	0,7439	0,741	0,7381
72,9	0,7946	0,791	0,7875	0,784	0,7806	0,7772	0,7739	0,7706	0,7673	0,7641	0,761	0,7579	0,7548	0,7518	0,7487	0,7458	0,7429	0,74	0,7371
73	0,7935	0,7899	0,7864	0,7829	0,7795	0,7761	0,7728	0,7695	0,7663	0,7631	0,7599	0,7568	0,7537	0,7507	0,7477	0,7447	0,7418	0,7389	0,736
73,1	0,7924	0,7889	0,7854	0,7819	0,7785	0,7751	0,7718	0,7685	0,7652	0,762	0,7589	0,7558	0,7527	0,7496	0,7466	0,7437	0,7407	0,7378	0,735
73,2	0,7914	0,7878	0,7843	0,7808	0,7774	0,774	0,7707	0,7674	0,7642	0,761	0,7578	0,7547	0,7516	0,7486	0,7456	0,7426	0,7397	0,7368	0,7339
73,3	0,7903	0,7867	0,7832	0,7798	0,7763	0,773	0,7696	0,7663	0,7631	0,7599	0,7568	0,7536	0,7506	0,7475	0,7445	0,7416	0,7386	0,7357	0,7329
73,4	0,7892	0,7857	0,7822	0,7787	0,7753	0,7719	0,7686	0,7653	0,762	0,7589	0,7557	0,7526	0,7495	0,7465	0,7435	0,7405	0,7376	0,7347	0,7318
73,5	0,7882	0,7846	0,7811	0,7776	0,7742	0,7708	0,7675	0,7642	0,761	0,7578	0,7546	0,7515	0,7484	0,7454	0,7424	0,7394	0,7365	0,7336	0,7308
73,6	0,7871	0,7835	0,78	0,7766	0,7731	0,7698	0,7664	0,7632	0,7599	0,7567	0,7536	0,7505	0,7474	0,7444	0,7414	0,7384	0,7355	0,7326	0,7297
73,7	0,786	0,7825	0,779	0,7755	0,7721	0,7687	0,7654	0,7621	0,7589	0,7557	0,7525	0,7494	0,7463	0,7433	0,7403	0,7373	0,7344	0,7315	0,7287
73,8	0,785	0,7814	0,7779	0,7744	0,771	0,7676	0,7643	0,761	0,7578	0,7546	0,7515	0,7483	0,7453	0,7422	0,7392	0,7363	0,7333	0,7305	0,7276
73,9	0,7839	0,7803	0,7768	0,7734	0,7699	0,7666	0,7632	0,76	0,7567	0,7535	0,7504	0,7473	0,7442	0,7412	0,7382	0,7352	0,7323	0,7294	0,7265
74	0,7828	0,7793	0,7758	0,7723	0,7689	0,7655	0,7622	0,7589	0,7557	0,7525	0,7493	0,7462	0,7431	0,7401	0,7371	0,7342	0,7312	0,7283	0,7255
74,1	0,7818	0,7782	0,7747	0,7712	0,7678	0,7644	0,7611	0,7578	0,7546	0,7514	0,7483	0,7451	0,7421	0,739	0,736	0,7331	0,7302	0,7273	0,7244
74,2	0,7807	0,7771	0,7736	0,7701	0,7667	0,7634	0,76	0,7568	0,7535	0,7503	0,7472	0,7441	0,741	0,738	0,735	0,732	0,7291	0,7262	0,7234
74,3	0,7796	0,7761	0,7725	0,7691	0,7657	0,7623	0,759	0,7557	0,7525	0,7493	0,7461	0,743	0,74	0,7369	0,7339	0,731	0,728	0,7252	0,7223
74,4	0,7785	0,775	0,7715	0,768	0,7646	0,7612	0,7579	0,7546	0,7514	0,7482	0,7451	0,742	0,7389	0,7359	0,7329	0,7299	0,727	0,7241	0,7212

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
71	0,7541	0,7513	0,7485	0,7458	0,7431	0,7404	0,7377	0,7351	0,7325	0,7299	0,7274	0,7249	0,7224	0,7199	0,7175	0,715	0,7126	0,7103	0,7079
71,1	0,7531	0,7503	0,7475	0,7448	0,742	0,7394	0,7367	0,7341	0,7315	0,7289	0,7264	0,7238	0,7213	0,7189	0,7164	0,714	0,7116	0,7092	0,7069
71,2	0,7521	0,7492	0,7465	0,7437	0,741	0,7383	0,7357	0,733	0,7304	0,7279	0,7253	0,7228	0,7203	0,7178	0,7154	0,713	0,7106	0,7082	0,7058
71,3	0,751	0,7482	0,7454	0,7427	0,74	0,7373	0,7346	0,732	0,7294	0,7268	0,7243	0,7218	0,7193	0,7168	0,7144	0,7119	0,7095	0,7072	0,7048
71,4	0,75	0,7472	0,7444	0,7416	0,7389	0,7362	0,7336	0,731	0,7284	0,7258	0,7232	0,7207	0,7182	0,7158	0,7133	0,7109	0,7085	0,7061	0,7038
71,5	0,7489	0,7461	0,7433	0,7406	0,7379	0,7352	0,7325	0,7299	0,7273	0,7248	0,7222	0,7197	0,7172	0,7147	0,7123	0,7099	0,7075	0,7051	0,7027
71,6	0,7479	0,7451	0,7423	0,7396	0,7368	0,7342	0,7315	0,7289	0,7263	0,7237	0,7212	0,7187	0,7162	0,7137	0,7112	0,7088	0,7064	0,7041	0,7017
71,7	0,7468	0,744	0,7413	0,7385	0,7358	0,7331	0,7305	0,7278	0,7252	0,7227	0,7201	0,7176	0,7151	0,7127	0,7102	0,7078	0,7054	0,703	0,7007
71,8	0,7458	0,743	0,7402	0,7375	0,7348	0,7321	0,7294	0,7268	0,7242	0,7216	0,7191	0,7166	0,7141	0,7116	0,7092	0,7068	0,7044	0,702	0,6996
71,9	0,7447	0,7419	0,7392	0,7364	0,7337	0,731	0,7284	0,7258	0,7232	0,7206	0,7181	0,7155	0,713	0,7106	0,7081	0,7057	0,7033	0,701	0,6986
72	0,7437	0,7409	0,7381	0,7354	0,7327	0,73	0,7273	0,7247	0,7221	0,7196	0,717	0,7145	0,712	0,7095	0,7071	0,7047	0,7023	0,6999	0,6976
72,1	0,7427	0,7398	0,7371	0,7343	0,7316	0,729	0,7263	0,7237	0,7211	0,7185	0,716	0,7135	0,711	0,7085	0,7061	0,7036	0,7013	0,6989	0,6965
72,2	0,7416	0,7388	0,736	0,7333	0,7306	0,7279	0,7253	0,7226	0,72	0,7175	0,7149	0,7124	0,7099	0,7075	0,705	0,7026	0,7002	0,6978	0,6955
72,3	0,7406	0,7378	0,735	0,7322	0,7295	0,7269	0,7242	0,7216	0,719	0,7164	0,7139	0,7114	0,7089	0,7064	0,704	0,7016	0,6992	0,6968	0,6945
72,4	0,7395	0,7367	0,7339	0,7312	0,7285	0,7258	0,7232	0,7205	0,718	0,7154	0,7128	0,7103	0,7078	0,7054	0,7029	0,7005	0,6981	0,6958	0,6934
72,5	0,7385	0,7357	0,7329	0,7302	0,7274	0,7248	0,7221	0,7195	0,7169	0,7143	0,7118	0,7093	0,7068	0,7043	0,7019	0,6995	0,6971	0,6947	0,6924
72,6	0,7374	0,7346	0,7318	0,7291	0,7264	0,7237	0,7211	0,7185	0,7159	0,7133	0,7108	0,7082	0,7058	0,7033	0,7009	0,6984	0,6961	0,6937	0,6913
72,7	0,7364	0,7336	0,7308	0,7281	0,7254	0,7227	0,72	0,7174	0,7148	0,7123	0,7097	0,7072	0,7047	0,7023	0,6998	0,6974	0,695	0,6926	0,6903
72,8	0,7353	0,7325	0,7297	0,727	0,7243	0,7216	0,719	0,7164	0,7138	0,7112	0,7087	0,7062	0,7037	0,7012	0,6988	0,6964	0,694	0,6916	0,6893
72,9	0,7343	0,7315	0,7287	0,726	0,7233	0,7206	0,7179	0,7153	0,7127	0,7102	0,7076	0,7051	0,7026	0,7002	0,6977	0,6953	0,6929	0,6906	0,6882
73	0,7332	0,7304	0,7276	0,7249	0,7222	0,7195	0,7169	0,7143	0,7117	0,7091	0,7066	0,7041	0,7016	0,6991	0,6967	0,6943	0,6919	0,6895	0,6872
73,1	0,7322	0,7294	0,7266	0,7239	0,7212	0,7185	0,7158	0,7132	0,7106	0,7081	0,7055	0,703	0,7005	0,6981	0,6956	0,6932	0,6908	0,6885	0,6861
73,2	0,7311	0,7283	0,7255	0,7228	0,7201	0,7174	0,7148	0,7122	0,7096	0,707	0,7045	0,702	0,6995	0,697	0,6946	0,6922	0,6898	0,6874	0,6851
73,3	0,7301	0,7273	0,7245	0,7218	0,7191	0,7164	0,7137	0,7111	0,7085	0,706	0,7034	0,7009	0,6984	0,696	0,6935	0,6911	0,6888	0,6864	0,684
73,4	0,729	0,7262	0,7234	0,7207	0,718	0,7153	0,7127	0,7101	0,7075	0,7049	0,7024	0,6999	0,6974	0,6949	0,6925	0,6901	0,6877	0,6853	0,683
73,5	0,7279	0,7251	0,7224	0,7197	0,717	0,7143	0,7116	0,709	0,7064	0,7039	0,7013	0,6988	0,6963	0,6939	0,6915	0,689	0,6867	0,6843	0,682
73,6	0,7269	0,7241	0,7213	0,7186	0,7159	0,7132	0,7106	0,708	0,7054	0,7028	0,7003	0,6978	0,6953	0,6928	0,6904	0,688	0,6856	0,6833	0,6809
73,7	0,7258	0,723	0,7203	0,7175	0,7148	0,7122	0,7095	0,7069	0,7043	0,7018	0,6992	0,6967	0,6942	0,6918	0,6894	0,687	0,6846	0,6822	0,6799
73,8	0,7248	0,722	0,7192	0,7165	0,7138	0,7111	0,7085	0,7059	0,7033	0,7007	0,6982	0,6957	0,6932	0,6907	0,6883	0,6859	0,6835	0,6812	0,6788
73,9	0,7237	0,7209	0,7182	0,7154	0,7127	0,7101	0,7074	0,7048	0,7022	0,6997	0,6971	0,6946	0,6921	0,6897	0,6873	0,6849	0,6825	0,6801	0,6778
74	0,7227	0,7199	0,7171	0,7144	0,7117	0,709	0,7064	0,7038	0,7012	0,6986	0,6961	0,6936	0,6911	0,6886	0,6862	0,6838	0,6814	0,6791	0,6767
74,1	0,7216	0,7188	0,716	0,7133	0,7106	0,708	0,7053	0,7027	0,7001	0,6976	0,695	0,6925	0,69	0,6876	0,6852	0,6828	0,6804	0,678	0,6757
74,2	0,7205	0,7177	0,715	0,7123	0,7096	0,7069	0,7043	0,7016	0,6991	0,6965	0,694	0,6915	0,689	0,6865	0,6841	0,6817	0,6793	0,677	0,6746
74,3	0,7195	0,7167	0,7139	0,7112	0,7085	0,7058	0,7032	0,7006	0,698	0,6954	0,6929	0,6904	0,6879	0,6855	0,6831	0,6806	0,6783	0,6759	0,6736
74,4	0,7184	0,7156	0,7129	0,7101	0,7074	0,7048	0,7021	0,6995	0,6969	0,6944	0,6919	0,6894	0,6869	0,6844	0,682	0,6796	0,6772	0,6749	0,6725

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
71	0,7056	0,7033	0,701	0,6987	0,6965	0,6942	0,692	0,6898	0,6877	0,6855	0,6834	0,6813	0,6792	0,6771	0,6751	0,673	0,671	0,669	0,667
71,1	0,7045	0,7022	0,6999	0,6977	0,6954	0,6932	0,691	0,6888	0,6867	0,6845	0,6824	0,6803	0,6782	0,6761	0,674	0,672	0,67	0,668	0,666
71,2	0,7035	0,7012	0,6989	0,6967	0,6944	0,6922	0,69	0,6878	0,6856	0,6835	0,6813	0,6792	0,6771	0,6751	0,673	0,671	0,6689	0,6669	0,6649
71,3	0,7025	0,7002	0,6979	0,6956	0,6934	0,6912	0,6889	0,6868	0,6846	0,6824	0,6803	0,6782	0,6761	0,674	0,672	0,6699	0,6679	0,6659	0,6639
71,4	0,7014	0,6991	0,6969	0,6946	0,6923	0,6901	0,6879	0,6857	0,6836	0,6814	0,6793	0,6772	0,6751	0,673	0,671	0,6689	0,6669	0,6649	0,6629
71,5	0,7004	0,6981	0,6958	0,6936	0,6913	0,6891	0,6869	0,6847	0,6825	0,6804	0,6783	0,6762	0,6741	0,672	0,6699	0,6679	0,6659	0,6639	0,6619
71,6	0,6994	0,6971	0,6948	0,6925	0,6903	0,6881	0,6859	0,6837	0,6815	0,6794	0,6772	0,6751	0,673	0,671	0,6689	0,6669	0,6648	0,6628	0,6608
71,7	0,6983	0,696	0,6938	0,6915	0,6893	0,687	0,6848	0,6826	0,6805	0,6783	0,6762	0,6741	0,672	0,6699	0,6679	0,6658	0,6638	0,6618	0,6598
71,8	0,6973	0,695	0,6927	0,6905	0,6882	0,686	0,6838	0,6816	0,6794	0,6773	0,6752	0,6731	0,671	0,6689	0,6668	0,6648	0,6628	0,6608	0,6588
71,9	0,6963	0,694	0,6917	0,6894	0,6872	0,685	0,6828	0,6806	0,6784	0,6763	0,6741	0,672	0,6699	0,6679	0,6658	0,6638	0,6618	0,6598	0,6578
72	0,6952	0,6929	0,6907	0,6884	0,6862	0,6839	0,6817	0,6795	0,6774	0,6752	0,6731	0,671	0,6689	0,6668	0,6648	0,6628	0,6607	0,6587	0,6567
72,1	0,6942	0,6919	0,6896	0,6874	0,6851	0,6829	0,6807	0,6785	0,6764	0,6742	0,6721	0,67	0,6679	0,6658	0,6638	0,6617	0,6597	0,6577	0,6557
72,2	0,6932	0,6909	0,6886	0,6863	0,6841	0,6819	0,6797	0,6775	0,6753	0,6732	0,6711	0,6689	0,6669	0,6648	0,6627	0,6607	0,6587	0,6567	0,6547
72,3	0,6921	0,6898	0,6875	0,6853	0,683	0,6808	0,6786	0,6764	0,6743	0,6721	0,67	0,6679	0,6658	0,6638	0,6617	0,6597	0,6576	0,6556	0,6537
72,4	0,6911	0,6888	0,6865	0,6843	0,682	0,6798	0,6776	0,6754	0,6733	0,6711	0,669	0,6669	0,6648	0,6627	0,6607	0,6586	0,6566	0,6546	0,6526
72,5	0,6901	0,6878	0,6855	0,6832	0,681	0,6788	0,6766	0,6744	0,6722	0,6701	0,668	0,6658	0,6638	0,6617	0,6596	0,6576	0,6556	0,6536	0,6516
72,6	0,689	0,6867	0,6844	0,6822	0,6799	0,6777	0,6755	0,6733	0,6712	0,669	0,6669	0,6648	0,6627	0,6607	0,6586	0,6566	0,6545	0,6525	0,6506
72,7	0,688	0,6857	0,6834	0,6811	0,6789	0,6767	0,6745	0,6723	0,6701	0,668	0,6659	0,6638	0,6617	0,6596	0,6576	0,6555	0,6535	0,6515	0,6495
72,8	0,6869	0,6846	0,6824	0,6801	0,6779	0,6756	0,6734	0,6713	0,6691	0,667	0,6648	0,6627	0,6607	0,6586	0,6565	0,6545	0,6525	0,6505	0,6485
72,9	0,6859	0,6836	0,6813	0,6791	0,6768	0,6746	0,6724	0,6702	0,6681	0,6659	0,6638	0,6617	0,6596	0,6576	0,6555	0,6535	0,6514	0,6494	0,6475
73	0,6849	0,6826	0,6803	0,678	0,6758	0,6736	0,6714	0,6692	0,667	0,6649	0,6628	0,6607	0,6586	0,6565	0,6545	0,6524	0,6504	0,6484	0,6464
73,1	0,6838	0,6815	0,6792	0,677	0,6747	0,6725	0,6703	0,6682	0,666	0,6639	0,6617	0,6596	0,6575	0,6555	0,6534	0,6514	0,6494	0,6474	0,6454
73,2	0,6828	0,6805	0,6782	0,6759	0,6737	0,6715	0,6693	0,6671	0,665	0,6628	0,6607	0,6586	0,6565	0,6544	0,6524	0,6504	0,6483	0,6463	0,6444
73,3	0,6817	0,6794	0,6772	0,6749	0,6727	0,6704	0,6683	0,6661	0,6639	0,6618	0,6597	0,6576	0,6555	0,6534	0,6514	0,6493	0,6473	0,6453	0,6433
73,4	0,6807	0,6784	0,6761	0,6739	0,6716	0,6694	0,6672	0,665	0,6629	0,6607	0,6586	0,6565	0,6544	0,6524	0,6503	0,6483	0,6463	0,6443	0,6423
73,5	0,6796	0,6773	0,6751	0,6728	0,6706	0,6684	0,6662	0,664	0,6618	0,6597	0,6576	0,6555	0,6534	0,6513	0,6493	0,6472	0,6452	0,6432	0,6412
73,6	0,6786	0,6763	0,674	0,6718	0,6695	0,6673	0,6651	0,6629	0,6608	0,6587	0,6565	0,6544	0,6524	0,6503	0,6482	0,6462	0,6442	0,6422	0,6402
73,7	0,6775	0,6752	0,673	0,6707	0,6685	0,6663	0,6641	0,6619	0,6598	0,6576	0,6555	0,6534	0,6513	0,6492	0,6472	0,6452	0,6432	0,6412	0,6392
73,8	0,6765	0,6742	0,6719	0,6697	0,6674	0,6652	0,663	0,6609	0,6587	0,6566	0,6545	0,6524	0,6503	0,6482	0,6462	0,6441	0,6421	0,6401	0,6381
73,9	0,6755	0,6732	0,6709	0,6686	0,6664	0,6642	0,662	0,6598	0,6577	0,6555	0,6534	0,6513	0,6492	0,6472	0,6451	0,6431	0,6411	0,6391	0,6371
74	0,6744	0,6721	0,6698	0,6676	0,6653	0,6631	0,6609	0,6588	0,6566	0,6545	0,6524	0,6503	0,6482	0,6461	0,6441	0,642	0,64	0,638	0,6361
74,1	0,6734	0,6711	0,6688	0,6665	0,6643	0,6621	0,6599	0,6577	0,6556	0,6534	0,6513	0,6492	0,6471	0,6451	0,643	0,641	0,639	0,637	0,635
74,2	0,6723	0,67	0,6677	0,6655	0,6633	0,661	0,6589	0,6567	0,6545	0,6524	0,6503	0,6482	0,6461	0,644	0,642	0,64	0,6379	0,6359	0,634
74,3	0,6713	0,669	0,6667	0,6644	0,6622	0,66	0,6578	0,6556	0,6535	0,6513	0,6492	0,6471	0,645	0,643	0,6409	0,6389	0,6369	0,6349	0,6329
74,4	0,6702	0,6679	0,6656	0,6634	0,6612	0,6589	0,6568	0,6546	0,6524	0,6503	0,6482	0,6461	0,644	0,6419	0,6399	0,6379	0,6359	0,6339	0,6319

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
71	0,665	0,663	0,6611	0,6592	0,6573	0,6554	0,6535	0,6516	0,6497	0,6479	0,6461	0,6442	0,6424	0,6406	0,6389	0,6371	0,6353	0,6336	0,6319
71,1	0,664	0,662	0,6601	0,6581	0,6562	0,6543	0,6524	0,6506	0,6487	0,6469	0,645	0,6432	0,6414	0,6396	0,6378	0,6361	0,6343	0,6326	0,6309
71,2	0,663	0,661	0,6591	0,6571	0,6552	0,6533	0,6514	0,6496	0,6477	0,6459	0,644	0,6422	0,6404	0,6386	0,6368	0,6351	0,6333	0,6316	0,6298
71,3	0,6619	0,66	0,658	0,6561	0,6542	0,6523	0,6504	0,6485	0,6467	0,6448	0,643	0,6412	0,6394	0,6376	0,6358	0,634	0,6323	0,6306	0,6288
71,4	0,6609	0,659	0,657	0,6551	0,6532	0,6513	0,6494	0,6475	0,6457	0,6438	0,642	0,6402	0,6384	0,6366	0,6348	0,633	0,6313	0,6295	0,6278
71,5	0,6599	0,6579	0,656	0,6541	0,6521	0,6502	0,6484	0,6465	0,6446	0,6428	0,641	0,6391	0,6373	0,6356	0,6338	0,632	0,6303	0,6285	0,6268
71,6	0,6589	0,6569	0,655	0,653	0,6511	0,6492	0,6473	0,6455	0,6436	0,6418	0,6399	0,6381	0,6363	0,6345	0,6328	0,631	0,6292	0,6275	0,6258
71,7	0,6578	0,6559	0,6539	0,652	0,6501	0,6482	0,6463	0,6444	0,6426	0,6407	0,6389	0,6371	0,6353	0,6335	0,6317	0,63	0,6282	0,6265	0,6248
71,8	0,6568	0,6549	0,6529	0,651	0,6491	0,6472	0,6453	0,6434	0,6416	0,6397	0,6379	0,6361	0,6343	0,6325	0,6307	0,629	0,6272	0,6255	0,6237
71,9	0,6558	0,6538	0,6519	0,65	0,6481	0,6462	0,6443	0,6424	0,6405	0,6387	0,6369	0,6351	0,6333	0,6315	0,6297	0,6279	0,6262	0,6244	0,6227
72	0,6548	0,6528	0,6509	0,6489	0,647	0,6451	0,6432	0,6414	0,6395	0,6377	0,6358	0,634	0,6322	0,6304	0,6287	0,6269	0,6252	0,6234	0,6217
72,1	0,6537	0,6518	0,6498	0,6479	0,646	0,6441	0,6422	0,6404	0,6385	0,6367	0,6348	0,633	0,6312	0,6294	0,6276	0,6259	0,6241	0,6224	0,6207
72,2	0,6527	0,6507	0,6488	0,6469	0,645	0,6431	0,6412	0,6393	0,6375	0,6356	0,6338	0,632	0,6302	0,6284	0,6266	0,6249	0,6231	0,6214	0,6197
72,3	0,6517	0,6497	0,6478	0,6459	0,6439	0,642	0,6402	0,6383	0,6364	0,6346	0,6328	0,631	0,6292	0,6274	0,6256	0,6238	0,6221	0,6204	0,6186
72,4	0,6506	0,6487	0,6468	0,6448	0,6429	0,641	0,6391	0,6373	0,6354	0,6336	0,6318	0,6299	0,6281	0,6264	0,6246	0,6228	0,6211	0,6193	0,6176
72,5	0,6496	0,6477	0,6457	0,6438	0,6419	0,64	0,6381	0,6362	0,6344	0,6326	0,6307	0,6289	0,6271	0,6253	0,6236	0,6218	0,62	0,6183	0,6166
72,6	0,6486	0,6466	0,6447	0,6428	0,6409	0,639	0,6371	0,6352	0,6334	0,6315	0,6297	0,6279	0,6261	0,6243	0,6225	0,6208	0,619	0,6173	0,6156
72,7	0,6476	0,6456	0,6437	0,6417	0,6398	0,6379	0,6361	0,6342	0,6323	0,6305	0,6287	0,6269	0,6251	0,6233	0,6215	0,6197	0,618	0,6163	0,6145
72,8	0,6465	0,6446	0,6426	0,6407	0,6388	0,6369	0,635	0,6332	0,6313	0,6295	0,6276	0,6258	0,624	0,6222	0,6205	0,6187	0,617	0,6152	0,6135
72,9	0,6455	0,6435	0,6416	0,6397	0,6378	0,6359	0,634	0,6321	0,6303	0,6284	0,6266	0,6248	0,623	0,6212	0,6194	0,6177	0,6159	0,6142	0,6125
73	0,6445	0,6425	0,6406	0,6386	0,6367	0,6348	0,633	0,6311	0,6292	0,6274	0,6256	0,6238	0,622	0,6202	0,6184	0,6167	0,6149	0,6132	0,6115
73,1	0,6434	0,6415	0,6395	0,6376	0,6357	0,6338	0,6319	0,6301	0,6282	0,6264	0,6246	0,6227	0,6209	0,6192	0,6174	0,6156	0,6139	0,6122	0,6104
73,2	0,6424	0,6404	0,6385	0,6366	0,6347	0,6328	0,6309	0,629	0,6272	0,6253	0,6235	0,6217	0,6199	0,6181	0,6164	0,6146	0,6129	0,6111	0,6094
73,3	0,6414	0,6394	0,6375	0,6355	0,6336	0,6317	0,6299	0,628	0,6262	0,6243	0,6225	0,6207	0,6189	0,6171	0,6153	0,6136	0,6118	0,6101	0,6084
73,4	0,6403	0,6384	0,6364	0,6345	0,6326	0,6307	0,6288	0,627	0,6251	0,6233	0,6215	0,6197	0,6179	0,6161	0,6143	0,6125	0,6108	0,6091	0,6073
73,5	0,6393	0,6373	0,6354	0,6335	0,6316	0,6297	0,6278	0,6259	0,6241	0,6222	0,6204	0,6186	0,6168	0,615	0,6133	0,6115	0,6098	0,608	0,6063
73,6	0,6382	0,6363	0,6344	0,6324	0,6305	0,6286	0,6268	0,6249	0,6231	0,6212	0,6194	0,6176	0,6158	0,614	0,6122	0,6105	0,6087	0,607	0,6053
73,7	0,6372	0,6353	0,6333	0,6314	0,6295	0,6276	0,6257	0,6239	0,622	0,6202	0,6184	0,6166	0,6148	0,613	0,6112	0,6094	0,6077	0,606	0,6043
73,8	0,6362	0,6342	0,6323	0,6304	0,6285	0,6266	0,6247	0,6228	0,621	0,6191	0,6173	0,6155	0,6137	0,6119	0,6102	0,6084	0,6067	0,6049	0,6032
73,9	0,6351	0,6332	0,6312	0,6293	0,6274	0,6255	0,6237	0,6218	0,6199	0,6181	0,6163	0,6145	0,6127	0,6109	0,6091	0,6074	0,6056	0,6039	0,6022
74	0,6341	0,6321	0,6302	0,6283	0,6264	0,6245	0,6226	0,6208	0,6189	0,6171	0,6153	0,6134	0,6117	0,6099	0,6081	0,6063	0,6046	0,6029	0,6012
74,1	0,633	0,6311	0,6292	0,6272	0,6253	0,6235	0,6216	0,6197	0,6179	0,616	0,6142	0,6124	0,6106	0,6088	0,6071	0,6053	0,6036	0,6018	0,6001
74,2	0,632	0,6301	0,6281	0,6262	0,6243	0,6224	0,6205	0,6187	0,6168	0,615	0,6132	0,6114	0,6096	0,6078	0,606	0,6043	0,6025	0,6008	0,5991
74,3	0,631	0,629	0,6271	0,6252	0,6233	0,6214	0,6195	0,6176	0,6158	0,614	0,6121	0,6103	0,6085	0,6068	0,605	0,6032	0,6015	0,5998	0,598
74,4	0,6299	0,628	0,626	0,6241	0,6222	0,6203	0,6185	0,6166	0,6147	0,6129	0,6111	0,6093	0,6075	0,6057	0,604	0,6022	0,6005	0,5987	0,597

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
71	0,6302	0,6284	0,6268	0,6251	0,6234	0,6217	0,6201	0,6184
71,1	0,6291	0,6274	0,6257	0,6241	0,6224	0,6207	0,6191	0,6174
71,2	0,6281	0,6264	0,6247	0,623	0,6214	0,6197	0,6181	0,6164
71,3	0,6271	0,6254	0,6237	0,622	0,6204	0,6187	0,6171	0,6154
71,4	0,6261	0,6244	0,6227	0,621	0,6193	0,6177	0,616	0,6144
71,5	0,6251	0,6234	0,6217	0,62	0,6183	0,6167	0,615	0,6134
71,6	0,6241	0,6224	0,6207	0,619	0,6173	0,6157	0,614	0,6124
71,7	0,623	0,6213	0,6196	0,618	0,6163	0,6146	0,613	0,6114
71,8	0,622	0,6203	0,6186	0,6169	0,6153	0,6136	0,612	0,6103
71,9	0,621	0,6193	0,6176	0,6159	0,6143	0,6126	0,611	0,6093
72	0,62	0,6183	0,6166	0,6149	0,6132	0,6116	0,6099	0,6083
72,1	0,619	0,6173	0,6156	0,6139	0,6122	0,6106	0,6089	0,6073
72,2	0,6179	0,6162	0,6145	0,6129	0,6112	0,6095	0,6079	0,6063
72,3	0,6169	0,6152	0,6135	0,6118	0,6102	0,6085	0,6069	0,6052
72,4	0,6159	0,6142	0,6125	0,6108	0,6092	0,6075	0,6059	0,6042
72,5	0,6149	0,6132	0,6115	0,6098	0,6081	0,6065	0,6048	0,6032
72,6	0,6138	0,6121	0,6105	0,6088	0,6071	0,6055	0,6038	0,6022
72,7	0,6128	0,6111	0,6094	0,6078	0,6061	0,6044	0,6028	0,6012
72,8	0,6118	0,6101	0,6084	0,6067	0,6051	0,6034	0,6018	0,6001
72,9	0,6108	0,6091	0,6074	0,6057	0,604	0,6024	0,6007	0,5991
73	0,6097	0,608	0,6064	0,6047	0,603	0,6014	0,5997	0,5981
73,1	0,6087	0,607	0,6053	0,6037	0,602	0,6003	0,5987	0,5971
73,2	0,6077	0,606	0,6043	0,6026	0,601	0,5993	0,5977	0,596
73,3	0,6067	0,605	0,6033	0,6016	0,5999	0,5983	0,5966	0,595
73,4	0,6056	0,6039	0,6023	0,6006	0,5989	0,5973	0,5956	0,594
73,5	0,6046	0,6029	0,6012	0,5995	0,5979	0,5962	0,5946	0,593
73,6	0,6036	0,6019	0,6002	0,5985	0,5969	0,5952	0,5936	0,5919
73,7	0,6025	0,6008	0,5992	0,5975	0,5958	0,5942	0,5925	0,5909
73,8	0,6015	0,5998	0,5981	0,5965	0,5948	0,5931	0,5915	0,5899
73,9	0,6005	0,5988	0,5971	0,5954	0,5938	0,5921	0,5905	0,5888
74	0,5994	0,5977	0,5961	0,5944	0,5927	0,5911	0,5894	0,5878
74,1	0,5984	0,5967	0,595	0,5934	0,5917	0,59	0,5884	0,5868
74,2	0,5974	0,5957	0,594	0,5923	0,5907	0,589	0,5874	0,5857
74,3	0,5963	0,5946	0,593	0,5913	0,5896	0,588	0,5863	0,5847
74,4	0,5953	0,5936	0,5919	0,5903	0,5886	0,5869	0,5853	0,5837

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
74,5	1,231	1,2084	1,1878	1,1688	1,1512	1,1348	1,1195	1,1051	1,0915	1,0787	1,0665	1,0549	1,0438	1,0332	1,0231	1,0133	1,004	0,995	0,9863
74,6	1,2298	1,2073	1,1866	1,1677	1,1501	1,1337	1,1184	1,104	1,0904	1,0775	1,0653	1,0537	1,0427	1,0321	1,0219	1,0122	1,0029	0,9939	0,9852
74,7	1,2287	1,2061	1,1855	1,1665	1,1489	1,1325	1,1172	1,1028	1,0892	1,0764	1,0642	1,0526	1,0415	1,0309	1,0208	1,0111	1,0017	0,9928	0,9841
74,8	1,2275	1,2049	1,1843	1,1653	1,1478	1,1314	1,1161	1,1017	1,0881	1,0752	1,0631	1,0515	1,0404	1,0298	1,0197	1,01	1,0006	0,9916	0,983
74,9	1,2263	1,2038	1,1831	1,1642	1,1466	1,1302	1,1149	1,1005	1,087	1,0741	1,0619	1,0503	1,0393	1,0287	1,0186	1,0088	0,9995	0,9905	0,9818
75	1,2252	1,2026	1,182	1,163	1,1454	1,1291	1,1138	1,0994	1,0858	1,073	1,0608	1,0492	1,0381	1,0275	1,0174	1,0077	0,9984	0,9894	0,9807
75,1	1,224	1,2014	1,1808	1,1619	1,1443	1,1279	1,1126	1,0982	1,0847	1,0718	1,0596	1,048	1,037	1,0264	1,0163	1,0066	0,9972	0,9883	0,9796
75,2	1,2228	1,2002	1,1796	1,1607	1,1431	1,1268	1,1115	1,0971	1,0835	1,0707	1,0585	1,0469	1,0358	1,0253	1,0152	1,0055	0,9961	0,9871	0,9785
75,3	1,2216	1,1991	1,1785	1,1595	1,142	1,1256	1,1103	1,0959	1,0824	1,0695	1,0574	1,0458	1,0347	1,0241	1,014	1,0043	0,995	0,986	0,9774
75,4	1,2204	1,1979	1,1773	1,1584	1,1408	1,1245	1,1092	1,0948	1,0812	1,0684	1,0562	1,0446	1,0336	1,023	1,0129	1,0032	0,9939	0,9849	0,9762
75,5	1,2193	1,1967	1,1761	1,1572	1,1396	1,1233	1,108	1,0936	1,0801	1,0672	1,0551	1,0435	1,0324	1,0219	1,0118	1,0021	0,9927	0,9838	0,9751
75,6	1,2181	1,1956	1,175	1,156	1,1385	1,1221	1,1069	1,0925	1,0789	1,0661	1,0539	1,0423	1,0313	1,0207	1,0106	1,0009	0,9916	0,9826	0,974
75,7	1,2169	1,1944	1,1738	1,1549	1,1373	1,121	1,1057	1,0913	1,0778	1,065	1,0528	1,0412	1,0302	1,0196	1,0095	0,9998	0,9905	0,9815	0,9729
75,8	1,2157	1,1932	1,1726	1,1537	1,1362	1,1198	1,1045	1,0902	1,0766	1,0638	1,0516	1,0401	1,029	1,0185	1,0084	0,9987	0,9893	0,9804	0,9717
75,9	1,2146	1,192	1,1715	1,1525	1,135	1,1187	1,1034	1,089	1,0755	1,0627	1,0505	1,0389	1,0279	1,0173	1,0072	0,9975	0,9882	0,9792	0,9706
76	1,2134	1,1909	1,1703	1,1514	1,1338	1,1175	1,1022	1,0879	1,0743	1,0615	1,0494	1,0378	1,0267	1,0162	1,0061	0,9964	0,9871	0,9781	0,9695
76,1	1,2122	1,1897	1,1691	1,1502	1,1327	1,1163	1,1011	1,0867	1,0732	1,0604	1,0482	1,0366	1,0256	1,0151	1,005	0,9953	0,9859	0,977	0,9683
76,2	1,211	1,1885	1,1679	1,149	1,1315	1,1152	1,0999	1,0856	1,072	1,0592	1,0471	1,0355	1,0245	1,0139	1,0038	0,9941	0,9848	0,9759	0,9672
76,3	1,2098	1,1873	1,1668	1,1479	1,1303	1,114	1,0988	1,0844	1,0709	1,0581	1,0459	1,0343	1,0233	1,0128	1,0027	0,993	0,9837	0,9747	0,9661
76,4	1,2086	1,1861	1,1656	1,1467	1,1292	1,1129	1,0976	1,0833	1,0697	1,0569	1,0448	1,0332	1,0222	1,0116	1,0015	0,9919	0,9825	0,9736	0,9649
76,5	1,2075	1,185	1,1644	1,1455	1,128	1,1117	1,0964	1,0821	1,0686	1,0558	1,0436	1,0321	1,021	1,0105	1,0004	0,9907	0,9814	0,9724	0,9638
76,6	1,2063	1,1838	1,1632	1,1443	1,1268	1,1105	1,0953	1,0809	1,0674	1,0546	1,0425	1,0309	1,0199	1,0093	0,9993	0,9896	0,9803	0,9713	0,9627
76,7	1,2051	1,1826	1,1621	1,1432	1,1257	1,1094	1,0941	1,0798	1,0663	1,0535	1,0413	1,0298	1,0187	1,0082	0,9981	0,9884	0,9791	0,9702	0,9615
76,8	1,2039	1,1814	1,1609	1,142	1,1245	1,1082	1,0929	1,0786	1,0651	1,0523	1,0402	1,0286	1,0176	1,0071	0,997	0,9873	0,978	0,969	0,9604
76,9	1,2027	1,1802	1,1597	1,1408	1,1233	1,107	1,0918	1,0775	1,0639	1,0511	1,039	1,0275	1,0164	1,0059	0,9958	0,9862	0,9769	0,9679	0,9593
77	1,2015	1,1791	1,1585	1,1397	1,1222	1,1059	1,0906	1,0763	1,0628	1,05	1,0379	1,0263	1,0153	1,0048	0,9947	0,985	0,9757	0,9668	0,9581
77,1	1,2003	1,1779	1,1574	1,1385	1,121	1,1047	1,0895	1,0751	1,0616	1,0488	1,0367	1,0252	1,0141	1,0036	0,9935	0,9839	0,9746	0,9656	0,957
77,2	1,1991	1,1767	1,1562	1,1373	1,1198	1,1035	1,0883	1,074	1,0605	1,0477	1,0355	1,024	1,013	1,0025	0,9924	0,9827	0,9734	0,9645	0,9559
77,3	1,198	1,1755	1,155	1,1361	1,1186	1,1024	1,0871	1,0728	1,0593	1,0465	1,0344	1,0229	1,0118	1,0013	0,9912	0,9816	0,9723	0,9633	0,9547
77,4	1,1968	1,1743	1,1538	1,1349	1,1175	1,1012	1,086	1,0716	1,0581	1,0454	1,0332	1,0217	1,0107	1,0002	0,9901	0,9804	0,9711	0,9622	0,9536
77,5	1,1956	1,1731	1,1526	1,1338	1,1163	1,1	1,0848	1,0705	1,057	1,0442	1,0321	1,0205	1,0095	0,999	0,989	0,9793	0,97	0,9611	0,9524
77,6	1,1944	1,1719	1,1515	1,1326	1,1151	1,0988	1,0836	1,0693	1,0558	1,043	1,0309	1,0194	1,0084	0,9979	0,9878	0,9781	0,9689	0,9599	0,9513
77,7	1,1932	1,1708	1,1503	1,1314	1,1139	1,0977	1,0824	1,0681	1,0546	1,0419	1,0298	1,0182	1,0072	0,9967	0,9867	0,977	0,9677	0,9588	0,9502
77,8	1,192	1,1696	1,1491	1,1302	1,1128	1,0965	1,0813	1,067	1,0535	1,0407	1,0286	1,0171	1,0061	0,9956	0,9855	0,9758	0,9666	0,9576	0,949
77,9	1,1908	1,1684	1,1479	1,129	1,1116	1,0953	1,0801	1,0658	1,0523	1,0396	1,0274	1,0159	1,0049	0,9944	0,9843	0,9747	0,9654	0,9565	0,9479

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
74,5	0,978	0,9699	0,962	0,9545	0,9471	0,94	0,9331	0,9263	0,9198	0,9134	0,9072	0,9011	0,8952	0,8895	0,8838	0,8783	0,873	0,8677	0,8625
74,6	0,9768	0,9688	0,9609	0,9534	0,946	0,9389	0,932	0,9252	0,9187	0,9123	0,9061	0,9	0,8941	0,8884	0,8827	0,8772	0,8719	0,8666	0,8615
74,7	0,9757	0,9676	0,9598	0,9522	0,9449	0,9378	0,9308	0,9241	0,9176	0,9112	0,905	0,8989	0,893	0,8873	0,8816	0,8761	0,8708	0,8655	0,8604
74,8	0,9746	0,9665	0,9587	0,9511	0,9438	0,9367	0,9297	0,923	0,9165	0,9101	0,9039	0,8978	0,8919	0,8862	0,8805	0,875	0,8697	0,8644	0,8593
74,9	0,9735	0,9654	0,9576	0,95	0,9427	0,9355	0,9286	0,9219	0,9154	0,909	0,9028	0,8967	0,8908	0,8851	0,8795	0,874	0,8686	0,8633	0,8582
75	0,9724	0,9643	0,9565	0,9489	0,9416	0,9344	0,9275	0,9208	0,9143	0,9079	0,9017	0,8956	0,8897	0,884	0,8784	0,8729	0,8675	0,8622	0,8571
75,1	0,9712	0,9632	0,9554	0,9478	0,9404	0,9333	0,9264	0,9197	0,9131	0,9068	0,9006	0,8945	0,8886	0,8829	0,8773	0,8718	0,8664	0,8611	0,856
75,2	0,9701	0,962	0,9542	0,9467	0,9393	0,9322	0,9253	0,9186	0,912	0,9057	0,8995	0,8934	0,8875	0,8818	0,8761	0,8707	0,8653	0,86	0,8549
75,3	0,969	0,9609	0,9531	0,9455	0,9382	0,9311	0,9242	0,9175	0,9109	0,9046	0,8984	0,8923	0,8864	0,8807	0,875	0,8696	0,8642	0,8589	0,8538
75,4	0,9679	0,9598	0,952	0,9444	0,9371	0,93	0,9231	0,9164	0,9098	0,9035	0,8973	0,8912	0,8853	0,8796	0,8739	0,8685	0,8631	0,8578	0,8527
75,5	0,9668	0,9587	0,9509	0,9433	0,936	0,9289	0,922	0,9152	0,9087	0,9023	0,8961	0,8901	0,8842	0,8785	0,8728	0,8673	0,862	0,8567	0,8516
75,6	0,9656	0,9576	0,9498	0,9422	0,9349	0,9278	0,9208	0,9141	0,9076	0,9012	0,895	0,889	0,8831	0,8774	0,8717	0,8662	0,8609	0,8556	0,8505
75,7	0,9645	0,9564	0,9486	0,9411	0,9337	0,9266	0,9197	0,913	0,9065	0,9001	0,8939	0,8879	0,882	0,8762	0,8706	0,8651	0,8598	0,8545	0,8494
75,8	0,9634	0,9553	0,9475	0,94	0,9326	0,9255	0,9186	0,9119	0,9054	0,899	0,8928	0,8868	0,8809	0,8751	0,8695	0,864	0,8587	0,8534	0,8483
75,9	0,9623	0,9542	0,9464	0,9388	0,9315	0,9244	0,9175	0,9108	0,9043	0,8979	0,8917	0,8857	0,8798	0,874	0,8684	0,8629	0,8576	0,8523	0,8472
76	0,9611	0,9531	0,9453	0,9377	0,9304	0,9233	0,9164	0,9097	0,9031	0,8968	0,8906	0,8846	0,8787	0,8729	0,8673	0,8618	0,8565	0,8512	0,8461
76,1	0,96	0,9519	0,9441	0,9366	0,9293	0,9222	0,9153	0,9086	0,902	0,8957	0,8895	0,8834	0,8776	0,8718	0,8662	0,8607	0,8554	0,8501	0,845
76,2	0,9589	0,9508	0,943	0,9355	0,9281	0,921	0,9141	0,9074	0,9009	0,8946	0,8884	0,8823	0,8764	0,8707	0,8651	0,8596	0,8542	0,849	0,8439
76,3	0,9577	0,9497	0,9419	0,9343	0,927	0,9199	0,913	0,9063	0,8998	0,8934	0,8873	0,8812	0,8753	0,8696	0,864	0,8585	0,8531	0,8479	0,8428
76,4	0,9566	0,9486	0,9408	0,9332	0,9259	0,9188	0,9119	0,9052	0,8987	0,8923	0,8861	0,8801	0,8742	0,8685	0,8629	0,8574	0,852	0,8468	0,8417
76,5	0,9555	0,9474	0,9396	0,9321	0,9248	0,9177	0,9108	0,9041	0,8976	0,8912	0,885	0,879	0,8731	0,8674	0,8618	0,8563	0,8509	0,8457	0,8406
76,6	0,9543	0,9463	0,9385	0,931	0,9236	0,9166	0,9097	0,903	0,8964	0,8901	0,8839	0,8779	0,872	0,8663	0,8606	0,8552	0,8498	0,8446	0,8394
76,7	0,9532	0,9452	0,9374	0,9298	0,9225	0,9154	0,9085	0,9018	0,8953	0,889	0,8828	0,8768	0,8709	0,8651	0,8595	0,8541	0,8487	0,8435	0,8383
76,8	0,9521	0,944	0,9362	0,9287	0,9214	0,9143	0,9074	0,9007	0,8942	0,8878	0,8817	0,8756	0,8698	0,864	0,8584	0,8529	0,8476	0,8424	0,8372
76,9	0,9509	0,9429	0,9351	0,9276	0,9203	0,9132	0,9063	0,8996	0,8931	0,8867	0,8805	0,8745	0,8686	0,8629	0,8573	0,8518	0,8465	0,8412	0,8361
77	0,9498	0,9418	0,934	0,9264	0,9191	0,912	0,9052	0,8985	0,8919	0,8856	0,8794	0,8734	0,8675	0,8618	0,8562	0,8507	0,8454	0,8401	0,835
77,1	0,9487	0,9406	0,9329	0,9253	0,918	0,9109	0,904	0,8973	0,8908	0,8845	0,8783	0,8723	0,8664	0,8607	0,8551	0,8496	0,8442	0,839	0,8339
77,2	0,9475	0,9395	0,9317	0,9242	0,9169	0,9098	0,9029	0,8962	0,8897	0,8834	0,8772	0,8712	0,8653	0,8596	0,854	0,8485	0,8431	0,8379	0,8328
77,3	0,9464	0,9384	0,9306	0,9231	0,9157	0,9087	0,9018	0,8951	0,8886	0,8822	0,8761	0,87	0,8642	0,8584	0,8528	0,8474	0,842	0,8368	0,8317
77,4	0,9453	0,9372	0,9294	0,9219	0,9146	0,9075	0,9006	0,894	0,8874	0,8811	0,8749	0,8689	0,863	0,8573	0,8517	0,8462	0,8409	0,8357	0,8305
77,5	0,9441	0,9361	0,9283	0,9208	0,9135	0,9064	0,8995	0,8928	0,8863	0,88	0,8738	0,8678	0,8619	0,8562	0,8506	0,8451	0,8398	0,8346	0,8294
77,6	0,943	0,935	0,9272	0,9196	0,9123	0,9053	0,8984	0,8917	0,8852	0,8789	0,8727	0,8667	0,8608	0,8551	0,8495	0,844	0,8387	0,8334	0,8283
77,7	0,9418	0,9338	0,926	0,9185	0,9112	0,9041	0,8973	0,8906	0,8841	0,8777	0,8716	0,8655	0,8597	0,8539	0,8484	0,8429	0,8375	0,8323	0,8272
77,8	0,9407	0,9327	0,9249	0,9174	0,9101	0,903	0,8961	0,8894	0,8829	0,8766	0,8704	0,8644	0,8585	0,8528	0,8472	0,8418	0,8364	0,8312	0,8261
77,9	0,9396	0,9315	0,9238	0,9162	0,9089	0,9019	0,895	0,8883	0,8818	0,8755	0,8693	0,8633	0,8574	0,8517	0,8461	0,8406	0,8353	0,8301	0,825

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
74,5	0,8575	0,8526	0,8477	0,843	0,8383	0,8338	0,8293	0,8249	0,8205	0,8163	0,8121	0,808	0,804	0,8	0,7961	0,7923	0,7885	0,7848	0,7811
74,6	0,8564	0,8515	0,8466	0,8419	0,8372	0,8327	0,8282	0,8238	0,8195	0,8152	0,811	0,8069	0,8029	0,7989	0,795	0,7912	0,7874	0,7837	0,78
74,7	0,8553	0,8504	0,8455	0,8408	0,8361	0,8316	0,8271	0,8227	0,8184	0,8141	0,81	0,8059	0,8018	0,7979	0,7939	0,7901	0,7863	0,7826	0,7789
74,8	0,8542	0,8493	0,8445	0,8397	0,8351	0,8305	0,826	0,8216	0,8173	0,813	0,8089	0,8048	0,8007	0,7968	0,7929	0,789	0,7852	0,7815	0,7779
74,9	0,8531	0,8482	0,8434	0,8386	0,834	0,8294	0,8249	0,8205	0,8162	0,812	0,8078	0,8037	0,7997	0,7957	0,7918	0,7879	0,7842	0,7804	0,7768
75	0,852	0,8471	0,8423	0,8375	0,8329	0,8283	0,8238	0,8194	0,8151	0,8109	0,8067	0,8026	0,7986	0,7946	0,7907	0,7869	0,7831	0,7794	0,7757
75,1	0,8509	0,846	0,8412	0,8364	0,8318	0,8272	0,8227	0,8183	0,814	0,8098	0,8056	0,8015	0,7975	0,7935	0,7896	0,7858	0,782	0,7783	0,7746
75,2	0,8498	0,8449	0,8401	0,8353	0,8307	0,8261	0,8217	0,8173	0,8129	0,8087	0,8045	0,8004	0,7964	0,7924	0,7885	0,7847	0,7809	0,7772	0,7735
75,3	0,8487	0,8438	0,839	0,8342	0,8296	0,825	0,8206	0,8162	0,8119	0,8076	0,8034	0,7993	0,7953	0,7914	0,7875	0,7836	0,7798	0,7761	0,7725
75,4	0,8477	0,8427	0,8379	0,8332	0,8285	0,8239	0,8195	0,8151	0,8108	0,8065	0,8024	0,7983	0,7942	0,7903	0,7864	0,7825	0,7788	0,775	0,7714
75,5	0,8466	0,8416	0,8368	0,8321	0,8274	0,8229	0,8184	0,814	0,8097	0,8054	0,8013	0,7972	0,7931	0,7892	0,7853	0,7814	0,7777	0,774	0,7703
75,6	0,8455	0,8405	0,8357	0,831	0,8263	0,8218	0,8173	0,8129	0,8086	0,8043	0,8002	0,7961	0,7921	0,7881	0,7842	0,7804	0,7766	0,7729	0,7692
75,7	0,8444	0,8394	0,8346	0,8299	0,8252	0,8207	0,8162	0,8118	0,8075	0,8033	0,7991	0,795	0,791	0,787	0,7831	0,7793	0,7755	0,7718	0,7681
75,8	0,8433	0,8383	0,8335	0,8288	0,8241	0,8196	0,8151	0,8107	0,8064	0,8022	0,798	0,7939	0,7899	0,7859	0,782	0,7782	0,7744	0,7707	0,767
75,9	0,8422	0,8372	0,8324	0,8277	0,823	0,8185	0,814	0,8096	0,8053	0,8011	0,7969	0,7928	0,7888	0,7848	0,7809	0,7771	0,7733	0,7696	0,766
76	0,8411	0,8361	0,8313	0,8266	0,8219	0,8174	0,8129	0,8085	0,8042	0,8	0,7958	0,7917	0,7877	0,7837	0,7798	0,776	0,7722	0,7685	0,7649
76,1	0,84	0,835	0,8302	0,8255	0,8208	0,8163	0,8118	0,8074	0,8031	0,7989	0,7947	0,7906	0,7866	0,7826	0,7788	0,7749	0,7712	0,7674	0,7638
76,2	0,8388	0,8339	0,8291	0,8244	0,8197	0,8152	0,8107	0,8063	0,802	0,7978	0,7936	0,7895	0,7855	0,7816	0,7777	0,7738	0,7701	0,7663	0,7627
76,3	0,8377	0,8328	0,828	0,8233	0,8186	0,8141	0,8096	0,8052	0,8009	0,7967	0,7925	0,7884	0,7844	0,7805	0,7766	0,7727	0,769	0,7653	0,7616
76,4	0,8366	0,8317	0,8269	0,8222	0,8175	0,813	0,8085	0,8041	0,7998	0,7956	0,7914	0,7873	0,7833	0,7794	0,7755	0,7716	0,7679	0,7642	0,7605
76,5	0,8355	0,8306	0,8258	0,8211	0,8164	0,8119	0,8074	0,803	0,7987	0,7945	0,7903	0,7862	0,7822	0,7783	0,7744	0,7706	0,7668	0,7631	0,7594
76,6	0,8344	0,8295	0,8247	0,82	0,8153	0,8108	0,8063	0,8019	0,7976	0,7934	0,7892	0,7852	0,7811	0,7772	0,7733	0,7695	0,7657	0,762	0,7583
76,7	0,8333	0,8284	0,8236	0,8189	0,8142	0,8097	0,8052	0,8008	0,7965	0,7923	0,7881	0,7841	0,78	0,7761	0,7722	0,7684	0,7646	0,7609	0,7572
76,8	0,8322	0,8273	0,8225	0,8177	0,8131	0,8086	0,8041	0,7997	0,7954	0,7912	0,787	0,783	0,7789	0,775	0,7711	0,7673	0,7635	0,7598	0,7561
76,9	0,8311	0,8262	0,8214	0,8166	0,812	0,8075	0,803	0,7986	0,7943	0,7901	0,7859	0,7819	0,7778	0,7739	0,77	0,7662	0,7624	0,7587	0,755
77	0,83	0,8251	0,8203	0,8155	0,8109	0,8064	0,8019	0,7975	0,7932	0,789	0,7848	0,7808	0,7767	0,7728	0,7689	0,7651	0,7613	0,7576	0,754
77,1	0,8289	0,824	0,8191	0,8144	0,8098	0,8052	0,8008	0,7964	0,7921	0,7879	0,7837	0,7796	0,7756	0,7717	0,7678	0,764	0,7602	0,7565	0,7529
77,2	0,8278	0,8228	0,818	0,8133	0,8087	0,8041	0,7997	0,7953	0,791	0,7868	0,7826	0,7785	0,7745	0,7706	0,7667	0,7629	0,7591	0,7554	0,7518
77,3	0,8266	0,8217	0,8169	0,8122	0,8076	0,803	0,7986	0,7942	0,7899	0,7857	0,7815	0,7774	0,7734	0,7695	0,7656	0,7618	0,758	0,7543	0,7507
77,4	0,8255	0,8206	0,8158	0,8111	0,8065	0,8019	0,7975	0,7931	0,7888	0,7846	0,7804	0,7763	0,7723	0,7684	0,7645	0,7607	0,7569	0,7532	0,7496
77,5	0,8244	0,8195	0,8147	0,81	0,8054	0,8008	0,7964	0,792	0,7877	0,7835	0,7793	0,7752	0,7712	0,7673	0,7634	0,7596	0,7558	0,7521	0,7485
77,6	0,8233	0,8184	0,8136	0,8089	0,8042	0,7997	0,7952	0,7909	0,7866	0,7824	0,7782	0,7741	0,7701	0,7662	0,7623	0,7585	0,7547	0,751	0,7474
77,7	0,8222	0,8173	0,8125	0,8078	0,8031	0,7986	0,7941	0,7898	0,7855	0,7812	0,7771	0,773	0,769	0,7651	0,7612	0,7574	0,7536	0,7499	0,7463
77,8	0,8211	0,8162	0,8113	0,8066	0,802	0,7975	0,793	0,7886	0,7844	0,7801	0,776	0,7719	0,7679	0,764	0,7601	0,7563	0,7525	0,7488	0,7452
77,9	0,8199	0,815	0,8102	0,8055	0,8009	0,7964	0,7919	0,7875	0,7832	0,779	0,7749	0,7708	0,7668	0,7629	0,759	0,7552	0,7514	0,7477	0,744

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e$_0$ / m$_0$	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
74,5	0,7775	0,7739	0,7704	0,7669	0,7635	0,7602	0,7568	0,7536	0,7503	0,7471	0,744	0,7409	0,7378	0,7348	0,7318	0,7288	0,7259	0,723	0,7202
74,6	0,7764	0,7728	0,7693	0,7659	0,7624	0,7591	0,7558	0,7525	0,7493	0,7461	0,7429	0,7398	0,7368	0,7337	0,7307	0,7278	0,7249	0,722	0,7191
74,7	0,7753	0,7718	0,7682	0,7648	0,7614	0,758	0,7547	0,7514	0,7482	0,745	0,7419	0,7388	0,7357	0,7327	0,7297	0,7267	0,7238	0,7209	0,718
74,8	0,7742	0,7707	0,7672	0,7637	0,7603	0,7569	0,7536	0,7504	0,7471	0,7439	0,7408	0,7377	0,7346	0,7316	0,7286	0,7256	0,7227	0,7198	0,717
74,9	0,7732	0,7696	0,7661	0,7626	0,7592	0,7559	0,7525	0,7493	0,746	0,7429	0,7397	0,7366	0,7335	0,7305	0,7275	0,7246	0,7217	0,7188	0,7159
75	0,7721	0,7685	0,765	0,7616	0,7582	0,7548	0,7515	0,7482	0,745	0,7418	0,7386	0,7355	0,7325	0,7294	0,7265	0,7235	0,7206	0,7177	0,7149
75,1	0,771	0,7674	0,7639	0,7605	0,7571	0,7537	0,7504	0,7471	0,7439	0,7407	0,7376	0,7345	0,7314	0,7284	0,7254	0,7224	0,7195	0,7166	0,7138
75,2	0,7699	0,7664	0,7629	0,7594	0,756	0,7526	0,7493	0,7461	0,7428	0,7396	0,7365	0,7334	0,7303	0,7273	0,7243	0,7214	0,7184	0,7156	0,7127
75,3	0,7688	0,7653	0,7618	0,7583	0,7549	0,7516	0,7482	0,745	0,7418	0,7386	0,7354	0,7323	0,7293	0,7262	0,7232	0,7203	0,7174	0,7145	0,7116
75,4	0,7678	0,7642	0,7607	0,7573	0,7538	0,7505	0,7472	0,7439	0,7407	0,7375	0,7344	0,7313	0,7282	0,7252	0,7222	0,7192	0,7163	0,7134	0,7106
75,5	0,7667	0,7631	0,7596	0,7562	0,7528	0,7494	0,7461	0,7428	0,7396	0,7364	0,7333	0,7302	0,7271	0,7241	0,7211	0,7182	0,7152	0,7124	0,7095
75,6	0,7656	0,762	0,7585	0,7551	0,7517	0,7483	0,745	0,7417	0,7385	0,7353	0,7322	0,7291	0,726	0,723	0,72	0,7171	0,7142	0,7113	0,7084
75,7	0,7645	0,761	0,7575	0,754	0,7506	0,7472	0,7439	0,7407	0,7374	0,7343	0,7311	0,728	0,725	0,7219	0,719	0,716	0,7131	0,7102	0,7074
75,8	0,7634	0,7599	0,7564	0,7529	0,7495	0,7462	0,7429	0,7396	0,7364	0,7332	0,73	0,727	0,7239	0,7209	0,7179	0,7149	0,712	0,7091	0,7063
75,9	0,7624	0,7588	0,7553	0,7518	0,7484	0,7451	0,7418	0,7385	0,7353	0,7321	0,729	0,7259	0,7228	0,7198	0,7168	0,7139	0,7109	0,7081	0,7052
76	0,7613	0,7577	0,7542	0,7508	0,7474	0,744	0,7407	0,7374	0,7342	0,731	0,7279	0,7248	0,7217	0,7187	0,7157	0,7128	0,7099	0,707	0,7041
76,1	0,7602	0,7566	0,7531	0,7497	0,7463	0,7429	0,7396	0,7363	0,7331	0,7299	0,7268	0,7237	0,7207	0,7176	0,7147	0,7117	0,7088	0,7059	0,7031
76,2	0,7591	0,7555	0,752	0,7486	0,7452	0,7418	0,7385	0,7353	0,732	0,7289	0,7257	0,7226	0,7196	0,7166	0,7136	0,7106	0,7077	0,7048	0,702
76,3	0,758	0,7545	0,751	0,7475	0,7441	0,7408	0,7374	0,7342	0,731	0,7278	0,7246	0,7216	0,7185	0,7155	0,7125	0,7095	0,7066	0,7038	0,7009
76,4	0,7569	0,7534	0,7499	0,7464	0,743	0,7397	0,7364	0,7331	0,7299	0,7267	0,7236	0,7205	0,7174	0,7144	0,7114	0,7085	0,7056	0,7027	0,6998
76,5	0,7558	0,7523	0,7488	0,7453	0,7419	0,7386	0,7353	0,732	0,7288	0,7256	0,7225	0,7194	0,7163	0,7133	0,7103	0,7074	0,7045	0,7016	0,6988
76,6	0,7547	0,7512	0,7477	0,7442	0,7408	0,7375	0,7342	0,7309	0,7277	0,7245	0,7214	0,7183	0,7152	0,7122	0,7092	0,7063	0,7034	0,7005	0,6977
76,7	0,7536	0,7501	0,7466	0,7432	0,7398	0,7364	0,7331	0,7298	0,7266	0,7234	0,7203	0,7172	0,7142	0,7111	0,7082	0,7052	0,7023	0,6994	0,6966
76,8	0,7525	0,749	0,7455	0,7421	0,7387	0,7353	0,732	0,7287	0,7255	0,7224	0,7192	0,7161	0,7131	0,7101	0,7071	0,7041	0,7012	0,6984	0,6955
76,9	0,7515	0,7479	0,7444	0,741	0,7376	0,7342	0,7309	0,7277	0,7244	0,7213	0,7181	0,715	0,712	0,709	0,706	0,7031	0,7001	0,6973	0,6944
77	0,7504	0,7468	0,7433	0,7399	0,7365	0,7331	0,7298	0,7266	0,7234	0,7202	0,7171	0,714	0,7109	0,7079	0,7049	0,702	0,6991	0,6962	0,6933
77,1	0,7493	0,7457	0,7422	0,7388	0,7354	0,732	0,7287	0,7255	0,7223	0,7191	0,716	0,7129	0,7098	0,7068	0,7038	0,7009	0,698	0,6951	0,6923
77,2	0,7482	0,7446	0,7411	0,7377	0,7343	0,7309	0,7276	0,7244	0,7212	0,718	0,7149	0,7118	0,7087	0,7057	0,7027	0,6998	0,6969	0,694	0,6912
77,3	0,7471	0,7435	0,74	0,7366	0,7332	0,7299	0,7266	0,7233	0,7201	0,7169	0,7138	0,7107	0,7076	0,7046	0,7016	0,6987	0,6958	0,6929	0,6901
77,4	0,746	0,7424	0,7389	0,7355	0,7321	0,7288	0,7255	0,7222	0,719	0,7158	0,7127	0,7096	0,7065	0,7035	0,7006	0,6976	0,6947	0,6918	0,689
77,5	0,7449	0,7413	0,7378	0,7344	0,731	0,7277	0,7244	0,7211	0,7179	0,7147	0,7116	0,7085	0,7055	0,7024	0,6995	0,6965	0,6936	0,6908	0,6879
77,6	0,7438	0,7402	0,7367	0,7333	0,7299	0,7266	0,7233	0,72	0,7168	0,7136	0,7105	0,7074	0,7044	0,7013	0,6984	0,6954	0,6925	0,6897	0,6868
77,7	0,7427	0,7391	0,7356	0,7322	0,7288	0,7255	0,7222	0,7189	0,7157	0,7125	0,7094	0,7063	0,7033	0,7003	0,6973	0,6943	0,6914	0,6886	0,6857
77,8	0,7416	0,738	0,7345	0,7311	0,7277	0,7244	0,7211	0,7178	0,7146	0,7114	0,7083	0,7052	0,7022	0,6992	0,6962	0,6932	0,6903	0,6875	0,6846
77,9	0,7405	0,7369	0,7334	0,73	0,7266	0,7233	0,72	0,7167	0,7135	0,7103	0,7072	0,7041	0,7011	0,6981	0,6951	0,6922	0,6893	0,6864	0,6835

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
74,5	0,7174	0,7146	0,7118	0,7091	0,7064	0,7037	0,7011	0,6985	0,6959	0,6933	0,6908	0,6883	0,6858	0,6834	0,6809	0,6785	0,6762	0,6738	0,6715
74,6	0,7163	0,7135	0,7107	0,708	0,7053	0,7027	0,7	0,6974	0,6948	0,6923	0,6897	0,6872	0,6848	0,6823	0,6799	0,6775	0,6751	0,6727	0,6704
74,7	0,7152	0,7124	0,7097	0,707	0,7043	0,7016	0,699	0,6964	0,6938	0,6912	0,6887	0,6862	0,6837	0,6813	0,6788	0,6764	0,674	0,6717	0,6694
74,8	0,7142	0,7114	0,7086	0,7059	0,7032	0,7005	0,6979	0,6953	0,6927	0,6902	0,6876	0,6851	0,6827	0,6802	0,6778	0,6754	0,673	0,6706	0,6683
74,9	0,7131	0,7103	0,7076	0,7048	0,7021	0,6995	0,6968	0,6942	0,6917	0,6891	0,6866	0,6841	0,6816	0,6791	0,6767	0,6743	0,6719	0,6696	0,6672
75	0,712	0,7092	0,7065	0,7038	0,7011	0,6984	0,6958	0,6932	0,6906	0,688	0,6855	0,683	0,6805	0,6781	0,6757	0,6733	0,6709	0,6685	0,6662
75,1	0,711	0,7082	0,7054	0,7027	0,7	0,6973	0,6947	0,6921	0,6895	0,687	0,6845	0,682	0,6795	0,677	0,6746	0,6722	0,6698	0,6675	0,6651
75,2	0,7099	0,7071	0,7044	0,7016	0,6989	0,6963	0,6937	0,691	0,6885	0,6859	0,6834	0,6809	0,6784	0,676	0,6735	0,6711	0,6688	0,6664	0,6641
75,3	0,7088	0,706	0,7033	0,7006	0,6979	0,6952	0,6926	0,69	0,6874	0,6849	0,6823	0,6798	0,6774	0,6749	0,6725	0,6701	0,6677	0,6653	0,663
75,4	0,7078	0,705	0,7022	0,6995	0,6968	0,6942	0,6915	0,6889	0,6863	0,6838	0,6813	0,6788	0,6763	0,6738	0,6714	0,669	0,6666	0,6643	0,662
75,5	0,7067	0,7039	0,7012	0,6984	0,6957	0,6931	0,6905	0,6878	0,6853	0,6827	0,6802	0,6777	0,6752	0,6728	0,6704	0,668	0,6656	0,6632	0,6609
75,6	0,7056	0,7028	0,7001	0,6974	0,6947	0,692	0,6894	0,6868	0,6842	0,6817	0,6791	0,6766	0,6742	0,6717	0,6693	0,6669	0,6645	0,6622	0,6598
75,7	0,7046	0,7018	0,699	0,6963	0,6936	0,6909	0,6883	0,6857	0,6831	0,6806	0,6781	0,6756	0,6731	0,6706	0,6682	0,6658	0,6635	0,6611	0,6588
75,8	0,7035	0,7007	0,6979	0,6952	0,6925	0,6899	0,6872	0,6846	0,6821	0,6795	0,677	0,6745	0,672	0,6696	0,6672	0,6648	0,6624	0,66	0,6577
75,9	0,7024	0,6996	0,6969	0,6942	0,6915	0,6888	0,6862	0,6836	0,681	0,6785	0,6759	0,6734	0,671	0,6685	0,6661	0,6637	0,6613	0,659	0,6566
76	0,7013	0,6986	0,6958	0,6931	0,6904	0,6877	0,6851	0,6825	0,6799	0,6774	0,6749	0,6724	0,6699	0,6675	0,665	0,6626	0,6603	0,6579	0,6556
76,1	0,7003	0,6975	0,6947	0,692	0,6893	0,6867	0,684	0,6814	0,6789	0,6763	0,6738	0,6713	0,6688	0,6664	0,664	0,6616	0,6592	0,6568	0,6545
76,2	0,6992	0,6964	0,6937	0,6909	0,6883	0,6856	0,683	0,6804	0,6778	0,6752	0,6727	0,6702	0,6678	0,6653	0,6629	0,6605	0,6581	0,6558	0,6534
76,3	0,6981	0,6953	0,6926	0,6899	0,6872	0,6845	0,6819	0,6793	0,6767	0,6742	0,6716	0,6692	0,6667	0,6642	0,6618	0,6594	0,6571	0,6547	0,6524
76,4	0,697	0,6942	0,6915	0,6888	0,6861	0,6834	0,6808	0,6782	0,6756	0,6731	0,6706	0,6681	0,6656	0,6632	0,6608	0,6584	0,656	0,6536	0,6513
76,5	0,6959	0,6932	0,6904	0,6877	0,685	0,6824	0,6797	0,6771	0,6746	0,672	0,6695	0,667	0,6645	0,6621	0,6597	0,6573	0,6549	0,6526	0,6502
76,6	0,6949	0,6921	0,6893	0,6866	0,6839	0,6813	0,6787	0,6761	0,6735	0,6709	0,6684	0,6659	0,6635	0,661	0,6586	0,6562	0,6538	0,6515	0,6492
76,7	0,6938	0,691	0,6883	0,6856	0,6829	0,6802	0,6776	0,675	0,6724	0,6699	0,6674	0,6649	0,6624	0,66	0,6575	0,6551	0,6528	0,6504	0,6481
76,8	0,6927	0,6899	0,6872	0,6845	0,6818	0,6791	0,6765	0,6739	0,6713	0,6688	0,6663	0,6638	0,6613	0,6589	0,6565	0,6541	0,6517	0,6493	0,647
76,9	0,6916	0,6888	0,6861	0,6834	0,6807	0,6781	0,6754	0,6728	0,6703	0,6677	0,6652	0,6627	0,6602	0,6578	0,6554	0,653	0,6506	0,6483	0,646
77	0,6905	0,6878	0,685	0,6823	0,6796	0,677	0,6744	0,6718	0,6692	0,6666	0,6641	0,6616	0,6592	0,6567	0,6543	0,6519	0,6495	0,6472	0,6449
77,1	0,6895	0,6867	0,6839	0,6812	0,6785	0,6759	0,6733	0,6707	0,6681	0,6656	0,663	0,6606	0,6581	0,6556	0,6532	0,6508	0,6485	0,6461	0,6438
77,2	0,6884	0,6856	0,6829	0,6801	0,6775	0,6748	0,6722	0,6696	0,667	0,6645	0,662	0,6595	0,657	0,6546	0,6522	0,6498	0,6474	0,645	0,6427
77,3	0,6873	0,6845	0,6818	0,6791	0,6764	0,6737	0,6711	0,6685	0,6659	0,6634	0,6609	0,6584	0,6559	0,6535	0,6511	0,6487	0,6463	0,644	0,6416
77,4	0,6862	0,6834	0,6807	0,678	0,6753	0,6726	0,67	0,6674	0,6649	0,6623	0,6598	0,6573	0,6549	0,6524	0,65	0,6476	0,6452	0,6429	0,6406
77,5	0,6851	0,6823	0,6796	0,6769	0,6742	0,6716	0,6689	0,6663	0,6638	0,6612	0,6587	0,6562	0,6538	0,6513	0,6489	0,6465	0,6442	0,6418	0,6395
77,6	0,684	0,6813	0,6785	0,6758	0,6731	0,6705	0,6678	0,6653	0,6627	0,6601	0,6576	0,6551	0,6527	0,6502	0,6478	0,6454	0,6431	0,6407	0,6384
77,7	0,6829	0,6802	0,6774	0,6747	0,672	0,6694	0,6668	0,6642	0,6616	0,6591	0,6565	0,6541	0,6516	0,6492	0,6467	0,6444	0,642	0,6396	0,6373
77,8	0,6818	0,6791	0,6763	0,6736	0,6709	0,6683	0,6657	0,6631	0,6605	0,658	0,6555	0,653	0,6505	0,6481	0,6457	0,6433	0,6409	0,6386	0,6362
77,9	0,6807	0,678	0,6752	0,6725	0,6699	0,6672	0,6646	0,662	0,6594	0,6569	0,6544	0,6519	0,6494	0,647	0,6446	0,6422	0,6398	0,6375	0,6352

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
74,5	0,6691	0,6669	0,6646	0,6623	0,6601	0,6579	0,6557	0,6535	0,6514	0,6492	0,6471	0,645	0,643	0,6409	0,6388	0,6368	0,6348	0,6328	0,6308
74,6	0,6681	0,6658	0,6635	0,6613	0,6591	0,6568	0,6547	0,6525	0,6503	0,6482	0,6461	0,644	0,6419	0,6398	0,6378	0,6358	0,6338	0,6318	0,6298
74,7	0,667	0,6648	0,6625	0,6602	0,658	0,6558	0,6536	0,6514	0,6493	0,6471	0,645	0,6429	0,6409	0,6388	0,6368	0,6347	0,6327	0,6307	0,6287
74,8	0,666	0,6637	0,6614	0,6592	0,6569	0,6547	0,6526	0,6504	0,6482	0,6461	0,644	0,6419	0,6398	0,6377	0,6357	0,6337	0,6317	0,6297	0,6277
74,9	0,6649	0,6626	0,6604	0,6581	0,6559	0,6537	0,6515	0,6493	0,6472	0,645	0,6429	0,6408	0,6388	0,6367	0,6347	0,6326	0,6306	0,6286	0,6267
75	0,6639	0,6616	0,6593	0,6571	0,6548	0,6526	0,6504	0,6483	0,6461	0,644	0,6419	0,6398	0,6377	0,6357	0,6336	0,6316	0,6296	0,6276	0,6256
75,1	0,6628	0,6605	0,6583	0,656	0,6538	0,6516	0,6494	0,6472	0,6451	0,6429	0,6408	0,6387	0,6367	0,6346	0,6326	0,6305	0,6285	0,6265	0,6246
75,2	0,6618	0,6595	0,6572	0,655	0,6527	0,6505	0,6483	0,6462	0,644	0,6419	0,6398	0,6377	0,6356	0,6335	0,6315	0,6295	0,6275	0,6255	0,6235
75,3	0,6607	0,6584	0,6561	0,6539	0,6517	0,6495	0,6473	0,6451	0,643	0,6408	0,6387	0,6366	0,6346	0,6325	0,6305	0,6284	0,6264	0,6244	0,6225
75,4	0,6596	0,6574	0,6551	0,6528	0,6506	0,6484	0,6462	0,6441	0,6419	0,6398	0,6377	0,6356	0,6335	0,6314	0,6294	0,6274	0,6254	0,6234	0,6214
75,5	0,6586	0,6563	0,654	0,6518	0,6496	0,6474	0,6452	0,643	0,6409	0,6387	0,6366	0,6345	0,6324	0,6304	0,6283	0,6263	0,6243	0,6223	0,6203
75,6	0,6575	0,6552	0,653	0,6507	0,6485	0,6463	0,6441	0,6419	0,6398	0,6377	0,6356	0,6335	0,6314	0,6293	0,6273	0,6253	0,6233	0,6213	0,6193
75,7	0,6565	0,6542	0,6519	0,6497	0,6474	0,6452	0,643	0,6409	0,6387	0,6366	0,6345	0,6324	0,6303	0,6283	0,6262	0,6242	0,6222	0,6202	0,6182
75,8	0,6554	0,6531	0,6508	0,6486	0,6464	0,6442	0,642	0,6398	0,6377	0,6355	0,6334	0,6313	0,6293	0,6272	0,6252	0,6232	0,6211	0,6192	0,6172
75,9	0,6543	0,652	0,6498	0,6475	0,6453	0,6431	0,6409	0,6388	0,6366	0,6345	0,6324	0,6303	0,6282	0,6262	0,6241	0,6221	0,6201	0,6181	0,6161
76	0,6533	0,651	0,6487	0,6465	0,6443	0,642	0,6399	0,6377	0,6356	0,6334	0,6313	0,6292	0,6272	0,6251	0,6231	0,621	0,619	0,617	0,6151
76,1	0,6522	0,6499	0,6477	0,6454	0,6432	0,641	0,6388	0,6366	0,6345	0,6324	0,6303	0,6282	0,6261	0,624	0,622	0,62	0,618	0,616	0,614
76,2	0,6511	0,6489	0,6466	0,6443	0,6421	0,6399	0,6377	0,6356	0,6334	0,6313	0,6292	0,6271	0,625	0,623	0,6209	0,6189	0,6169	0,6149	0,613
76,3	0,6501	0,6478	0,6455	0,6433	0,6411	0,6389	0,6367	0,6345	0,6324	0,6302	0,6281	0,626	0,624	0,6219	0,6199	0,6179	0,6159	0,6139	0,6119
76,4	0,649	0,6467	0,6445	0,6422	0,64	0,6378	0,6356	0,6334	0,6313	0,6292	0,6271	0,625	0,6229	0,6209	0,6188	0,6168	0,6148	0,6128	0,6108
76,5	0,6479	0,6456	0,6434	0,6411	0,6389	0,6367	0,6345	0,6324	0,6302	0,6281	0,626	0,6239	0,6218	0,6198	0,6178	0,6157	0,6137	0,6117	0,6098
76,6	0,6469	0,6446	0,6423	0,6401	0,6379	0,6357	0,6335	0,6313	0,6292	0,627	0,6249	0,6228	0,6208	0,6187	0,6167	0,6147	0,6127	0,6107	0,6087
76,7	0,6458	0,6435	0,6412	0,639	0,6368	0,6346	0,6324	0,6302	0,6281	0,626	0,6239	0,6218	0,6197	0,6177	0,6156	0,6136	0,6116	0,6096	0,6076
76,8	0,6447	0,6424	0,6402	0,6379	0,6357	0,6335	0,6313	0,6292	0,627	0,6249	0,6228	0,6207	0,6186	0,6166	0,6146	0,6125	0,6105	0,6086	0,6066
76,9	0,6436	0,6414	0,6391	0,6369	0,6346	0,6324	0,6303	0,6281	0,626	0,6238	0,6217	0,6196	0,6176	0,6155	0,6135	0,6115	0,6095	0,6075	0,6055
77	0,6426	0,6403	0,638	0,6358	0,6336	0,6314	0,6292	0,627	0,6249	0,6228	0,6207	0,6186	0,6165	0,6145	0,6124	0,6104	0,6084	0,6064	0,6044
77,1	0,6415	0,6392	0,637	0,6347	0,6325	0,6303	0,6281	0,626	0,6238	0,6217	0,6196	0,6175	0,6154	0,6134	0,6114	0,6093	0,6073	0,6053	0,6034
77,2	0,6404	0,6381	0,6359	0,6336	0,6314	0,6292	0,627	0,6249	0,6227	0,6206	0,6185	0,6164	0,6144	0,6123	0,6103	0,6083	0,6063	0,6043	0,6023
77,3	0,6393	0,6371	0,6348	0,6326	0,6303	0,6282	0,626	0,6238	0,6217	0,6196	0,6174	0,6154	0,6133	0,6112	0,6092	0,6072	0,6052	0,6032	0,6012
77,4	0,6383	0,636	0,6337	0,6315	0,6293	0,6271	0,6249	0,6227	0,6206	0,6185	0,6164	0,6143	0,6122	0,6102	0,6081	0,6061	0,6041	0,6021	0,6002
77,5	0,6372	0,6349	0,6327	0,6304	0,6282	0,626	0,6238	0,6217	0,6195	0,6174	0,6153	0,6132	0,6111	0,6091	0,6071	0,6051	0,6031	0,6011	0,5991
77,6	0,6361	0,6338	0,6316	0,6293	0,6271	0,6249	0,6227	0,6206	0,6184	0,6163	0,6142	0,6121	0,6101	0,608	0,606	0,604	0,602	0,6	0,598
77,7	0,635	0,6327	0,6305	0,6283	0,626	0,6238	0,6217	0,6195	0,6174	0,6152	0,6131	0,6111	0,609	0,6069	0,6049	0,6029	0,6009	0,5989	0,597
77,8	0,6339	0,6317	0,6294	0,6272	0,625	0,6228	0,6206	0,6184	0,6163	0,6142	0,6121	0,61	0,6079	0,6059	0,6038	0,6018	0,5998	0,5978	0,5959
77,9	0,6329	0,6306	0,6283	0,6261	0,6239	0,6217	0,6195	0,6173	0,6152	0,6131	0,611	0,6089	0,6068	0,6048	0,6028	0,6007	0,5987	0,5968	0,5948

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
74,5	0,6289	0,6269	0,625	0,6231	0,6212	0,6193	0,6174	0,6156	0,6137	0,6119	0,6101	0,6083	0,6065	0,6047	0,6029	0,6012	0,5994	0,5977	0,596
74,6	0,6278	0,6259	0,624	0,622	0,6201	0,6182	0,6164	0,6145	0,6127	0,6108	0,609	0,6072	0,6054	0,6036	0,6019	0,6001	0,5984	0,5967	0,5949
74,7	0,6268	0,6248	0,6229	0,621	0,6191	0,6172	0,6153	0,6135	0,6116	0,6098	0,608	0,6062	0,6044	0,6026	0,6008	0,5991	0,5973	0,5956	0,5939
74,8	0,6257	0,6238	0,6219	0,6199	0,618	0,6162	0,6143	0,6124	0,6106	0,6087	0,6069	0,6051	0,6033	0,6016	0,5998	0,598	0,5963	0,5946	0,5929
74,9	0,6247	0,6227	0,6208	0,6189	0,617	0,6151	0,6132	0,6114	0,6095	0,6077	0,6059	0,6041	0,6023	0,6005	0,5987	0,597	0,5953	0,5935	0,5918
75	0,6236	0,6217	0,6198	0,6178	0,6159	0,6141	0,6122	0,6103	0,6085	0,6067	0,6048	0,603	0,6012	0,5995	0,5977	0,596	0,5942	0,5925	0,5908
75,1	0,6226	0,6206	0,6187	0,6168	0,6149	0,613	0,6111	0,6093	0,6074	0,6056	0,6038	0,602	0,6002	0,5984	0,5967	0,5949	0,5932	0,5914	0,5897
75,2	0,6215	0,6196	0,6177	0,6158	0,6139	0,612	0,6101	0,6082	0,6064	0,6046	0,6028	0,6009	0,5992	0,5974	0,5956	0,5939	0,5921	0,5904	0,5887
75,3	0,6205	0,6185	0,6166	0,6147	0,6128	0,6109	0,609	0,6072	0,6053	0,6035	0,6017	0,5999	0,5981	0,5963	0,5946	0,5928	0,5911	0,5894	0,5876
75,4	0,6194	0,6175	0,6156	0,6137	0,6118	0,6099	0,608	0,6061	0,6043	0,6025	0,6007	0,5989	0,5971	0,5953	0,5935	0,5918	0,59	0,5883	0,5866
75,5	0,6184	0,6164	0,6145	0,6126	0,6107	0,6088	0,6069	0,6051	0,6033	0,6014	0,5996	0,5978	0,596	0,5942	0,5925	0,5907	0,589	0,5873	0,5855
75,6	0,6173	0,6154	0,6135	0,6116	0,6097	0,6078	0,6059	0,604	0,6022	0,6004	0,5986	0,5968	0,595	0,5932	0,5914	0,5897	0,5879	0,5862	0,5845
75,7	0,6163	0,6143	0,6124	0,6105	0,6086	0,6067	0,6048	0,603	0,6011	0,5993	0,5975	0,5957	0,5939	0,5921	0,5904	0,5886	0,5869	0,5852	0,5835
75,8	0,6152	0,6133	0,6114	0,6094	0,6075	0,6057	0,6038	0,6019	0,6001	0,5983	0,5965	0,5947	0,5929	0,5911	0,5893	0,5876	0,5858	0,5841	0,5824
75,9	0,6142	0,6122	0,6103	0,6084	0,6065	0,6046	0,6027	0,6009	0,599	0,5972	0,5954	0,5936	0,5918	0,59	0,5883	0,5865	0,5848	0,5831	0,5814
76	0,6131	0,6112	0,6092	0,6073	0,6054	0,6036	0,6017	0,5998	0,598	0,5962	0,5944	0,5925	0,5908	0,589	0,5872	0,5855	0,5837	0,582	0,5803
76,1	0,6121	0,6101	0,6082	0,6063	0,6044	0,6025	0,6006	0,5988	0,5969	0,5951	0,5933	0,5915	0,5897	0,5879	0,5862	0,5844	0,5827	0,581	0,5793
76,2	0,611	0,6091	0,6071	0,6052	0,6033	0,6014	0,5996	0,5977	0,5959	0,5941	0,5922	0,5904	0,5887	0,5869	0,5851	0,5834	0,5816	0,5799	0,5782
76,3	0,6099	0,608	0,6061	0,6042	0,6023	0,6004	0,5985	0,5967	0,5948	0,593	0,5912	0,5894	0,5876	0,5858	0,5841	0,5823	0,5806	0,5789	0,5771
76,4	0,6089	0,6069	0,605	0,6031	0,6012	0,5993	0,5975	0,5956	0,5938	0,5919	0,5901	0,5883	0,5865	0,5848	0,583	0,5813	0,5795	0,5778	0,5761
76,5	0,6078	0,6059	0,6039	0,602	0,6001	0,5983	0,5964	0,5945	0,5927	0,5909	0,5891	0,5873	0,5855	0,5837	0,582	0,5802	0,5785	0,5768	0,575
76,6	0,6068	0,6048	0,6029	0,601	0,5991	0,5972	0,5953	0,5935	0,5916	0,5898	0,588	0,5862	0,5844	0,5827	0,5809	0,5792	0,5774	0,5757	0,574
76,7	0,6057	0,6038	0,6018	0,5999	0,598	0,5961	0,5943	0,5924	0,5906	0,5888	0,587	0,5852	0,5834	0,5816	0,5798	0,5781	0,5764	0,5746	0,5729
76,8	0,6046	0,6027	0,6008	0,5989	0,597	0,5951	0,5932	0,5914	0,5895	0,5877	0,5859	0,5841	0,5823	0,5805	0,5788	0,577	0,5753	0,5736	0,5719
76,9	0,6036	0,6016	0,5997	0,5978	0,5959	0,594	0,5922	0,5903	0,5885	0,5866	0,5848	0,583	0,5812	0,5795	0,5777	0,576	0,5742	0,5725	0,5708
77	0,6025	0,6006	0,5986	0,5967	0,5948	0,593	0,5911	0,5892	0,5874	0,5856	0,5838	0,582	0,5802	0,5784	0,5767	0,5749	0,5732	0,5715	0,5697
77,1	0,6014	0,5995	0,5976	0,5957	0,5938	0,5919	0,59	0,5882	0,5863	0,5845	0,5827	0,5809	0,5791	0,5774	0,5756	0,5739	0,5721	0,5704	0,5687
77,2	0,6004	0,5984	0,5965	0,5946	0,5927	0,5908	0,589	0,5871	0,5853	0,5834	0,5816	0,5798	0,5781	0,5763	0,5745	0,5728	0,5711	0,5693	0,5676
77,3	0,5993	0,5974	0,5954	0,5935	0,5916	0,5898	0,5879	0,586	0,5842	0,5824	0,5806	0,5788	0,577	0,5752	0,5735	0,5717	0,57	0,5683	0,5666
77,4	0,5982	0,5963	0,5944	0,5925	0,5906	0,5887	0,5868	0,585	0,5831	0,5813	0,5795	0,5777	0,5759	0,5742	0,5724	0,5707	0,5689	0,5672	0,5655
77,5	0,5971	0,5952	0,5933	0,5914	0,5895	0,5876	0,5858	0,5839	0,5821	0,5802	0,5784	0,5766	0,5749	0,5731	0,5713	0,5696	0,5679	0,5661	0,5644
77,6	0,5961	0,5941	0,5922	0,5903	0,5884	0,5865	0,5847	0,5828	0,581	0,5792	0,5774	0,5756	0,5738	0,572	0,5703	0,5685	0,5668	0,5651	0,5634
77,7	0,595	0,5931	0,5911	0,5892	0,5873	0,5855	0,5836	0,5818	0,5799	0,5781	0,5763	0,5745	0,5727	0,571	0,5692	0,5675	0,5657	0,564	0,5623
77,8	0,5939	0,592	0,5901	0,5882	0,5863	0,5844	0,5825	0,5807	0,5789	0,577	0,5752	0,5734	0,5717	0,5699	0,5681	0,5664	0,5647	0,5629	0,5612
77,9	0,5929	0,5909	0,589	0,5871	0,5852	0,5833	0,5815	0,5796	0,5778	0,576	0,5742	0,5724	0,5706	0,5688	0,5671	0,5653	0,5636	0,5619	0,5602

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
74,5	0,5943	0,5926	0,5909	0,5892	0,5876	0,5859	0,5843	0,5826
74,6	0,5932	0,5915	0,5899	0,5882	0,5865	0,5849	0,5832	0,5816
74,7	0,5922	0,5905	0,5888	0,5871	0,5855	0,5838	0,5822	0,5806
74,8	0,5911	0,5895	0,5878	0,5861	0,5844	0,5828	0,5812	0,5795
74,9	0,5901	0,5884	0,5867	0,5851	0,5834	0,5818	0,5801	0,5785
75	0,5891	0,5874	0,5857	0,584	0,5824	0,5807	0,5791	0,5775
75,1	0,588	0,5863	0,5847	0,583	0,5813	0,5797	0,578	0,5764
75,2	0,587	0,5853	0,5836	0,5819	0,5803	0,5786	0,577	0,5754
75,3	0,5859	0,5842	0,5826	0,5809	0,5792	0,5776	0,576	0,5743
75,4	0,5849	0,5832	0,5815	0,5799	0,5782	0,5766	0,5749	0,5733
75,5	0,5838	0,5822	0,5805	0,5788	0,5772	0,5755	0,5739	0,5722
75,6	0,5828	0,5811	0,5794	0,5778	0,5761	0,5745	0,5728	0,5712
75,7	0,5818	0,5801	0,5784	0,5767	0,5751	0,5734	0,5718	0,5702
75,8	0,5807	0,579	0,5773	0,5757	0,574	0,5724	0,5707	0,5691
75,9	0,5797	0,578	0,5763	0,5746	0,573	0,5713	0,5697	0,5681
76	0,5786	0,5769	0,5752	0,5736	0,5719	0,5703	0,5686	0,567
76,1	0,5776	0,5759	0,5742	0,5725	0,5709	0,5692	0,5676	0,566
76,2	0,5765	0,5748	0,5731	0,5715	0,5698	0,5682	0,5665	0,5649
76,3	0,5754	0,5738	0,5721	0,5704	0,5688	0,5671	0,5655	0,5639
76,4	0,5744	0,5727	0,571	0,5694	0,5677	0,5661	0,5644	0,5628
76,5	0,5733	0,5717	0,57	0,5683	0,5667	0,565	0,5634	0,5618
76,6	0,5723	0,5706	0,5689	0,5673	0,5656	0,564	0,5623	0,5607
76,7	0,5712	0,5695	0,5679	0,5662	0,5645	0,5629	0,5613	0,5597
76,8	0,5702	0,5685	0,5668	0,5651	0,5635	0,5619	0,5602	0,5586
76,9	0,5691	0,5674	0,5658	0,5641	0,5624	0,5608	0,5592	0,5575
77	0,5681	0,5664	0,5647	0,563	0,5614	0,5597	0,5581	0,5565
77,1	0,567	0,5653	0,5636	0,562	0,5603	0,5587	0,557	0,5554
77,2	0,5659	0,5642	0,5626	0,5609	0,5593	0,5576	0,556	0,5544
77,3	0,5649	0,5632	0,5615	0,5598	0,5582	0,5566	0,5549	0,5533
77,4	0,5638	0,5621	0,5604	0,5588	0,5571	0,5555	0,5539	0,5522
77,5	0,5627	0,5611	0,5594	0,5577	0,5561	0,5544	0,5528	0,5512
77,6	0,5617	0,56	0,5583	0,5567	0,555	0,5534	0,5517	0,5501
77,7	0,5606	0,5589	0,5572	0,5556	0,5539	0,5523	0,5507	0,5491
77,8	0,5595	0,5579	0,5562	0,5545	0,5529	0,5512	0,5496	0,548
77,9	0,5585	0,5568	0,5551	0,5535	0,5518	0,5502	0,5485	0,5469

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
78	1,1896	1,1672	1,1467	1,1279	1,1104	1,0941	1,0789	1,0646	1,0511	1,0384	1,0263	1,0148	1,0038	0,9933	0,9832	0,9735	0,9643	0,9553	0,9467
78,1	1,1884	1,166	1,1455	1,1267	1,1092	1,093	1,0778	1,0635	1,05	1,0372	1,0251	1,0136	1,0026	0,9921	0,982	0,9724	0,9631	0,9542	0,9456
78,2	1,1872	1,1648	1,1443	1,1255	1,108	1,0918	1,0766	1,0623	1,0488	1,0361	1,024	1,0124	1,0014	0,9909	0,9809	0,9712	0,962	0,953	0,9444
78,3	1,186	1,1636	1,1431	1,1243	1,1069	1,0906	1,0754	1,0611	1,0476	1,0349	1,0228	1,0113	1,0003	0,9898	0,9797	0,9701	0,9608	0,9519	0,9433
78,4	1,1848	1,1624	1,142	1,1231	1,1057	1,0894	1,0742	1,0599	1,0465	1,0337	1,0216	1,0101	0,9991	0,9886	0,9786	0,9689	0,9597	0,9507	0,9421
78,5	1,1836	1,1612	1,1408	1,1219	1,1045	1,0883	1,0731	1,0588	1,0453	1,0326	1,0205	1,0089	0,998	0,9875	0,9774	0,9678	0,9585	0,9496	0,941
78,6	1,1824	1,16	1,1396	1,1207	1,1033	1,0871	1,0719	1,0576	1,0441	1,0314	1,0193	1,0078	0,9968	0,9863	0,9763	0,9666	0,9573	0,9484	0,9398
78,7	1,1812	1,1588	1,1384	1,1196	1,1021	1,0859	1,0707	1,0564	1,043	1,0302	1,0181	1,0066	0,9956	0,9851	0,9751	0,9655	0,9562	0,9473	0,9387
78,8	1,18	1,1576	1,1372	1,1184	1,1009	1,0847	1,0695	1,0552	1,0418	1,029	1,0169	1,0054	0,9945	0,984	0,9739	0,9643	0,955	0,9461	0,9375
78,9	1,1788	1,1564	1,136	1,1172	1,0998	1,0835	1,0683	1,0541	1,0406	1,0279	1,0158	1,0043	0,9933	0,9828	0,9728	0,9631	0,9539	0,945	0,9364
79	1,1776	1,1552	1,1348	1,116	1,0986	1,0823	1,0672	1,0529	1,0394	1,0267	1,0146	1,0031	0,9921	0,9817	0,9716	0,962	0,9527	0,9438	0,9352
79,1	1,1764	1,154	1,1336	1,1148	1,0974	1,0812	1,066	1,0517	1,0382	1,0255	1,0134	1,0019	0,991	0,9805	0,9704	0,9608	0,9516	0,9426	0,9341
79,2	1,1752	1,1528	1,1324	1,1136	1,0962	1,08	1,0648	1,0505	1,0371	1,0243	1,0123	1,0008	0,9898	0,9793	0,9693	0,9596	0,9504	0,9415	0,9329
79,3	1,174	1,1516	1,1312	1,1124	1,095	1,0788	1,0636	1,0493	1,0359	1,0232	1,0111	0,9996	0,9886	0,9781	0,9681	0,9585	0,9492	0,9403	0,9317
79,4	1,1728	1,1504	1,13	1,1112	1,0938	1,0776	1,0624	1,0482	1,0347	1,022	1,0099	0,9984	0,9875	0,977	0,9669	0,9573	0,9481	0,9392	0,9306
79,5	1,1716	1,1492	1,1288	1,11	1,0926	1,0764	1,0612	1,047	1,0335	1,0208	1,0087	0,9972	0,9863	0,9758	0,9658	0,9562	0,9469	0,938	0,9294
79,6	1,1703	1,148	1,1276	1,1088	1,0914	1,0752	1,06	1,0458	1,0323	1,0196	1,0076	0,9961	0,9851	0,9746	0,9646	0,955	0,9457	0,9368	0,9283
79,7	1,1691	1,1468	1,1264	1,1076	1,0902	1,074	1,0589	1,0446	1,0312	1,0184	1,0064	0,9949	0,9839	0,9735	0,9634	0,9538	0,9446	0,9357	0,9271
79,8	1,1679	1,1456	1,1252	1,1064	1,089	1,0728	1,0577	1,0434	1,03	1,0173	1,0052	0,9937	0,9828	0,9723	0,9623	0,9526	0,9434	0,9345	0,9259
79,9	1,1667	1,1444	1,124	1,1052	1,0878	1,0716	1,0565	1,0422	1,0288	1,0161	1,004	0,9925	0,9816	0,9711	0,9611	0,9515	0,9422	0,9333	0,9248
80	1,1655	1,1432	1,1228	1,104	1,0866	1,0704	1,0553	1,041	1,0276	1,0149	1,0028	0,9914	0,9804	0,9699	0,9599	0,9503	0,9411	0,9322	0,9236
80,1	1,1643	1,142	1,1216	1,1028	1,0854	1,0692	1,0541	1,0398	1,0264	1,0137	1,0016	0,9902	0,9792	0,9688	0,9587	0,9491	0,9399	0,931	0,9224
80,2	1,1631	1,1407	1,1204	1,1016	1,0842	1,068	1,0529	1,0387	1,0252	1,0125	1,0005	0,989	0,978	0,9676	0,9576	0,948	0,9387	0,9298	0,9213
80,3	1,1618	1,1395	1,1191	1,1004	1,083	1,0668	1,0517	1,0375	1,024	1,0113	0,9993	0,9878	0,9769	0,9664	0,9564	0,9468	0,9375	0,9287	0,9201
80,4	1,1606	1,1383	1,1179	1,0992	1,0818	1,0656	1,0505	1,0363	1,0228	1,0101	0,9981	0,9866	0,9757	0,9652	0,9552	0,9456	0,9364	0,9275	0,9189
80,5	1,1594	1,1371	1,1167	1,098	1,0806	1,0644	1,0493	1,0351	1,0216	1,009	0,9969	0,9854	0,9745	0,964	0,954	0,9444	0,9352	0,9263	0,9177
80,6	1,1582	1,1359	1,1155	1,0968	1,0794	1,0632	1,0481	1,0339	1,0205	1,0078	0,9957	0,9842	0,9733	0,9629	0,9529	0,9432	0,934	0,9251	0,9166
80,7	1,157	1,1347	1,1143	1,0956	1,0782	1,062	1,0469	1,0327	1,0193	1,0066	0,9945	0,9831	0,9721	0,9617	0,9517	0,9421	0,9328	0,924	0,9154
80,8	1,1557	1,1334	1,1131	1,0943	1,077	1,0608	1,0457	1,0315	1,0181	1,0054	0,9933	0,9819	0,9709	0,9605	0,9505	0,9409	0,9317	0,9228	0,9142
80,9	1,1545	1,1322	1,1119	1,0931	1,0758	1,0596	1,0445	1,0303	1,0169	1,0042	0,9921	0,9807	0,9698	0,9593	0,9493	0,9397	0,9305	0,9216	0,913
81	1,1533	1,131	1,1106	1,0919	1,0746	1,0584	1,0433	1,0291	1,0157	1,003	0,9909	0,9795	0,9686	0,9581	0,9481	0,9385	0,9293	0,9204	0,9119
81,1	1,1521	1,1298	1,1094	1,0907	1,0734	1,0572	1,0421	1,0279	1,0145	1,0018	0,9897	0,9783	0,9674	0,9569	0,9469	0,9373	0,9281	0,9192	0,9107
81,2	1,1508	1,1286	1,1082	1,0895	1,0721	1,056	1,0409	1,0267	1,0133	1,0006	0,9885	0,9771	0,9662	0,9557	0,9457	0,9361	0,9269	0,9181	0,9095
81,3	1,1496	1,1273	1,107	1,0883	1,0709	1,0548	1,0397	1,0255	1,0121	0,9994	0,9874	0,9759	0,965	0,9545	0,9445	0,935	0,9257	0,9169	0,9083
81,4	1,1484	1,1261	1,1058	1,087	1,0697	1,0536	1,0385	1,0242	1,0109	0,9982	0,9862	0,9747	0,9638	0,9534	0,9434	0,9338	0,9246	0,9157	0,9071

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
78	0,9384	0,9304	0,9226	0,9151	0,9078	0,9007	0,8938	0,8872	0,8807	0,8743	0,8682	0,8622	0,8563	0,8506	0,845	0,8395	0,8342	0,8289	0,8238
78,1	0,9373	0,9292	0,9215	0,914	0,9067	0,8996	0,8927	0,886	0,8795	0,8732	0,867	0,861	0,8552	0,8494	0,8439	0,8384	0,8331	0,8278	0,8227
78,2	0,9361	0,9281	0,9203	0,9128	0,9055	0,8984	0,8916	0,8849	0,8784	0,8721	0,8659	0,8599	0,854	0,8483	0,8427	0,8373	0,8319	0,8267	0,8216
78,3	0,935	0,927	0,9192	0,9117	0,9044	0,8973	0,8904	0,8838	0,8773	0,8709	0,8648	0,8588	0,8529	0,8472	0,8416	0,8361	0,8308	0,8256	0,8205
78,4	0,9338	0,9258	0,918	0,9105	0,9032	0,8962	0,8893	0,8826	0,8761	0,8698	0,8636	0,8576	0,8518	0,8461	0,8405	0,835	0,8297	0,8245	0,8193
78,5	0,9327	0,9247	0,9169	0,9094	0,9021	0,895	0,8882	0,8815	0,875	0,8687	0,8625	0,8565	0,8506	0,8449	0,8393	0,8339	0,8285	0,8233	0,8182
78,6	0,9315	0,9235	0,9158	0,9082	0,901	0,8939	0,887	0,8803	0,8739	0,8675	0,8614	0,8554	0,8495	0,8438	0,8382	0,8327	0,8274	0,8222	0,8171
78,7	0,9304	0,9224	0,9146	0,9071	0,8998	0,8927	0,8859	0,8792	0,8727	0,8664	0,8602	0,8542	0,8484	0,8427	0,8371	0,8316	0,8263	0,8211	0,816
78,8	0,9292	0,9212	0,9135	0,9059	0,8987	0,8916	0,8847	0,8781	0,8716	0,8653	0,8591	0,8531	0,8472	0,8415	0,8359	0,8305	0,8252	0,8199	0,8148
78,9	0,9281	0,9201	0,9123	0,9048	0,8975	0,8904	0,8836	0,8769	0,8704	0,8641	0,858	0,852	0,8461	0,8404	0,8348	0,8294	0,824	0,8188	0,8137
79	0,9269	0,9189	0,9112	0,9036	0,8964	0,8893	0,8824	0,8758	0,8693	0,863	0,8568	0,8508	0,845	0,8392	0,8337	0,8282	0,8229	0,8177	0,8126
79,1	0,9258	0,9178	0,91	0,9025	0,8952	0,8882	0,8813	0,8746	0,8681	0,8618	0,8557	0,8497	0,8438	0,8381	0,8325	0,8271	0,8218	0,8165	0,8114
79,2	0,9246	0,9166	0,9088	0,9013	0,8941	0,887	0,8801	0,8735	0,867	0,8607	0,8545	0,8485	0,8427	0,837	0,8314	0,8259	0,8206	0,8154	0,8103
79,3	0,9234	0,9154	0,9077	0,9002	0,8929	0,8859	0,879	0,8723	0,8659	0,8595	0,8534	0,8474	0,8415	0,8358	0,8303	0,8248	0,8195	0,8143	0,8092
79,4	0,9223	0,9143	0,9065	0,899	0,8918	0,8847	0,8779	0,8712	0,8647	0,8584	0,8522	0,8462	0,8404	0,8347	0,8291	0,8237	0,8183	0,8131	0,808
79,5	0,9211	0,9131	0,9054	0,8979	0,8906	0,8836	0,8767	0,87	0,8636	0,8572	0,8511	0,8451	0,8393	0,8335	0,828	0,8225	0,8172	0,812	0,8069
79,6	0,92	0,912	0,9042	0,8967	0,8895	0,8824	0,8755	0,8689	0,8624	0,8561	0,8499	0,844	0,8381	0,8324	0,8268	0,8214	0,8161	0,8108	0,8058
79,7	0,9188	0,9108	0,9031	0,8956	0,8883	0,8812	0,8744	0,8677	0,8613	0,8549	0,8488	0,8428	0,837	0,8313	0,8257	0,8202	0,8149	0,8097	0,8046
79,8	0,9176	0,9096	0,9019	0,8944	0,8871	0,8801	0,8732	0,8666	0,8601	0,8538	0,8477	0,8417	0,8358	0,8301	0,8245	0,8191	0,8138	0,8086	0,8035
79,9	0,9165	0,9085	0,9007	0,8933	0,886	0,8789	0,8721	0,8654	0,859	0,8526	0,8465	0,8405	0,8347	0,829	0,8234	0,818	0,8126	0,8074	0,8023
80	0,9153	0,9073	0,8996	0,8921	0,8848	0,8778	0,8709	0,8643	0,8578	0,8515	0,8454	0,8394	0,8335	0,8278	0,8222	0,8168	0,8115	0,8063	0,8012
80,1	0,9142	0,9062	0,8984	0,8909	0,8837	0,8766	0,8698	0,8631	0,8566	0,8503	0,8442	0,8382	0,8324	0,8267	0,8211	0,8157	0,8103	0,8051	0,8
80,2	0,913	0,905	0,8973	0,8898	0,8825	0,8755	0,8686	0,862	0,8555	0,8492	0,843	0,8371	0,8312	0,8255	0,8199	0,8145	0,8092	0,804	0,7989
80,3	0,9118	0,9038	0,8961	0,8886	0,8813	0,8743	0,8675	0,8608	0,8543	0,848	0,8419	0,8359	0,8301	0,8244	0,8188	0,8134	0,808	0,8028	0,7977
80,4	0,9106	0,9027	0,8949	0,8874	0,8802	0,8731	0,8663	0,8596	0,8532	0,8469	0,8407	0,8347	0,8289	0,8232	0,8176	0,8122	0,8069	0,8017	0,7966
80,5	0,9095	0,9015	0,8938	0,8863	0,879	0,872	0,8651	0,8585	0,852	0,8457	0,8396	0,8336	0,8278	0,8221	0,8165	0,8111	0,8057	0,8005	0,7955
80,6	0,9083	0,9003	0,8926	0,8851	0,8778	0,8708	0,864	0,8573	0,8508	0,8445	0,8384	0,8324	0,8266	0,8209	0,8153	0,8099	0,8046	0,7994	0,7943
80,7	0,9071	0,8991	0,8914	0,8839	0,8767	0,8696	0,8628	0,8561	0,8497	0,8434	0,8373	0,8313	0,8254	0,8197	0,8142	0,8087	0,8034	0,7982	0,7931
80,8	0,906	0,898	0,8902	0,8828	0,8755	0,8685	0,8616	0,855	0,8485	0,8422	0,8361	0,8301	0,8243	0,8186	0,813	0,8076	0,8023	0,7971	0,792
80,9	0,9048	0,8968	0,8891	0,8816	0,8743	0,8673	0,8605	0,8538	0,8474	0,8411	0,8349	0,829	0,8231	0,8174	0,8119	0,8064	0,8011	0,7959	0,7908
81	0,9036	0,8956	0,8879	0,8804	0,8732	0,8661	0,8593	0,8526	0,8462	0,8399	0,8338	0,8278	0,822	0,8163	0,8107	0,8053	0,8	0,7948	0,7897
81,1	0,9024	0,8944	0,8867	0,8792	0,872	0,865	0,8581	0,8515	0,845	0,8387	0,8326	0,8266	0,8208	0,8151	0,8095	0,8041	0,7988	0,7936	0,7885
81,2	0,9012	0,8933	0,8855	0,8781	0,8708	0,8638	0,857	0,8503	0,8439	0,8376	0,8314	0,8255	0,8196	0,8139	0,8084	0,803	0,7976	0,7925	0,7874
81,3	0,9001	0,8921	0,8844	0,8769	0,8696	0,8626	0,8558	0,8491	0,8427	0,8364	0,8303	0,8243	0,8185	0,8128	0,8072	0,8018	0,7965	0,7913	0,7862
81,4	0,8989	0,8909	0,8832	0,8757	0,8685	0,8614	0,8546	0,848	0,8415	0,8352	0,8291	0,8231	0,8173	0,8116	0,8061	0,8006	0,7953	0,7901	0,785

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
78	0,8188	0,8139	0,8091	0,8044	0,7998	0,7952	0,7908	0,7864	0,7821	0,7779	0,7738	0,7697	0,7657	0,7617	0,7579	0,754	0,7503	0,7466	0,7429
78,1	0,8177	0,8128	0,808	0,8033	0,7987	0,7941	0,7897	0,7853	0,781	0,7768	0,7727	0,7686	0,7646	0,7606	0,7568	0,7529	0,7492	0,7455	0,7418
78,2	0,8166	0,8117	0,8069	0,8022	0,7975	0,793	0,7886	0,7842	0,7799	0,7757	0,7715	0,7675	0,7635	0,7595	0,7556	0,7518	0,7481	0,7444	0,7407
78,3	0,8155	0,8106	0,8058	0,801	0,7964	0,7919	0,7874	0,7831	0,7788	0,7746	0,7704	0,7664	0,7623	0,7584	0,7545	0,7507	0,747	0,7433	0,7396
78,4	0,8143	0,8094	0,8046	0,7999	0,7953	0,7908	0,7863	0,782	0,7777	0,7735	0,7693	0,7652	0,7612	0,7573	0,7534	0,7496	0,7459	0,7422	0,7385
78,5	0,8132	0,8083	0,8035	0,7988	0,7942	0,7897	0,7852	0,7808	0,7765	0,7723	0,7682	0,7641	0,7601	0,7562	0,7523	0,7485	0,7447	0,741	0,7374
78,6	0,8121	0,8072	0,8024	0,7977	0,7931	0,7885	0,7841	0,7797	0,7754	0,7712	0,7671	0,763	0,759	0,7551	0,7512	0,7474	0,7436	0,7399	0,7363
78,7	0,811	0,8061	0,8013	0,7965	0,7919	0,7874	0,783	0,7786	0,7743	0,7701	0,766	0,7619	0,7579	0,7539	0,7501	0,7463	0,7425	0,7388	0,7352
78,8	0,8098	0,8049	0,8001	0,7954	0,7908	0,7863	0,7818	0,7775	0,7732	0,769	0,7648	0,7608	0,7568	0,7528	0,749	0,7451	0,7414	0,7377	0,7341
78,9	0,8087	0,8038	0,799	0,7943	0,7897	0,7852	0,7807	0,7763	0,7721	0,7679	0,7637	0,7596	0,7556	0,7517	0,7478	0,744	0,7403	0,7366	0,7329
79	0,8076	0,8027	0,7979	0,7932	0,7886	0,784	0,7796	0,7752	0,7709	0,7667	0,7626	0,7585	0,7545	0,7506	0,7467	0,7429	0,7392	0,7355	0,7318
79,1	0,8064	0,8015	0,7967	0,792	0,7874	0,7829	0,7785	0,7741	0,7698	0,7656	0,7615	0,7574	0,7534	0,7495	0,7456	0,7418	0,738	0,7343	0,7307
79,2	0,8053	0,8004	0,7956	0,7909	0,7863	0,7818	0,7773	0,773	0,7687	0,7645	0,7603	0,7563	0,7523	0,7484	0,7445	0,7407	0,7369	0,7332	0,7296
79,3	0,8042	0,7993	0,7945	0,7898	0,7852	0,7806	0,7762	0,7718	0,7676	0,7634	0,7592	0,7552	0,7512	0,7472	0,7434	0,7396	0,7358	0,7321	0,7285
79,4	0,803	0,7981	0,7933	0,7886	0,784	0,7795	0,7751	0,7707	0,7664	0,7622	0,7581	0,754	0,75	0,7461	0,7422	0,7384	0,7347	0,731	0,7274
79,5	0,8019	0,797	0,7922	0,7875	0,7829	0,7784	0,7739	0,7696	0,7653	0,7611	0,757	0,7529	0,7489	0,745	0,7411	0,7373	0,7336	0,7299	0,7262
79,6	0,8008	0,7959	0,7911	0,7864	0,7818	0,7772	0,7728	0,7685	0,7642	0,76	0,7558	0,7518	0,7478	0,7439	0,74	0,7362	0,7324	0,7287	0,7251
79,7	0,7996	0,7947	0,7899	0,7852	0,7806	0,7761	0,7717	0,7673	0,763	0,7588	0,7547	0,7506	0,7467	0,7427	0,7389	0,7351	0,7313	0,7276	0,724
79,8	0,7985	0,7936	0,7888	0,7841	0,7795	0,775	0,7705	0,7662	0,7619	0,7577	0,7536	0,7495	0,7455	0,7416	0,7377	0,7339	0,7302	0,7265	0,7229
79,9	0,7973	0,7925	0,7877	0,783	0,7784	0,7738	0,7694	0,7651	0,7608	0,7566	0,7524	0,7484	0,7444	0,7405	0,7366	0,7328	0,7291	0,7254	0,7217
80	0,7962	0,7913	0,7865	0,7818	0,7772	0,7727	0,7683	0,7639	0,7596	0,7554	0,7513	0,7472	0,7433	0,7393	0,7355	0,7317	0,7279	0,7242	0,7206
80,1	0,7951	0,7902	0,7854	0,7807	0,7761	0,7716	0,7671	0,7628	0,7585	0,7543	0,7502	0,7461	0,7421	0,7382	0,7343	0,7305	0,7268	0,7231	0,7195
80,2	0,7939	0,789	0,7842	0,7795	0,7749	0,7704	0,766	0,7616	0,7574	0,7532	0,749	0,745	0,741	0,7371	0,7332	0,7294	0,7257	0,722	0,7183
80,3	0,7928	0,7879	0,7831	0,7784	0,7738	0,7693	0,7649	0,7605	0,7562	0,752	0,7479	0,7438	0,7399	0,7359	0,7321	0,7283	0,7245	0,7208	0,7172
80,4	0,7916	0,7867	0,7819	0,7773	0,7727	0,7681	0,7637	0,7594	0,7551	0,7509	0,7468	0,7427	0,7387	0,7348	0,7309	0,7271	0,7234	0,7197	0,7161
80,5	0,7905	0,7856	0,7808	0,7761	0,7715	0,767	0,7626	0,7582	0,7539	0,7497	0,7456	0,7416	0,7376	0,7337	0,7298	0,726	0,7223	0,7186	0,7149
80,6	0,7893	0,7844	0,7797	0,775	0,7704	0,7659	0,7614	0,7571	0,7528	0,7486	0,7445	0,7404	0,7364	0,7325	0,7287	0,7249	0,7211	0,7174	0,7138
80,7	0,7882	0,7833	0,7785	0,7738	0,7692	0,7647	0,7603	0,7559	0,7517	0,7475	0,7433	0,7393	0,7353	0,7314	0,7275	0,7237	0,72	0,7163	0,7127
80,8	0,787	0,7821	0,7774	0,7727	0,7681	0,7636	0,7591	0,7548	0,7505	0,7463	0,7422	0,7381	0,7342	0,7302	0,7264	0,7226	0,7188	0,7152	0,7115
80,9	0,7859	0,781	0,7762	0,7715	0,7669	0,7624	0,758	0,7536	0,7494	0,7452	0,741	0,737	0,733	0,7291	0,7252	0,7214	0,7177	0,714	0,7104
81	0,7847	0,7798	0,775	0,7704	0,7658	0,7613	0,7568	0,7525	0,7482	0,744	0,7399	0,7358	0,7319	0,7279	0,7241	0,7203	0,7166	0,7129	0,7093
81,1	0,7835	0,7787	0,7739	0,7692	0,7646	0,7601	0,7557	0,7513	0,7471	0,7429	0,7388	0,7347	0,7307	0,7268	0,7229	0,7192	0,7154	0,7117	0,7081
81,2	0,7824	0,7775	0,7727	0,7681	0,7635	0,759	0,7545	0,7502	0,7459	0,7417	0,7376	0,7336	0,7296	0,7257	0,7218	0,718	0,7143	0,7106	0,707
81,3	0,7812	0,7764	0,7716	0,7669	0,7623	0,7578	0,7534	0,749	0,7448	0,7406	0,7365	0,7324	0,7284	0,7245	0,7207	0,7169	0,7131	0,7094	0,7058
81,4	0,7801	0,7752	0,7704	0,7657	0,7611	0,7566	0,7522	0,7479	0,7436	0,7394	0,7353	0,7313	0,7273	0,7234	0,7195	0,7157	0,712	0,7083	0,7047

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
78	0,7394	0,7358	0,7323	0,7289	0,7255	0,7222	0,7189	0,7156	0,7124	0,7092	0,7061	0,703	0,7	0,697	0,694	0,6911	0,6882	0,6853	0,6825
78,1	0,7382	0,7347	0,7312	0,7278	0,7244	0,7211	0,7178	0,7145	0,7113	0,7081	0,705	0,7019	0,6989	0,6959	0,6929	0,69	0,6871	0,6842	0,6814
78,2	0,7371	0,7336	0,7301	0,7267	0,7233	0,72	0,7167	0,7134	0,7102	0,707	0,7039	0,7008	0,6978	0,6948	0,6918	0,6889	0,686	0,6831	0,6803
78,3	0,736	0,7325	0,729	0,7256	0,7222	0,7189	0,7156	0,7123	0,7091	0,7059	0,7028	0,6997	0,6967	0,6937	0,6907	0,6878	0,6849	0,682	0,6792
78,4	0,7349	0,7314	0,7279	0,7245	0,7211	0,7177	0,7145	0,7112	0,708	0,7048	0,7017	0,6986	0,6956	0,6926	0,6896	0,6867	0,6838	0,6809	0,6781
78,5	0,7338	0,7303	0,7268	0,7234	0,72	0,7166	0,7133	0,7101	0,7069	0,7037	0,7006	0,6975	0,6945	0,6915	0,6885	0,6856	0,6827	0,6798	0,677
78,6	0,7327	0,7292	0,7257	0,7223	0,7189	0,7155	0,7122	0,709	0,7058	0,7026	0,6995	0,6964	0,6934	0,6904	0,6874	0,6845	0,6816	0,6787	0,6759
78,7	0,7316	0,7281	0,7246	0,7211	0,7178	0,7144	0,7111	0,7079	0,7047	0,7015	0,6984	0,6953	0,6923	0,6893	0,6863	0,6834	0,6805	0,6776	0,6748
78,8	0,7305	0,7269	0,7235	0,72	0,7167	0,7133	0,71	0,7068	0,7036	0,7004	0,6973	0,6942	0,6912	0,6882	0,6852	0,6823	0,6794	0,6765	0,6737
78,9	0,7294	0,7258	0,7224	0,7189	0,7155	0,7122	0,7089	0,7057	0,7025	0,6993	0,6962	0,6931	0,6901	0,6871	0,6841	0,6812	0,6783	0,6754	0,6726
79	0,7282	0,7247	0,7212	0,7178	0,7144	0,7111	0,7078	0,7046	0,7014	0,6982	0,6951	0,692	0,6889	0,6859	0,683	0,68	0,6771	0,6743	0,6715
79,1	0,7271	0,7236	0,7201	0,7167	0,7133	0,71	0,7067	0,7034	0,7002	0,6971	0,694	0,6909	0,6878	0,6848	0,6819	0,6789	0,676	0,6732	0,6704
79,2	0,726	0,7225	0,719	0,7156	0,7122	0,7089	0,7056	0,7023	0,6991	0,696	0,6928	0,6898	0,6867	0,6837	0,6808	0,6778	0,6749	0,6721	0,6692
79,3	0,7249	0,7214	0,7179	0,7145	0,7111	0,7077	0,7045	0,7012	0,698	0,6949	0,6917	0,6887	0,6856	0,6826	0,6796	0,6767	0,6738	0,671	0,6681
79,4	0,7238	0,7202	0,7168	0,7133	0,71	0,7066	0,7033	0,7001	0,6969	0,6937	0,6906	0,6875	0,6845	0,6815	0,6785	0,6756	0,6727	0,6699	0,667
79,5	0,7227	0,7191	0,7157	0,7122	0,7088	0,7055	0,7022	0,699	0,6958	0,6926	0,6895	0,6864	0,6834	0,6804	0,6774	0,6745	0,6716	0,6687	0,6659
79,6	0,7215	0,718	0,7145	0,7111	0,7077	0,7044	0,7011	0,6979	0,6947	0,6915	0,6884	0,6853	0,6823	0,6793	0,6763	0,6734	0,6705	0,6676	0,6648
79,7	0,7204	0,7169	0,7134	0,71	0,7066	0,7033	0,7	0,6967	0,6935	0,6904	0,6873	0,6842	0,6812	0,6782	0,6752	0,6723	0,6694	0,6665	0,6637
79,8	0,7193	0,7158	0,7123	0,7089	0,7055	0,7022	0,6989	0,6956	0,6924	0,6893	0,6862	0,6831	0,68	0,677	0,6741	0,6712	0,6683	0,6654	0,6626
79,9	0,7182	0,7146	0,7112	0,7077	0,7044	0,701	0,6977	0,6945	0,6913	0,6882	0,685	0,682	0,6789	0,6759	0,673	0,67	0,6671	0,6643	0,6615
80	0,717	0,7135	0,71	0,7066	0,7032	0,6999	0,6966	0,6934	0,6902	0,687	0,6839	0,6808	0,6778	0,6748	0,6718	0,6689	0,666	0,6632	0,6603
80,1	0,7159	0,7124	0,7089	0,7055	0,7021	0,6988	0,6955	0,6923	0,6891	0,6859	0,6828	0,6797	0,6767	0,6737	0,6707	0,6678	0,6649	0,6621	0,6592
80,2	0,7148	0,7112	0,7078	0,7044	0,701	0,6977	0,6944	0,6911	0,6879	0,6848	0,6817	0,6786	0,6756	0,6726	0,6696	0,6667	0,6638	0,6609	0,6581
80,3	0,7136	0,7101	0,7066	0,7032	0,6999	0,6965	0,6932	0,69	0,6868	0,6837	0,6805	0,6775	0,6744	0,6714	0,6685	0,6656	0,6627	0,6598	0,657
80,4	0,7125	0,709	0,7055	0,7021	0,6987	0,6954	0,6921	0,6889	0,6857	0,6825	0,6794	0,6763	0,6733	0,6703	0,6674	0,6644	0,6615	0,6587	0,6559
80,5	0,7114	0,7079	0,7044	0,701	0,6976	0,6943	0,691	0,6877	0,6846	0,6814	0,6783	0,6752	0,6722	0,6692	0,6662	0,6633	0,6604	0,6576	0,6547
80,6	0,7102	0,7067	0,7032	0,6998	0,6965	0,6931	0,6899	0,6866	0,6834	0,6803	0,6772	0,6741	0,6711	0,6681	0,6651	0,6622	0,6593	0,6564	0,6536
80,7	0,7091	0,7056	0,7021	0,6987	0,6953	0,692	0,6887	0,6855	0,6823	0,6791	0,676	0,673	0,6699	0,6669	0,664	0,6611	0,6582	0,6553	0,6525
80,8	0,708	0,7044	0,701	0,6976	0,6942	0,6909	0,6876	0,6844	0,6812	0,678	0,6749	0,6718	0,6688	0,6658	0,6628	0,6599	0,657	0,6542	0,6514
80,9	0,7068	0,7033	0,6998	0,6964	0,6931	0,6897	0,6864	0,6832	0,68	0,6769	0,6738	0,6707	0,6677	0,6647	0,6617	0,6588	0,6559	0,6531	0,6502
81	0,7057	0,7022	0,6987	0,6953	0,6919	0,6886	0,6853	0,6821	0,6789	0,6757	0,6726	0,6696	0,6665	0,6635	0,6606	0,6577	0,6548	0,6519	0,6491
81,1	0,7045	0,701	0,6976	0,6941	0,6908	0,6875	0,6842	0,6809	0,6778	0,6746	0,6715	0,6684	0,6654	0,6624	0,6594	0,6565	0,6536	0,6508	0,648
81,2	0,7034	0,6999	0,6964	0,693	0,6896	0,6863	0,683	0,6798	0,6766	0,6735	0,6704	0,6673	0,6643	0,6613	0,6583	0,6554	0,6525	0,6497	0,6468
81,3	0,7023	0,6987	0,6953	0,6919	0,6885	0,6852	0,6819	0,6787	0,6755	0,6723	0,6692	0,6662	0,6631	0,6601	0,6572	0,6543	0,6514	0,6485	0,6457
81,4	0,7011	0,6976	0,6941	0,6907	0,6873	0,684	0,6808	0,6775	0,6743	0,6712	0,6681	0,665	0,662	0,659	0,656	0,6531	0,6502	0,6474	0,6446

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
78	0,6797	0,6769	0,6741	0,6714	0,6688	0,6661	0,6635	0,6609	0,6583	0,6558	0,6533	0,6508	0,6483	0,6459	0,6435	0,6411	0,6387	0,6364	0,6341
78,1	0,6786	0,6758	0,6731	0,6703	0,6677	0,665	0,6624	0,6598	0,6572	0,6547	0,6522	0,6497	0,6473	0,6448	0,6424	0,64	0,6377	0,6353	0,633
78,2	0,6775	0,6747	0,672	0,6693	0,6666	0,6639	0,6613	0,6587	0,6562	0,6536	0,6511	0,6486	0,6462	0,6437	0,6413	0,6389	0,6366	0,6342	0,6319
78,3	0,6764	0,6736	0,6709	0,6682	0,6655	0,6628	0,6602	0,6576	0,6551	0,6525	0,65	0,6475	0,6451	0,6426	0,6402	0,6378	0,6355	0,6331	0,6308
78,4	0,6753	0,6725	0,6698	0,6671	0,6644	0,6617	0,6591	0,6565	0,654	0,6514	0,6489	0,6464	0,644	0,6415	0,6391	0,6367	0,6344	0,632	0,6297
78,5	0,6742	0,6714	0,6687	0,666	0,6633	0,6606	0,658	0,6554	0,6529	0,6503	0,6478	0,6453	0,6429	0,6405	0,638	0,6357	0,6333	0,631	0,6286
78,6	0,6731	0,6703	0,6676	0,6649	0,6622	0,6595	0,6569	0,6543	0,6518	0,6492	0,6467	0,6443	0,6418	0,6394	0,637	0,6346	0,6322	0,6299	0,6275
78,7	0,672	0,6692	0,6665	0,6638	0,6611	0,6585	0,6558	0,6532	0,6507	0,6481	0,6456	0,6432	0,6407	0,6383	0,6359	0,6335	0,6311	0,6288	0,6265
78,8	0,6709	0,6681	0,6654	0,6627	0,66	0,6574	0,6547	0,6521	0,6496	0,6471	0,6445	0,6421	0,6396	0,6372	0,6348	0,6324	0,63	0,6277	0,6254
78,9	0,6698	0,667	0,6643	0,6616	0,6589	0,6562	0,6536	0,651	0,6485	0,646	0,6434	0,641	0,6385	0,6361	0,6337	0,6313	0,6289	0,6266	0,6243
79	0,6687	0,6659	0,6632	0,6605	0,6578	0,6551	0,6525	0,6499	0,6474	0,6449	0,6423	0,6399	0,6374	0,635	0,6326	0,6302	0,6278	0,6255	0,6232
79,1	0,6676	0,6648	0,6621	0,6594	0,6567	0,654	0,6514	0,6488	0,6463	0,6438	0,6412	0,6388	0,6363	0,6339	0,6315	0,6291	0,6267	0,6244	0,6221
79,2	0,6665	0,6637	0,661	0,6583	0,6556	0,6529	0,6503	0,6477	0,6452	0,6426	0,6401	0,6377	0,6352	0,6328	0,6304	0,628	0,6256	0,6233	0,621
79,3	0,6653	0,6626	0,6599	0,6571	0,6545	0,6518	0,6492	0,6466	0,6441	0,6415	0,639	0,6366	0,6341	0,6317	0,6293	0,6269	0,6245	0,6222	0,6199
79,4	0,6642	0,6615	0,6587	0,656	0,6534	0,6507	0,6481	0,6455	0,643	0,6404	0,6379	0,6355	0,633	0,6306	0,6282	0,6258	0,6234	0,6211	0,6188
79,5	0,6631	0,6604	0,6576	0,6549	0,6523	0,6496	0,647	0,6444	0,6419	0,6393	0,6368	0,6344	0,6319	0,6295	0,6271	0,6247	0,6223	0,62	0,6177
79,6	0,662	0,6593	0,6565	0,6538	0,6512	0,6485	0,6459	0,6433	0,6408	0,6382	0,6357	0,6332	0,6308	0,6284	0,626	0,6236	0,6212	0,6189	0,6166
79,7	0,6609	0,6581	0,6554	0,6527	0,65	0,6474	0,6448	0,6422	0,6397	0,6371	0,6346	0,6321	0,6297	0,6273	0,6249	0,6225	0,6201	0,6178	0,6155
79,8	0,6598	0,657	0,6543	0,6516	0,6489	0,6463	0,6437	0,6411	0,6385	0,636	0,6335	0,631	0,6286	0,6261	0,6237	0,6214	0,619	0,6167	0,6144
79,9	0,6587	0,6559	0,6532	0,6505	0,6478	0,6452	0,6426	0,64	0,6374	0,6349	0,6324	0,6299	0,6275	0,625	0,6226	0,6203	0,6179	0,6156	0,6133
80	0,6576	0,6548	0,6521	0,6494	0,6467	0,6441	0,6415	0,6389	0,6363	0,6338	0,6313	0,6288	0,6264	0,6239	0,6215	0,6191	0,6168	0,6145	0,6121
80,1	0,6564	0,6537	0,651	0,6483	0,6456	0,643	0,6403	0,6378	0,6352	0,6327	0,6302	0,6277	0,6252	0,6228	0,6204	0,618	0,6157	0,6133	0,611
80,2	0,6553	0,6526	0,6498	0,6471	0,6445	0,6418	0,6392	0,6366	0,6341	0,6316	0,6291	0,6266	0,6241	0,6217	0,6193	0,6169	0,6146	0,6122	0,6099
80,3	0,6542	0,6514	0,6487	0,646	0,6434	0,6407	0,6381	0,6355	0,633	0,6304	0,6279	0,6255	0,623	0,6206	0,6182	0,6158	0,6135	0,6111	0,6088
80,4	0,6531	0,6503	0,6476	0,6449	0,6422	0,6396	0,637	0,6344	0,6319	0,6293	0,6268	0,6244	0,6219	0,6195	0,6171	0,6147	0,6123	0,61	0,6077
80,5	0,652	0,6492	0,6465	0,6438	0,6411	0,6385	0,6359	0,6333	0,6307	0,6282	0,6257	0,6232	0,6208	0,6184	0,616	0,6136	0,6112	0,6089	0,6066
80,6	0,6508	0,6481	0,6454	0,6427	0,64	0,6374	0,6347	0,6322	0,6296	0,6271	0,6246	0,6221	0,6197	0,6172	0,6148	0,6125	0,6101	0,6078	0,6055
80,7	0,6497	0,647	0,6442	0,6415	0,6389	0,6362	0,6336	0,631	0,6285	0,626	0,6235	0,621	0,6185	0,6161	0,6137	0,6113	0,609	0,6067	0,6044
80,8	0,6486	0,6458	0,6431	0,6404	0,6377	0,6351	0,6325	0,6299	0,6274	0,6248	0,6223	0,6199	0,6174	0,615	0,6126	0,6102	0,6079	0,6055	0,6032
80,9	0,6475	0,6447	0,642	0,6393	0,6366	0,634	0,6314	0,6288	0,6262	0,6237	0,6212	0,6188	0,6163	0,6139	0,6115	0,6091	0,6068	0,6044	0,6021
81	0,6463	0,6436	0,6408	0,6382	0,6355	0,6329	0,6302	0,6277	0,6251	0,6226	0,6201	0,6176	0,6152	0,6128	0,6104	0,608	0,6056	0,6033	0,601
81,1	0,6452	0,6424	0,6397	0,637	0,6344	0,6317	0,6291	0,6265	0,624	0,6215	0,619	0,6165	0,6141	0,6116	0,6092	0,6069	0,6045	0,6022	0,5999
81,2	0,6441	0,6413	0,6386	0,6359	0,6332	0,6306	0,628	0,6254	0,6229	0,6203	0,6178	0,6154	0,6129	0,6105	0,6081	0,6057	0,6034	0,6011	0,5987
81,3	0,6429	0,6402	0,6375	0,6348	0,6321	0,6295	0,6269	0,6243	0,6217	0,6192	0,6167	0,6142	0,6118	0,6094	0,607	0,6046	0,6023	0,5999	0,5976
81,4	0,6418	0,639	0,6363	0,6336	0,631	0,6283	0,6257	0,6232	0,6206	0,6181	0,6156	0,6131	0,6107	0,6083	0,6059	0,6035	0,6011	0,5988	0,5965

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
78	0,6318	0,6295	0,6272	0,625	0,6228	0,6206	0,6184	0,6163	0,6141	0,612	0,6099	0,6078	0,6058	0,6037	0,6017	0,5997	0,5977	0,5957	0,5937
78,1	0,6307	0,6284	0,6262	0,6239	0,6217	0,6195	0,6173	0,6152	0,613	0,6109	0,6088	0,6067	0,6047	0,6026	0,6006	0,5986	0,5966	0,5946	0,5926
78,2	0,6296	0,6273	0,6251	0,6228	0,6206	0,6184	0,6163	0,6141	0,612	0,6098	0,6077	0,6057	0,6036	0,6016	0,5995	0,5975	0,5955	0,5935	0,5916
78,3	0,6285	0,6262	0,624	0,6218	0,6195	0,6173	0,6152	0,613	0,6109	0,6088	0,6067	0,6046	0,6025	0,6005	0,5984	0,5964	0,5944	0,5925	0,5905
78,4	0,6274	0,6252	0,6229	0,6207	0,6185	0,6163	0,6141	0,6119	0,6098	0,6077	0,6056	0,6035	0,6014	0,5994	0,5974	0,5953	0,5933	0,5914	0,5894
78,5	0,6263	0,6241	0,6218	0,6196	0,6174	0,6152	0,613	0,6108	0,6087	0,6066	0,6045	0,6024	0,6003	0,5983	0,5963	0,5943	0,5923	0,5903	0,5883
78,6	0,6252	0,623	0,6207	0,6185	0,6163	0,6141	0,6119	0,6098	0,6076	0,6055	0,6034	0,6013	0,5993	0,5972	0,5952	0,5932	0,5912	0,5892	0,5872
78,7	0,6242	0,6219	0,6196	0,6174	0,6152	0,613	0,6108	0,6087	0,6065	0,6044	0,6023	0,6002	0,5982	0,5961	0,5941	0,5921	0,5901	0,5881	0,5862
78,8	0,6231	0,6208	0,6185	0,6163	0,6141	0,6119	0,6097	0,6076	0,6054	0,6033	0,6012	0,5992	0,5971	0,595	0,593	0,591	0,589	0,587	0,5851
78,9	0,622	0,6197	0,6174	0,6152	0,613	0,6108	0,6086	0,6065	0,6044	0,6022	0,6001	0,5981	0,596	0,594	0,5919	0,5899	0,5879	0,5859	0,584
79	0,6209	0,6186	0,6164	0,6141	0,6119	0,6097	0,6075	0,6054	0,6033	0,6011	0,599	0,597	0,5949	0,5929	0,5908	0,5888	0,5868	0,5849	0,5829
79,1	0,6198	0,6175	0,6153	0,613	0,6108	0,6086	0,6065	0,6043	0,6022	0,6001	0,598	0,5959	0,5938	0,5918	0,5897	0,5877	0,5857	0,5838	0,5818
79,2	0,6187	0,6164	0,6142	0,6119	0,6097	0,6075	0,6054	0,6032	0,6011	0,599	0,5969	0,5948	0,5927	0,5907	0,5887	0,5866	0,5847	0,5827	0,5807
79,3	0,6176	0,6153	0,6131	0,6108	0,6086	0,6064	0,6043	0,6021	0,6	0,5979	0,5958	0,5937	0,5916	0,5896	0,5876	0,5856	0,5836	0,5816	0,5796
79,4	0,6165	0,6142	0,612	0,6097	0,6075	0,6053	0,6032	0,601	0,5989	0,5968	0,5947	0,5926	0,5905	0,5885	0,5865	0,5845	0,5825	0,5805	0,5785
79,5	0,6154	0,6131	0,6109	0,6086	0,6064	0,6042	0,6021	0,5999	0,5978	0,5957	0,5936	0,5915	0,5894	0,5874	0,5854	0,5834	0,5814	0,5794	0,5774
79,6	0,6143	0,612	0,6098	0,6075	0,6053	0,6031	0,601	0,5988	0,5967	0,5946	0,5925	0,5904	0,5883	0,5863	0,5843	0,5823	0,5803	0,5783	0,5763
79,7	0,6132	0,6109	0,6087	0,6064	0,6042	0,602	0,5999	0,5977	0,5956	0,5935	0,5914	0,5893	0,5872	0,5852	0,5832	0,5812	0,5792	0,5772	0,5752
79,8	0,6121	0,6098	0,6076	0,6053	0,6031	0,6009	0,5988	0,5966	0,5945	0,5924	0,5903	0,5882	0,5861	0,5841	0,5821	0,5801	0,5781	0,5761	0,5741
79,9	0,611	0,6087	0,6064	0,6042	0,602	0,5998	0,5977	0,5955	0,5934	0,5913	0,5892	0,5871	0,585	0,583	0,581	0,579	0,577	0,575	0,573
80	0,6099	0,6076	0,6053	0,6031	0,6009	0,5987	0,5965	0,5944	0,5923	0,5902	0,5881	0,586	0,5839	0,5819	0,5799	0,5779	0,5759	0,5739	0,5719
80,1	0,6087	0,6065	0,6042	0,602	0,5998	0,5976	0,5954	0,5933	0,5912	0,5891	0,587	0,5849	0,5828	0,5808	0,5788	0,5768	0,5748	0,5728	0,5708
80,2	0,6076	0,6054	0,6031	0,6009	0,5987	0,5965	0,5943	0,5922	0,5901	0,5879	0,5859	0,5838	0,5817	0,5797	0,5777	0,5757	0,5737	0,5717	0,5697
80,3	0,6065	0,6043	0,602	0,5998	0,5976	0,5954	0,5932	0,5911	0,589	0,5868	0,5848	0,5827	0,5806	0,5786	0,5766	0,5746	0,5726	0,5706	0,5686
80,4	0,6054	0,6031	0,6009	0,5987	0,5965	0,5943	0,5921	0,59	0,5878	0,5857	0,5836	0,5816	0,5795	0,5775	0,5755	0,5734	0,5715	0,5695	0,5675
80,5	0,6043	0,602	0,5998	0,5976	0,5954	0,5932	0,591	0,5889	0,5867	0,5846	0,5825	0,5805	0,5784	0,5764	0,5743	0,5723	0,5703	0,5684	0,5664
80,6	0,6032	0,6009	0,5987	0,5964	0,5942	0,5921	0,5899	0,5877	0,5856	0,5835	0,5814	0,5793	0,5773	0,5753	0,5732	0,5712	0,5692	0,5673	0,5653
80,7	0,6021	0,5998	0,5976	0,5953	0,5931	0,5909	0,5888	0,5866	0,5845	0,5824	0,5803	0,5782	0,5762	0,5741	0,5721	0,5701	0,5681	0,5662	0,5642
80,8	0,6009	0,5987	0,5964	0,5942	0,592	0,5898	0,5877	0,5855	0,5834	0,5813	0,5792	0,5771	0,5751	0,573	0,571	0,569	0,567	0,565	0,5631
80,9	0,5998	0,5976	0,5953	0,5931	0,5909	0,5887	0,5865	0,5844	0,5823	0,5802	0,5781	0,576	0,574	0,5719	0,5699	0,5679	0,5659	0,5639	0,562
81	0,5987	0,5964	0,5942	0,592	0,5898	0,5876	0,5854	0,5833	0,5812	0,579	0,577	0,5749	0,5728	0,5708	0,5688	0,5668	0,5648	0,5628	0,5609
81,1	0,5976	0,5953	0,5931	0,5909	0,5887	0,5865	0,5843	0,5822	0,58	0,5779	0,5758	0,5738	0,5717	0,5697	0,5677	0,5657	0,5637	0,5617	0,5597
81,2	0,5965	0,5942	0,592	0,5897	0,5875	0,5853	0,5832	0,581	0,5789	0,5768	0,5747	0,5727	0,5706	0,5686	0,5665	0,5645	0,5626	0,5606	0,5586
81,3	0,5953	0,5931	0,5908	0,5886	0,5864	0,5842	0,5821	0,5799	0,5778	0,5757	0,5736	0,5715	0,5695	0,5674	0,5654	0,5634	0,5614	0,5595	0,5575
81,4	0,5942	0,5919	0,5897	0,5875	0,5853	0,5831	0,5809	0,5788	0,5767	0,5746	0,5725	0,5704	0,5684	0,5663	0,5643	0,5623	0,5603	0,5583	0,5564

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
78	0,5918	0,5898	0,5879	0,586	0,5841	0,5823	0,5804	0,5785	0,5767	0,5749	0,5731	0,5713	0,5695	0,5677	0,566	0,5642	0,5625	0,5608	0,5591
78,1	0,5907	0,5888	0,5868	0,5849	0,583	0,5812	0,5793	0,5775	0,5756	0,5738	0,572	0,5702	0,5684	0,5667	0,5649	0,5632	0,5614	0,5597	0,558
78,2	0,5896	0,5877	0,5858	0,5839	0,582	0,5801	0,5782	0,5764	0,5746	0,5727	0,5709	0,5691	0,5674	0,5656	0,5638	0,5621	0,5604	0,5587	0,5569
78,3	0,5885	0,5866	0,5847	0,5828	0,5809	0,579	0,5772	0,5753	0,5735	0,5717	0,5699	0,5681	0,5663	0,5645	0,5628	0,561	0,5593	0,5576	0,5559
78,4	0,5875	0,5855	0,5836	0,5817	0,5798	0,5779	0,5761	0,5742	0,5724	0,5706	0,5688	0,567	0,5652	0,5634	0,5617	0,5599	0,5582	0,5565	0,5548
78,5	0,5864	0,5844	0,5825	0,5806	0,5787	0,5769	0,575	0,5732	0,5713	0,5695	0,5677	0,5659	0,5641	0,5624	0,5606	0,5589	0,5571	0,5554	0,5537
78,6	0,5853	0,5834	0,5814	0,5795	0,5776	0,5758	0,5739	0,5721	0,5702	0,5684	0,5666	0,5648	0,563	0,5613	0,5595	0,5578	0,5561	0,5543	0,5526
78,7	0,5842	0,5823	0,5804	0,5785	0,5766	0,5747	0,5728	0,571	0,5692	0,5673	0,5655	0,5637	0,562	0,5602	0,5585	0,5567	0,555	0,5533	0,5516
78,8	0,5831	0,5812	0,5793	0,5774	0,5755	0,5736	0,5718	0,5699	0,5681	0,5663	0,5645	0,5627	0,5609	0,5591	0,5574	0,5556	0,5539	0,5522	0,5505
78,9	0,582	0,5801	0,5782	0,5763	0,5744	0,5725	0,5707	0,5688	0,567	0,5652	0,5634	0,5616	0,5598	0,558	0,5563	0,5545	0,5528	0,5511	0,5494
79	0,5809	0,579	0,5771	0,5752	0,5733	0,5714	0,5696	0,5677	0,5659	0,5641	0,5623	0,5605	0,5587	0,557	0,5552	0,5535	0,5517	0,55	0,5483
79,1	0,5799	0,5779	0,576	0,5741	0,5722	0,5704	0,5685	0,5667	0,5648	0,563	0,5612	0,5594	0,5576	0,5559	0,5541	0,5524	0,5507	0,5489	0,5472
79,2	0,5788	0,5768	0,5749	0,573	0,5711	0,5693	0,5674	0,5656	0,5637	0,5619	0,5601	0,5583	0,5565	0,5548	0,553	0,5513	0,5496	0,5479	0,5462
79,3	0,5777	0,5757	0,5738	0,5719	0,57	0,5682	0,5663	0,5645	0,5626	0,5608	0,559	0,5572	0,5555	0,5537	0,5519	0,5502	0,5485	0,5468	0,5451
79,4	0,5766	0,5747	0,5727	0,5708	0,569	0,5671	0,5652	0,5634	0,5616	0,5597	0,5579	0,5561	0,5544	0,5526	0,5509	0,5491	0,5474	0,5457	0,544
79,5	0,5755	0,5736	0,5716	0,5697	0,5679	0,566	0,5641	0,5623	0,5605	0,5586	0,5568	0,5551	0,5533	0,5515	0,5498	0,548	0,5463	0,5446	0,5429
79,6	0,5744	0,5725	0,5705	0,5686	0,5668	0,5649	0,563	0,5612	0,5594	0,5576	0,5558	0,554	0,5522	0,5504	0,5487	0,5469	0,5452	0,5435	0,5418
79,7	0,5733	0,5714	0,5695	0,5676	0,5657	0,5638	0,5619	0,5601	0,5583	0,5565	0,5547	0,5529	0,5511	0,5493	0,5476	0,5459	0,5441	0,5424	0,5407
79,8	0,5722	0,5703	0,5684	0,5665	0,5646	0,5627	0,5609	0,559	0,5572	0,5554	0,5536	0,5518	0,55	0,5482	0,5465	0,5448	0,543	0,5413	0,5396
79,9	0,5711	0,5692	0,5673	0,5654	0,5635	0,5616	0,5598	0,5579	0,5561	0,5543	0,5525	0,5507	0,5489	0,5471	0,5454	0,5437	0,5419	0,5402	0,5385
80	0,57	0,5681	0,5662	0,5643	0,5624	0,5605	0,5587	0,5568	0,555	0,5532	0,5514	0,5496	0,5478	0,5461	0,5443	0,5426	0,5408	0,5391	0,5374
80,1	0,5689	0,567	0,5651	0,5632	0,5613	0,5594	0,5576	0,5557	0,5539	0,5521	0,5503	0,5485	0,5467	0,545	0,5432	0,5415	0,5397	0,538	0,5363
80,2	0,5678	0,5659	0,564	0,5621	0,5602	0,5583	0,5565	0,5546	0,5528	0,551	0,5492	0,5474	0,5456	0,5439	0,5421	0,5404	0,5387	0,5369	0,5352
80,3	0,5667	0,5648	0,5629	0,561	0,5591	0,5572	0,5554	0,5535	0,5517	0,5499	0,5481	0,5463	0,5445	0,5428	0,541	0,5393	0,5376	0,5358	0,5341
80,4	0,5656	0,5637	0,5617	0,5599	0,558	0,5561	0,5542	0,5524	0,5506	0,5488	0,547	0,5452	0,5434	0,5417	0,5399	0,5382	0,5365	0,5347	0,533
80,5	0,5645	0,5626	0,5606	0,5587	0,5569	0,555	0,5531	0,5513	0,5495	0,5477	0,5459	0,5441	0,5423	0,5406	0,5388	0,5371	0,5353	0,5336	0,5319
80,6	0,5634	0,5614	0,5595	0,5576	0,5558	0,5539	0,552	0,5502	0,5484	0,5466	0,5448	0,543	0,5412	0,5394	0,5377	0,536	0,5342	0,5325	0,5308
80,7	0,5623	0,5603	0,5584	0,5565	0,5546	0,5528	0,5509	0,5491	0,5473	0,5455	0,5437	0,5419	0,5401	0,5383	0,5366	0,5349	0,5331	0,5314	0,5297
80,8	0,5611	0,5592	0,5573	0,5554	0,5535	0,5517	0,5498	0,548	0,5462	0,5443	0,5426	0,5408	0,539	0,5372	0,5355	0,5338	0,532	0,5303	0,5286
80,9	0,56	0,5581	0,5562	0,5543	0,5524	0,5506	0,5487	0,5469	0,545	0,5432	0,5414	0,5397	0,5379	0,5361	0,5344	0,5326	0,5309	0,5292	0,5275
81	0,5589	0,557	0,5551	0,5532	0,5513	0,5495	0,5476	0,5458	0,5439	0,5421	0,5403	0,5385	0,5368	0,535	0,5333	0,5315	0,5298	0,5281	0,5264
81,1	0,5578	0,5559	0,554	0,5521	0,5502	0,5483	0,5465	0,5446	0,5428	0,541	0,5392	0,5374	0,5357	0,5339	0,5322	0,5304	0,5287	0,527	0,5253
81,2	0,5567	0,5548	0,5529	0,551	0,5491	0,5472	0,5454	0,5435	0,5417	0,5399	0,5381	0,5363	0,5346	0,5328	0,5311	0,5293	0,5276	0,5259	0,5242
81,3	0,5556	0,5536	0,5517	0,5498	0,548	0,5461	0,5443	0,5424	0,5406	0,5388	0,537	0,5352	0,5334	0,5317	0,5299	0,5282	0,5265	0,5248	0,5231
81,4	0,5545	0,5525	0,5506	0,5487	0,5469	0,545	0,5431	0,5413	0,5395	0,5377	0,5359	0,5341	0,5323	0,5306	0,5288	0,5271	0,5254	0,5237	0,522

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
78	0,5574	0,5557	0,554	0,5524	0,5507	0,5491	0,5475	0,5459
78,1	0,5563	0,5546	0,553	0,5513	0,5497	0,548	0,5464	0,5448
78,2	0,5553	0,5536	0,5519	0,5502	0,5486	0,547	0,5453	0,5437
78,3	0,5542	0,5525	0,5508	0,5492	0,5475	0,5459	0,5443	0,5426
78,4	0,5531	0,5514	0,5498	0,5481	0,5464	0,5448	0,5432	0,5416
78,5	0,552	0,5503	0,5487	0,547	0,5454	0,5437	0,5421	0,5405
78,6	0,551	0,5493	0,5476	0,5459	0,5443	0,5427	0,541	0,5394
78,7	0,5499	0,5482	0,5465	0,5449	0,5432	0,5416	0,54	0,5383
78,8	0,5488	0,5471	0,5454	0,5438	0,5421	0,5405	0,5389	0,5373
78,9	0,5477	0,546	0,5444	0,5427	0,5411	0,5394	0,5378	0,5362
79	0,5466	0,545	0,5433	0,5416	0,54	0,5383	0,5367	0,5351
79,1	0,5455	0,5439	0,5422	0,5405	0,5389	0,5373	0,5356	0,534
79,2	0,5445	0,5428	0,5411	0,5395	0,5378	0,5362	0,5346	0,5329
79,3	0,5434	0,5417	0,54	0,5384	0,5367	0,5351	0,5335	0,5319
79,4	0,5423	0,5406	0,5389	0,5373	0,5356	0,534	0,5324	0,5308
79,5	0,5412	0,5395	0,5379	0,5362	0,5346	0,5329	0,5313	0,5297
79,6	0,5401	0,5384	0,5368	0,5351	0,5335	0,5318	0,5302	0,5286
79,7	0,539	0,5373	0,5357	0,534	0,5324	0,5307	0,5291	0,5275
79,8	0,5379	0,5363	0,5346	0,5329	0,5313	0,5297	0,528	0,5264
79,9	0,5368	0,5352	0,5335	0,5318	0,5302	0,5286	0,5269	0,5253
80	0,5357	0,5341	0,5324	0,5307	0,5291	0,5275	0,5259	0,5242
80,1	0,5346	0,533	0,5313	0,5297	0,528	0,5264	0,5248	0,5231
80,2	0,5336	0,5319	0,5302	0,5286	0,5269	0,5253	0,5237	0,5221
80,3	0,5325	0,5308	0,5291	0,5275	0,5258	0,5242	0,5226	0,521
80,4	0,5314	0,5297	0,528	0,5264	0,5247	0,5231	0,5215	0,5199
80,5	0,5303	0,5286	0,5269	0,5253	0,5236	0,522	0,5204	0,5188
80,6	0,5292	0,5275	0,5258	0,5242	0,5225	0,5209	0,5193	0,5177
80,7	0,528	0,5264	0,5247	0,5231	0,5214	0,5198	0,5182	0,5166
80,8	0,5269	0,5253	0,5236	0,522	0,5203	0,5187	0,5171	0,5155
80,9	0,5258	0,5242	0,5225	0,5208	0,5192	0,5176	0,516	0,5144
81	0,5247	0,5231	0,5214	0,5197	0,5181	0,5165	0,5149	0,5132
81,1	0,5236	0,5219	0,5203	0,5186	0,517	0,5154	0,5137	0,5121
81,2	0,5225	0,5208	0,5192	0,5175	0,5159	0,5143	0,5126	0,511
81,3	0,5214	0,5197	0,5181	0,5164	0,5148	0,5131	0,5115	0,5099
81,4	0,5203	0,5186	0,517	0,5153	0,5137	0,512	0,5104	0,5088

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
81,5	1,1471	1,1249	1,1045	1,0858	1,0685	1,0523	1,0372	1,023	1,0097	0,997	0,985	0,9735	0,9626	0,9522	0,9422	0,9326	0,9234	0,9145	0,9059
81,6	1,1459	1,1236	1,1033	1,0846	1,0673	1,0511	1,036	1,0218	1,0084	0,9958	0,9837	0,9723	0,9614	0,951	0,941	0,9314	0,9222	0,9133	0,9048
81,7	1,1447	1,1224	1,1021	1,0834	1,0661	1,0499	1,0348	1,0206	1,0072	0,9946	0,9825	0,9711	0,9602	0,9498	0,9398	0,9302	0,921	0,9121	0,9036
81,8	1,1434	1,1212	1,1009	1,0822	1,0648	1,0487	1,0336	1,0194	1,006	0,9934	0,9813	0,9699	0,959	0,9486	0,9386	0,929	0,9198	0,9109	0,9024
81,9	1,1422	1,1199	1,0996	1,0809	1,0636	1,0475	1,0324	1,0182	1,0048	0,9922	0,9801	0,9687	0,9578	0,9474	0,9374	0,9278	0,9186	0,9097	0,9012
82	1,1409	1,1187	1,0984	1,0797	1,0624	1,0463	1,0312	1,017	1,0036	0,9909	0,9789	0,9675	0,9566	0,9462	0,9362	0,9266	0,9174	0,9085	0,9
82,1	1,1397	1,1175	1,0972	1,0785	1,0612	1,045	1,0299	1,0158	1,0024	0,9897	0,9777	0,9663	0,9554	0,945	0,935	0,9254	0,9162	0,9073	0,8988
82,2	1,1385	1,1162	1,0959	1,0772	1,0599	1,0438	1,0287	1,0145	1,0012	0,9885	0,9765	0,9651	0,9542	0,9438	0,9338	0,9242	0,915	0,9061	0,8976
82,3	1,1372	1,115	1,0947	1,076	1,0587	1,0426	1,0275	1,0133	1	0,9873	0,9753	0,9639	0,953	0,9426	0,9326	0,923	0,9138	0,9049	0,8964
82,4	1,136	1,1138	1,0935	1,0748	1,0575	1,0414	1,0263	1,0121	0,9987	0,9861	0,9741	0,9627	0,9518	0,9413	0,9314	0,9218	0,9126	0,9037	0,8952
82,5	1,1347	1,1125	1,0922	1,0735	1,0562	1,0401	1,0251	1,0109	0,9975	0,9849	0,9729	0,9614	0,9506	0,9401	0,9302	0,9206	0,9114	0,9025	0,894
82,6	1,1335	1,1113	1,091	1,0723	1,055	1,0389	1,0238	1,0097	0,9963	0,9837	0,9717	0,9602	0,9493	0,9389	0,929	0,9194	0,9102	0,9013	0,8928
82,7	1,1322	1,11	1,0897	1,0711	1,0538	1,0377	1,0226	1,0084	0,9951	0,9824	0,9704	0,959	0,9481	0,9377	0,9277	0,9182	0,909	0,9001	0,8916
82,8	1,131	1,1088	1,0885	1,0698	1,0525	1,0364	1,0214	1,0072	0,9939	0,9812	0,9692	0,9578	0,9469	0,9365	0,9265	0,917	0,9078	0,8989	0,8904
82,9	1,1297	1,1075	1,0873	1,0686	1,0513	1,0352	1,0201	1,006	0,9926	0,98	0,968	0,9566	0,9457	0,9353	0,9253	0,9158	0,9066	0,8977	0,8892
83	1,1285	1,1063	1,086	1,0674	1,0501	1,034	1,0189	1,0048	0,9914	0,9788	0,9668	0,9554	0,9445	0,9341	0,9241	0,9146	0,9054	0,8965	0,888
83,1	1,1272	1,105	1,0848	1,0661	1,0488	1,0327	1,0177	1,0035	0,9902	0,9775	0,9656	0,9541	0,9433	0,9329	0,9229	0,9133	0,9042	0,8953	0,8868
83,2	1,126	1,1038	1,0835	1,0649	1,0476	1,0315	1,0164	1,0023	0,9889	0,9763	0,9643	0,9529	0,942	0,9316	0,9217	0,9121	0,9029	0,8941	0,8856
83,3	1,1247	1,1025	1,0823	1,0636	1,0464	1,0303	1,0152	1,0011	0,9877	0,9751	0,9631	0,9517	0,9408	0,9304	0,9205	0,9109	0,9017	0,8929	0,8844
83,4	1,1235	1,1013	1,081	1,0624	1,0451	1,029	1,014	0,9998	0,9865	0,9739	0,9619	0,9505	0,9396	0,9292	0,9192	0,9097	0,9005	0,8917	0,8831
83,5	1,1222	1,1	1,0798	1,0611	1,0439	1,0278	1,0127	0,9986	0,9852	0,9726	0,9606	0,9492	0,9384	0,928	0,918	0,9085	0,8993	0,8904	0,8819
83,6	1,1209	1,0988	1,0785	1,0599	1,0426	1,0265	1,0115	0,9973	0,984	0,9714	0,9594	0,948	0,9371	0,9267	0,9168	0,9072	0,8981	0,8892	0,8807
83,7	1,1197	1,0975	1,0773	1,0586	1,0414	1,0253	1,0102	0,9961	0,9828	0,9702	0,9582	0,9468	0,9359	0,9255	0,9156	0,906	0,8968	0,888	0,8795
83,8	1,1184	1,0962	1,076	1,0574	1,0401	1,024	1,009	0,9949	0,9815	0,9689	0,9569	0,9455	0,9347	0,9243	0,9143	0,9048	0,8956	0,8868	0,8783
83,9	1,1171	1,095	1,0747	1,0561	1,0389	1,0228	1,0078	0,9936	0,9803	0,9677	0,9557	0,9443	0,9335	0,9231	0,9131	0,9036	0,8944	0,8856	0,8771
84	1,1159	1,0937	1,0735	1,0549	1,0376	1,0215	1,0065	0,9924	0,9791	0,9664	0,9545	0,9431	0,9322	0,9218	0,9119	0,9023	0,8932	0,8843	0,8758
84,1	1,1146	1,0925	1,0722	1,0536	1,0364	1,0203	1,0053	0,9911	0,9778	0,9652	0,9532	0,9418	0,931	0,9206	0,9107	0,9011	0,8919	0,8831	0,8746
84,2	1,1133	1,0912	1,071	1,0523	1,0351	1,019	1,004	0,9899	0,9766	0,964	0,952	0,9406	0,9297	0,9194	0,9094	0,8999	0,8907	0,8819	0,8734
84,3	1,1121	1,0899	1,0697	1,0511	1,0338	1,0178	1,0028	0,9886	0,9753	0,9627	0,9507	0,9394	0,9285	0,9181	0,9082	0,8987	0,8895	0,8807	0,8722
84,4	1,1108	1,0887	1,0684	1,0498	1,0326	1,0165	1,0015	0,9874	0,9741	0,9615	0,9495	0,9381	0,9273	0,9169	0,907	0,8974	0,8883	0,8794	0,8709
84,5	1,1095	1,0874	1,0672	1,0486	1,0313	1,0153	1,0003	0,9861	0,9728	0,9602	0,9483	0,9369	0,926	0,9156	0,9057	0,8962	0,887	0,8782	0,8697
84,6	1,1082	1,0861	1,0659	1,0473	1,0301	1,014	0,999	0,9849	0,9716	0,959	0,947	0,9356	0,9248	0,9144	0,9045	0,8949	0,8858	0,877	0,8685
84,7	1,107	1,0848	1,0646	1,046	1,0288	1,0128	0,9977	0,9836	0,9703	0,9577	0,9458	0,9344	0,9235	0,9132	0,9032	0,8937	0,8845	0,8757	0,8672
84,8	1,1057	1,0836	1,0634	1,0448	1,0275	1,0115	0,9965	0,9824	0,9691	0,9565	0,9445	0,9331	0,9223	0,9119	0,902	0,8925	0,8833	0,8745	0,866
84,9	1,1044	1,0823	1,0621	1,0435	1,0263	1,0102	0,9952	0,9811	0,9678	0,9552	0,9433	0,9319	0,921	0,9107	0,9007	0,8912	0,8821	0,8732	0,8648

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
81,5	0,8977	0,8897	0,882	0,8745	0,8673	0,8603	0,8534	0,8468	0,8403	0,834	0,8279	0,822	0,8161	0,8104	0,8049	0,7995	0,7942	0,789	0,7839
81,6	0,8965	0,8885	0,8808	0,8733	0,8661	0,8591	0,8523	0,8456	0,8392	0,8329	0,8268	0,8208	0,815	0,8093	0,8037	0,7983	0,793	0,7878	0,7827
81,7	0,8953	0,8873	0,8796	0,8722	0,8649	0,8579	0,8511	0,8444	0,838	0,8317	0,8256	0,8196	0,8138	0,8081	0,8026	0,7971	0,7918	0,7866	0,7816
81,8	0,8941	0,8862	0,8785	0,871	0,8637	0,8567	0,8499	0,8433	0,8368	0,8305	0,8244	0,8184	0,8126	0,8069	0,8014	0,796	0,7907	0,7855	0,7804
81,9	0,8929	0,885	0,8773	0,8698	0,8626	0,8555	0,8487	0,8421	0,8356	0,8293	0,8232	0,8173	0,8114	0,8058	0,8002	0,7948	0,7895	0,7843	0,7792
82	0,8918	0,8838	0,8761	0,8686	0,8614	0,8544	0,8475	0,8409	0,8344	0,8282	0,822	0,8161	0,8103	0,8046	0,799	0,7936	0,7883	0,7831	0,7781
82,1	0,8906	0,8826	0,8749	0,8674	0,8602	0,8532	0,8463	0,8397	0,8333	0,827	0,8209	0,8149	0,8091	0,8034	0,7979	0,7924	0,7871	0,782	0,7769
82,2	0,8894	0,8814	0,8737	0,8662	0,859	0,852	0,8452	0,8385	0,8321	0,8258	0,8197	0,8137	0,8079	0,8022	0,7967	0,7913	0,786	0,7808	0,7757
82,3	0,8882	0,8802	0,8725	0,865	0,8578	0,8508	0,844	0,8373	0,8309	0,8246	0,8185	0,8125	0,8067	0,8011	0,7955	0,7901	0,7848	0,7796	0,7745
82,4	0,887	0,879	0,8713	0,8639	0,8566	0,8496	0,8428	0,8362	0,8297	0,8234	0,8173	0,8114	0,8055	0,7999	0,7943	0,7889	0,7836	0,7784	0,7734
82,5	0,8858	0,8778	0,8701	0,8627	0,8554	0,8484	0,8416	0,835	0,8285	0,8223	0,8161	0,8102	0,8044	0,7987	0,7931	0,7877	0,7824	0,7773	0,7722
82,6	0,8846	0,8766	0,8689	0,8615	0,8542	0,8472	0,8404	0,8338	0,8273	0,8211	0,815	0,809	0,8032	0,7975	0,792	0,7865	0,7813	0,7761	0,771
82,7	0,8834	0,8754	0,8677	0,8603	0,853	0,846	0,8392	0,8326	0,8261	0,8199	0,8138	0,8078	0,802	0,7963	0,7908	0,7854	0,7801	0,7749	0,7698
82,8	0,8822	0,8742	0,8665	0,8591	0,8518	0,8448	0,838	0,8314	0,825	0,8187	0,8126	0,8066	0,8008	0,7951	0,7896	0,7842	0,7789	0,7737	0,7686
82,9	0,881	0,873	0,8653	0,8579	0,8506	0,8436	0,8368	0,8302	0,8238	0,8175	0,8114	0,8054	0,7996	0,7939	0,7884	0,783	0,7777	0,7725	0,7675
83	0,8798	0,8718	0,8641	0,8567	0,8494	0,8424	0,8356	0,829	0,8226	0,8163	0,8102	0,8042	0,7984	0,7928	0,7872	0,7818	0,7765	0,7713	0,7663
83,1	0,8786	0,8706	0,8629	0,8555	0,8482	0,8412	0,8344	0,8278	0,8214	0,8151	0,809	0,803	0,7972	0,7916	0,786	0,7806	0,7753	0,7702	0,7651
83,2	0,8773	0,8694	0,8617	0,8543	0,847	0,84	0,8332	0,8266	0,8202	0,8139	0,8078	0,8018	0,796	0,7904	0,7848	0,7794	0,7741	0,769	0,7639
83,3	0,8761	0,8682	0,8605	0,8531	0,8458	0,8388	0,832	0,8254	0,819	0,8127	0,8066	0,8007	0,7948	0,7892	0,7836	0,7782	0,7729	0,7678	0,7627
83,4	0,8749	0,867	0,8593	0,8518	0,8446	0,8376	0,8308	0,8242	0,8178	0,8115	0,8054	0,7995	0,7937	0,788	0,7824	0,777	0,7718	0,7666	0,7615
83,5	0,8737	0,8658	0,8581	0,8506	0,8434	0,8364	0,8296	0,823	0,8166	0,8103	0,8042	0,7983	0,7925	0,7868	0,7813	0,7758	0,7706	0,7654	0,7603
83,6	0,8725	0,8646	0,8569	0,8494	0,8422	0,8352	0,8284	0,8218	0,8154	0,8091	0,803	0,7971	0,7913	0,7856	0,7801	0,7746	0,7694	0,7642	0,7591
83,7	0,8713	0,8633	0,8557	0,8482	0,841	0,834	0,8272	0,8206	0,8142	0,8079	0,8018	0,7959	0,79	0,7844	0,7789	0,7735	0,7682	0,763	0,7579
83,8	0,8701	0,8621	0,8544	0,847	0,8398	0,8328	0,826	0,8194	0,8129	0,8067	0,8006	0,7946	0,7888	0,7832	0,7777	0,7723	0,767	0,7618	0,7567
83,9	0,8688	0,8609	0,8532	0,8458	0,8386	0,8316	0,8248	0,8182	0,8117	0,8055	0,7994	0,7934	0,7876	0,782	0,7765	0,771	0,7658	0,7606	0,7555
84	0,8676	0,8597	0,852	0,8446	0,8374	0,8304	0,8236	0,817	0,8105	0,8043	0,7982	0,7922	0,7864	0,7808	0,7752	0,7698	0,7646	0,7594	0,7543
84,1	0,8664	0,8585	0,8508	0,8433	0,8361	0,8291	0,8223	0,8157	0,8093	0,8031	0,797	0,791	0,7852	0,7796	0,774	0,7686	0,7634	0,7582	0,7531
84,2	0,8652	0,8572	0,8496	0,8421	0,8349	0,8279	0,8211	0,8145	0,8081	0,8018	0,7958	0,7898	0,784	0,7784	0,7728	0,7674	0,7622	0,757	0,7519
84,3	0,8639	0,856	0,8483	0,8409	0,8337	0,8267	0,8199	0,8133	0,8069	0,8006	0,7945	0,7886	0,7828	0,7771	0,7716	0,7662	0,7609	0,7558	0,7507
84,4	0,8627	0,8548	0,8471	0,8397	0,8325	0,8255	0,8187	0,8121	0,8057	0,7994	0,7933	0,7874	0,7816	0,7759	0,7704	0,765	0,7597	0,7546	0,7495
84,5	0,8615	0,8536	0,8459	0,8385	0,8313	0,8243	0,8175	0,8109	0,8044	0,7982	0,7921	0,7862	0,7804	0,7747	0,7692	0,7638	0,7585	0,7534	0,7483
84,6	0,8603	0,8523	0,8447	0,8372	0,83	0,823	0,8162	0,8096	0,8032	0,797	0,7909	0,7849	0,7792	0,7735	0,768	0,7626	0,7573	0,7521	0,7471
84,7	0,859	0,8511	0,8434	0,836	0,8288	0,8218	0,815	0,8084	0,802	0,7958	0,7897	0,7837	0,7779	0,7723	0,7668	0,7614	0,7561	0,7509	0,7459
84,8	0,8578	0,8499	0,8422	0,8348	0,8276	0,8206	0,8138	0,8072	0,8008	0,7945	0,7884	0,7825	0,7767	0,7711	0,7655	0,7602	0,7549	0,7497	0,7447
84,9	0,8566	0,8486	0,841	0,8335	0,8263	0,8193	0,8126	0,806	0,7996	0,7933	0,7872	0,7813	0,7755	0,7698	0,7643	0,7589	0,7537	0,7485	0,7435

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
81,5	0,7789	0,774	0,7693	0,7646	0,76	0,7555	0,7511	0,7467	0,7425	0,7383	0,7341	0,7301	0,7261	0,7222	0,7184	0,7146	0,7108	0,7072	0,7035
81,6	0,7777	0,7729	0,7681	0,7634	0,7588	0,7543	0,7499	0,7456	0,7413	0,7371	0,733	0,7289	0,725	0,7211	0,7172	0,7134	0,7097	0,706	0,7024
81,7	0,7766	0,7717	0,7669	0,7623	0,7577	0,7532	0,7487	0,7444	0,7401	0,736	0,7318	0,7278	0,7238	0,7199	0,716	0,7123	0,7085	0,7048	0,7012
81,8	0,7754	0,7705	0,7658	0,7611	0,7565	0,752	0,7476	0,7432	0,739	0,7348	0,7307	0,7266	0,7227	0,7187	0,7149	0,7111	0,7074	0,7037	0,7001
81,9	0,7743	0,7694	0,7646	0,7599	0,7553	0,7508	0,7464	0,7421	0,7378	0,7336	0,7295	0,7255	0,7215	0,7176	0,7137	0,7099	0,7062	0,7025	0,6989
82	0,7731	0,7682	0,7634	0,7588	0,7542	0,7497	0,7453	0,7409	0,7367	0,7325	0,7284	0,7243	0,7203	0,7164	0,7126	0,7088	0,7051	0,7014	0,6978
82,1	0,7719	0,767	0,7623	0,7576	0,753	0,7485	0,7441	0,7398	0,7355	0,7313	0,7272	0,7232	0,7192	0,7153	0,7114	0,7076	0,7039	0,7002	0,6966
82,2	0,7707	0,7659	0,7611	0,7564	0,7518	0,7473	0,7429	0,7386	0,7343	0,7301	0,726	0,722	0,718	0,7141	0,7103	0,7065	0,7027	0,6991	0,6955
82,3	0,7696	0,7647	0,7599	0,7553	0,7507	0,7462	0,7418	0,7374	0,7332	0,729	0,7249	0,7208	0,7169	0,7129	0,7091	0,7053	0,7016	0,6979	0,6943
82,4	0,7684	0,7635	0,7588	0,7541	0,7495	0,745	0,7406	0,7363	0,732	0,7278	0,7237	0,7197	0,7157	0,7118	0,7079	0,7041	0,7004	0,6968	0,6931
82,5	0,7672	0,7624	0,7576	0,7529	0,7483	0,7438	0,7394	0,7351	0,7308	0,7266	0,7225	0,7185	0,7145	0,7106	0,7068	0,703	0,6993	0,6956	0,692
82,6	0,766	0,7612	0,7564	0,7517	0,7472	0,7427	0,7382	0,7339	0,7297	0,7255	0,7214	0,7173	0,7134	0,7094	0,7056	0,7018	0,6981	0,6944	0,6908
82,7	0,7649	0,76	0,7552	0,7506	0,746	0,7415	0,7371	0,7327	0,7285	0,7243	0,7202	0,7162	0,7122	0,7083	0,7044	0,7006	0,6969	0,6933	0,6896
82,8	0,7637	0,7588	0,7541	0,7494	0,7448	0,7403	0,7359	0,7316	0,7273	0,7231	0,719	0,715	0,711	0,7071	0,7033	0,6995	0,6958	0,6921	0,6885
82,9	0,7625	0,7576	0,7529	0,7482	0,7436	0,7391	0,7347	0,7304	0,7261	0,722	0,7178	0,7138	0,7098	0,7059	0,7021	0,6983	0,6946	0,6909	0,6873
83	0,7613	0,7565	0,7517	0,747	0,7424	0,738	0,7335	0,7292	0,725	0,7208	0,7167	0,7126	0,7087	0,7048	0,7009	0,6971	0,6934	0,6897	0,6861
83,1	0,7601	0,7553	0,7505	0,7458	0,7413	0,7368	0,7324	0,728	0,7238	0,7196	0,7155	0,7115	0,7075	0,7036	0,6997	0,696	0,6922	0,6886	0,685
83,2	0,7589	0,7541	0,7493	0,7447	0,7401	0,7356	0,7312	0,7268	0,7226	0,7184	0,7143	0,7103	0,7063	0,7024	0,6986	0,6948	0,6911	0,6874	0,6838
83,3	0,7578	0,7529	0,7481	0,7435	0,7389	0,7344	0,73	0,7257	0,7214	0,7172	0,7131	0,7091	0,7051	0,7012	0,6974	0,6936	0,6899	0,6862	0,6826
83,4	0,7566	0,7517	0,7469	0,7423	0,7377	0,7332	0,7288	0,7245	0,7202	0,7161	0,712	0,7079	0,704	0,7	0,6962	0,6924	0,6887	0,685	0,6814
83,5	0,7554	0,7505	0,7458	0,7411	0,7365	0,732	0,7276	0,7233	0,719	0,7149	0,7108	0,7067	0,7028	0,6989	0,695	0,6913	0,6875	0,6839	0,6803
83,6	0,7542	0,7493	0,7446	0,7399	0,7353	0,7308	0,7264	0,7221	0,7179	0,7137	0,7096	0,7056	0,7016	0,6977	0,6938	0,6901	0,6864	0,6827	0,6791
83,7	0,753	0,7481	0,7434	0,7387	0,7341	0,7296	0,7252	0,7209	0,7167	0,7125	0,7084	0,7044	0,7004	0,6965	0,6927	0,6889	0,6852	0,6815	0,6779
83,8	0,7518	0,7469	0,7422	0,7375	0,7329	0,7285	0,7241	0,7197	0,7155	0,7113	0,7072	0,7032	0,6992	0,6953	0,6915	0,6877	0,684	0,6803	0,6767
83,9	0,7506	0,7457	0,741	0,7363	0,7317	0,7273	0,7229	0,7185	0,7143	0,7101	0,706	0,702	0,698	0,6941	0,6903	0,6865	0,6828	0,6791	0,6755
84	0,7494	0,7445	0,7398	0,7351	0,7306	0,7261	0,7217	0,7173	0,7131	0,7089	0,7048	0,7008	0,6968	0,6929	0,6891	0,6853	0,6816	0,6779	0,6743
84,1	0,7482	0,7433	0,7386	0,7339	0,7294	0,7249	0,7205	0,7161	0,7119	0,7077	0,7036	0,6996	0,6956	0,6917	0,6879	0,6841	0,6804	0,6768	0,6732
84,2	0,747	0,7421	0,7374	0,7327	0,7282	0,7237	0,7193	0,7149	0,7107	0,7065	0,7024	0,6984	0,6944	0,6905	0,6867	0,6829	0,6792	0,6756	0,672
84,3	0,7458	0,7409	0,7362	0,7315	0,727	0,7225	0,7181	0,7137	0,7095	0,7053	0,7012	0,6972	0,6933	0,6894	0,6855	0,6817	0,678	0,6744	0,6708
84,4	0,7446	0,7397	0,735	0,7303	0,7257	0,7213	0,7169	0,7125	0,7083	0,7041	0,7	0,696	0,6921	0,6882	0,6843	0,6806	0,6768	0,6732	0,6696
84,5	0,7434	0,7385	0,7338	0,7291	0,7245	0,7201	0,7157	0,7113	0,7071	0,7029	0,6988	0,6948	0,6909	0,687	0,6831	0,6794	0,6756	0,672	0,6684
84,6	0,7421	0,7373	0,7326	0,7279	0,7233	0,7189	0,7145	0,7101	0,7059	0,7017	0,6976	0,6936	0,6897	0,6858	0,6819	0,6782	0,6744	0,6708	0,6672
84,7	0,7409	0,7361	0,7313	0,7267	0,7221	0,7176	0,7132	0,7089	0,7047	0,7005	0,6964	0,6924	0,6884	0,6846	0,6807	0,677	0,6732	0,6696	0,666
84,8	0,7397	0,7349	0,7301	0,7255	0,7209	0,7164	0,712	0,7077	0,7035	0,6993	0,6952	0,6912	0,6872	0,6834	0,6795	0,6758	0,672	0,6684	0,6648
84,9	0,7385	0,7337	0,7289	0,7243	0,7197	0,7152	0,7108	0,7065	0,7023	0,6981	0,694	0,69	0,686	0,6821	0,6783	0,6745	0,6708	0,6672	0,6636

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
81,5	0,7	0,6964	0,693	0,6896	0,6862	0,6829	0,6796	0,6764	0,6732	0,67	0,6669	0,6639	0,6608	0,6579	0,6549	0,652	0,6491	0,6463	0,6434
81,6	0,6988	0,6953	0,6918	0,6884	0,6851	0,6817	0,6785	0,6752	0,672	0,6689	0,6658	0,6627	0,6597	0,6567	0,6538	0,6508	0,648	0,6451	0,6423
81,7	0,6977	0,6942	0,6907	0,6873	0,6839	0,6806	0,6773	0,6741	0,6709	0,6678	0,6647	0,6616	0,6586	0,6556	0,6526	0,6497	0,6468	0,644	0,6412
81,8	0,6965	0,693	0,6895	0,6861	0,6828	0,6794	0,6762	0,6729	0,6698	0,6666	0,6635	0,6604	0,6574	0,6544	0,6515	0,6486	0,6457	0,6428	0,64
81,9	0,6954	0,6918	0,6884	0,685	0,6816	0,6783	0,675	0,6718	0,6686	0,6655	0,6624	0,6593	0,6563	0,6533	0,6503	0,6474	0,6445	0,6417	0,6389
82	0,6942	0,6907	0,6872	0,6838	0,6805	0,6771	0,6739	0,6706	0,6675	0,6643	0,6612	0,6581	0,6551	0,6521	0,6492	0,6463	0,6434	0,6405	0,6377
82,1	0,6931	0,6895	0,6861	0,6827	0,6793	0,676	0,6727	0,6695	0,6663	0,6632	0,6601	0,657	0,654	0,651	0,648	0,6451	0,6422	0,6394	0,6366
82,2	0,6919	0,6884	0,6849	0,6815	0,6782	0,6748	0,6716	0,6683	0,6652	0,662	0,6589	0,6558	0,6528	0,6498	0,6469	0,644	0,6411	0,6382	0,6354
82,3	0,6907	0,6872	0,6838	0,6804	0,677	0,6737	0,6704	0,6672	0,664	0,6609	0,6578	0,6547	0,6517	0,6487	0,6457	0,6428	0,6399	0,6371	0,6343
82,4	0,6896	0,6861	0,6826	0,6792	0,6758	0,6725	0,6693	0,666	0,6628	0,6597	0,6566	0,6535	0,6505	0,6475	0,6446	0,6417	0,6388	0,636	0,6331
82,5	0,6884	0,6849	0,6814	0,678	0,6747	0,6714	0,6681	0,6649	0,6617	0,6585	0,6554	0,6524	0,6494	0,6464	0,6434	0,6405	0,6376	0,6348	0,632
82,6	0,6873	0,6837	0,6803	0,6769	0,6735	0,6702	0,6669	0,6637	0,6605	0,6574	0,6543	0,6512	0,6482	0,6452	0,6423	0,6394	0,6365	0,6336	0,6308
82,7	0,6861	0,6826	0,6791	0,6757	0,6724	0,669	0,6658	0,6626	0,6594	0,6562	0,6531	0,6501	0,6471	0,6441	0,6411	0,6382	0,6353	0,6325	0,6297
82,8	0,6849	0,6814	0,678	0,6745	0,6712	0,6679	0,6646	0,6614	0,6582	0,6551	0,652	0,6489	0,6459	0,6429	0,64	0,6371	0,6342	0,6313	0,6285
82,9	0,6838	0,6802	0,6768	0,6734	0,67	0,6667	0,6634	0,6602	0,657	0,6539	0,6508	0,6477	0,6447	0,6417	0,6388	0,6359	0,633	0,6302	0,6274
83	0,6826	0,6791	0,6756	0,6722	0,6689	0,6655	0,6623	0,6591	0,6559	0,6527	0,6496	0,6466	0,6436	0,6406	0,6376	0,6347	0,6319	0,629	0,6262
83,1	0,6814	0,6779	0,6745	0,671	0,6677	0,6644	0,6611	0,6579	0,6547	0,6516	0,6485	0,6454	0,6424	0,6394	0,6365	0,6336	0,6307	0,6279	0,625
83,2	0,6802	0,6767	0,6733	0,6699	0,6665	0,6632	0,6599	0,6567	0,6535	0,6504	0,6473	0,6443	0,6412	0,6383	0,6353	0,6324	0,6295	0,6267	0,6239
83,3	0,6791	0,6756	0,6721	0,6687	0,6653	0,662	0,6588	0,6556	0,6524	0,6492	0,6461	0,6431	0,6401	0,6371	0,6341	0,6312	0,6284	0,6255	0,6227
83,4	0,6779	0,6744	0,6709	0,6675	0,6642	0,6609	0,6576	0,6544	0,6512	0,6481	0,645	0,6419	0,6389	0,6359	0,633	0,6301	0,6272	0,6244	0,6216
83,5	0,6767	0,6732	0,6698	0,6664	0,663	0,6597	0,6564	0,6532	0,65	0,6469	0,6438	0,6407	0,6377	0,6347	0,6318	0,6289	0,626	0,6232	0,6204
83,6	0,6755	0,672	0,6686	0,6652	0,6618	0,6585	0,6553	0,652	0,6489	0,6457	0,6426	0,6396	0,6366	0,6336	0,6306	0,6277	0,6249	0,622	0,6192
83,7	0,6743	0,6708	0,6674	0,664	0,6606	0,6573	0,6541	0,6509	0,6477	0,6445	0,6415	0,6384	0,6354	0,6324	0,6295	0,6266	0,6237	0,6208	0,618
83,8	0,6732	0,6697	0,6662	0,6628	0,6595	0,6562	0,6529	0,6497	0,6465	0,6434	0,6403	0,6372	0,6342	0,6312	0,6283	0,6254	0,6225	0,6197	0,6169
83,9	0,672	0,6685	0,665	0,6616	0,6583	0,655	0,6517	0,6485	0,6453	0,6422	0,6391	0,636	0,633	0,6301	0,6271	0,6242	0,6213	0,6185	0,6157
84	0,6708	0,6673	0,6638	0,6604	0,6571	0,6538	0,6505	0,6473	0,6441	0,641	0,6379	0,6349	0,6318	0,6289	0,6259	0,623	0,6202	0,6173	0,6145
84,1	0,6696	0,6661	0,6627	0,6593	0,6559	0,6526	0,6493	0,6461	0,643	0,6398	0,6367	0,6337	0,6307	0,6277	0,6248	0,6218	0,619	0,6161	0,6133
84,2	0,6684	0,6649	0,6615	0,6581	0,6547	0,6514	0,6482	0,6449	0,6418	0,6386	0,6356	0,6325	0,6295	0,6265	0,6236	0,6207	0,6178	0,615	0,6122
84,3	0,6672	0,6637	0,6603	0,6569	0,6535	0,6502	0,647	0,6438	0,6406	0,6375	0,6344	0,6313	0,6283	0,6253	0,6224	0,6195	0,6166	0,6138	0,611
84,4	0,666	0,6625	0,6591	0,6557	0,6523	0,649	0,6458	0,6426	0,6394	0,6363	0,6332	0,6301	0,6271	0,6241	0,6212	0,6183	0,6154	0,6126	0,6098
84,5	0,6648	0,6613	0,6579	0,6545	0,6512	0,6479	0,6446	0,6414	0,6382	0,6351	0,632	0,6289	0,6259	0,623	0,62	0,6171	0,6142	0,6114	0,6086
84,6	0,6636	0,6601	0,6567	0,6533	0,65	0,6467	0,6434	0,6402	0,637	0,6339	0,6308	0,6277	0,6247	0,6218	0,6188	0,6159	0,6131	0,6102	0,6074
84,7	0,6624	0,6589	0,6555	0,6521	0,6488	0,6455	0,6422	0,639	0,6358	0,6327	0,6296	0,6266	0,6235	0,6206	0,6176	0,6147	0,6119	0,609	0,6062
84,8	0,6612	0,6577	0,6543	0,6509	0,6476	0,6443	0,641	0,6378	0,6346	0,6315	0,6284	0,6254	0,6224	0,6194	0,6164	0,6135	0,6107	0,6078	0,605
84,9	0,66	0,6565	0,6531	0,6497	0,6464	0,6431	0,6398	0,6366	0,6334	0,6303	0,6272	0,6242	0,6212	0,6182	0,6152	0,6123	0,6095	0,6066	0,6038

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
81,5	0,6407	0,6379	0,6352	0,6325	0,6298	0,6272	0,6246	0,622	0,6195	0,617	0,6145	0,612	0,6095	0,6071	0,6047	0,6023	0,6	0,5977	0,5954
81,6	0,6395	0,6368	0,634	0,6314	0,6287	0,6261	0,6235	0,6209	0,6183	0,6158	0,6133	0,6109	0,6084	0,606	0,6036	0,6012	0,5989	0,5965	0,5942
81,7	0,6384	0,6356	0,6329	0,6302	0,6276	0,6249	0,6223	0,6198	0,6172	0,6147	0,6122	0,6097	0,6073	0,6049	0,6025	0,6001	0,5977	0,5954	0,5931
81,8	0,6372	0,6345	0,6318	0,6291	0,6264	0,6238	0,6212	0,6186	0,6161	0,6135	0,6111	0,6086	0,6061	0,6037	0,6013	0,599	0,5966	0,5943	0,592
81,9	0,6361	0,6333	0,6306	0,6279	0,6253	0,6226	0,62	0,6175	0,6149	0,6124	0,6099	0,6074	0,605	0,6026	0,6002	0,5978	0,5955	0,5931	0,5908
82	0,635	0,6322	0,6295	0,6268	0,6241	0,6215	0,6189	0,6163	0,6138	0,6113	0,6088	0,6063	0,6039	0,6014	0,5991	0,5967	0,5943	0,592	0,5897
82,1	0,6338	0,6311	0,6283	0,6257	0,623	0,6204	0,6178	0,6152	0,6126	0,6101	0,6076	0,6052	0,6027	0,6003	0,5979	0,5955	0,5932	0,5909	0,5886
82,2	0,6327	0,6299	0,6272	0,6245	0,6218	0,6192	0,6166	0,6141	0,6115	0,609	0,6065	0,604	0,6016	0,5992	0,5968	0,5944	0,5921	0,5897	0,5874
82,3	0,6315	0,6288	0,626	0,6234	0,6207	0,6181	0,6155	0,6129	0,6104	0,6078	0,6053	0,6029	0,6004	0,598	0,5956	0,5933	0,5909	0,5886	0,5863
82,4	0,6304	0,6276	0,6249	0,6222	0,6196	0,6169	0,6143	0,6118	0,6092	0,6067	0,6042	0,6017	0,5993	0,5969	0,5945	0,5921	0,5898	0,5874	0,5851
82,5	0,6292	0,6265	0,6237	0,6211	0,6184	0,6158	0,6132	0,6106	0,6081	0,6056	0,6031	0,6006	0,5982	0,5957	0,5933	0,591	0,5886	0,5863	0,584
82,6	0,6281	0,6253	0,6226	0,6199	0,6173	0,6146	0,612	0,6095	0,6069	0,6044	0,6019	0,5994	0,597	0,5946	0,5922	0,5898	0,5875	0,5852	0,5829
82,7	0,6269	0,6242	0,6214	0,6188	0,6161	0,6135	0,6109	0,6083	0,6058	0,6033	0,6008	0,5983	0,5959	0,5934	0,591	0,5887	0,5863	0,584	0,5817
82,8	0,6257	0,623	0,6203	0,6176	0,6149	0,6123	0,6097	0,6072	0,6046	0,6021	0,5996	0,5971	0,5947	0,5923	0,5899	0,5875	0,5852	0,5829	0,5806
82,9	0,6246	0,6218	0,6191	0,6164	0,6138	0,6112	0,6086	0,606	0,6035	0,6009	0,5985	0,596	0,5936	0,5911	0,5887	0,5864	0,584	0,5817	0,5794
83	0,6234	0,6207	0,618	0,6153	0,6126	0,61	0,6074	0,6048	0,6023	0,5998	0,5973	0,5948	0,5924	0,59	0,5876	0,5852	0,5829	0,5806	0,5783
83,1	0,6223	0,6195	0,6168	0,6141	0,6115	0,6089	0,6063	0,6037	0,6011	0,5986	0,5961	0,5937	0,5912	0,5888	0,5864	0,5841	0,5817	0,5794	0,5771
83,2	0,6211	0,6184	0,6157	0,613	0,6103	0,6077	0,6051	0,6025	0,6	0,5975	0,595	0,5925	0,5901	0,5877	0,5853	0,5829	0,5806	0,5783	0,576
83,3	0,6199	0,6172	0,6145	0,6118	0,6092	0,6065	0,6039	0,6014	0,5988	0,5963	0,5938	0,5914	0,5889	0,5865	0,5841	0,5818	0,5794	0,5771	0,5748
83,4	0,6188	0,616	0,6133	0,6106	0,608	0,6054	0,6028	0,6002	0,5977	0,5952	0,5927	0,5902	0,5878	0,5854	0,583	0,5806	0,5783	0,5759	0,5736
83,5	0,6176	0,6149	0,6122	0,6095	0,6068	0,6042	0,6016	0,599	0,5965	0,594	0,5915	0,589	0,5866	0,5842	0,5818	0,5794	0,5771	0,5748	0,5725
83,6	0,6164	0,6137	0,611	0,6083	0,6057	0,603	0,6004	0,5979	0,5953	0,5928	0,5903	0,5879	0,5854	0,583	0,5806	0,5783	0,5759	0,5736	0,5713
83,7	0,6153	0,6125	0,6098	0,6071	0,6045	0,6019	0,5993	0,5967	0,5942	0,5917	0,5892	0,5867	0,5843	0,5819	0,5795	0,5771	0,5748	0,5725	0,5702
83,8	0,6141	0,6114	0,6086	0,606	0,6033	0,6007	0,5981	0,5955	0,593	0,5905	0,588	0,5855	0,5831	0,5807	0,5783	0,5759	0,5736	0,5713	0,569
83,9	0,6129	0,6102	0,6075	0,6048	0,6021	0,5995	0,5969	0,5944	0,5918	0,5893	0,5868	0,5844	0,5819	0,5795	0,5771	0,5748	0,5724	0,5701	0,5678
84	0,6117	0,609	0,6063	0,6036	0,601	0,5984	0,5958	0,5932	0,5907	0,5881	0,5857	0,5832	0,5808	0,5784	0,576	0,5736	0,5713	0,569	0,5667
84,1	0,6106	0,6078	0,6051	0,6024	0,5998	0,5972	0,5946	0,592	0,5895	0,587	0,5845	0,582	0,5796	0,5772	0,5748	0,5724	0,5701	0,5678	0,5655
84,2	0,6094	0,6067	0,6039	0,6013	0,5986	0,596	0,5934	0,5908	0,5883	0,5858	0,5833	0,5809	0,5784	0,576	0,5736	0,5713	0,5689	0,5666	0,5643
84,3	0,6082	0,6055	0,6028	0,6001	0,5974	0,5948	0,5922	0,5897	0,5871	0,5846	0,5821	0,5797	0,5772	0,5748	0,5725	0,5701	0,5678	0,5654	0,5631
84,4	0,607	0,6043	0,6016	0,5989	0,5963	0,5936	0,591	0,5885	0,586	0,5834	0,581	0,5785	0,5761	0,5737	0,5713	0,5689	0,5666	0,5643	0,562
84,5	0,6058	0,6031	0,6004	0,5977	0,5951	0,5925	0,5899	0,5873	0,5848	0,5823	0,5798	0,5773	0,5749	0,5725	0,5701	0,5677	0,5654	0,5631	0,5608
84,6	0,6047	0,6019	0,5992	0,5965	0,5939	0,5913	0,5887	0,5861	0,5836	0,5811	0,5786	0,5761	0,5737	0,5713	0,5689	0,5666	0,5642	0,5619	0,5596
84,7	0,6035	0,6007	0,598	0,5953	0,5927	0,5901	0,5875	0,5849	0,5824	0,5799	0,5774	0,575	0,5725	0,5701	0,5677	0,5654	0,563	0,5607	0,5584
84,8	0,6023	0,5995	0,5968	0,5942	0,5915	0,5889	0,5863	0,5838	0,5812	0,5787	0,5762	0,5738	0,5713	0,5689	0,5666	0,5642	0,5619	0,5595	0,5572
84,9	0,6011	0,5983	0,5956	0,593	0,5903	0,5877	0,5851	0,5826	0,58	0,5775	0,575	0,5726	0,5702	0,5677	0,5654	0,563	0,5607	0,5584	0,5561

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
81,5	0,5931	0,5908	0,5886	0,5864	0,5842	0,582	0,5798	0,5777	0,5755	0,5734	0,5714	0,5693	0,5672	0,5652	0,5632	0,5612	0,5592	0,5572	0,5553
81,6	0,592	0,5897	0,5874	0,5852	0,583	0,5808	0,5787	0,5765	0,5744	0,5723	0,5702	0,5682	0,5661	0,5641	0,5621	0,5601	0,5581	0,5561	0,5541
81,7	0,5908	0,5886	0,5863	0,5841	0,5819	0,5797	0,5776	0,5754	0,5733	0,5712	0,5691	0,567	0,565	0,5629	0,5609	0,5589	0,5569	0,555	0,553
81,8	0,5897	0,5874	0,5852	0,583	0,5808	0,5786	0,5764	0,5743	0,5722	0,5701	0,568	0,5659	0,5639	0,5618	0,5598	0,5578	0,5558	0,5539	0,5519
81,9	0,5886	0,5863	0,5841	0,5818	0,5796	0,5775	0,5753	0,5732	0,571	0,5689	0,5668	0,5648	0,5627	0,5607	0,5587	0,5567	0,5547	0,5527	0,5508
82	0,5874	0,5852	0,5829	0,5807	0,5785	0,5763	0,5742	0,572	0,5699	0,5678	0,5657	0,5636	0,5616	0,5596	0,5575	0,5555	0,5536	0,5516	0,5496
82,1	0,5863	0,584	0,5818	0,5796	0,5774	0,5752	0,573	0,5709	0,5688	0,5667	0,5646	0,5625	0,5605	0,5584	0,5564	0,5544	0,5524	0,5505	0,5485
82,2	0,5851	0,5829	0,5806	0,5784	0,5762	0,5741	0,5719	0,5698	0,5676	0,5655	0,5634	0,5614	0,5593	0,5573	0,5553	0,5533	0,5513	0,5493	0,5474
82,3	0,584	0,5817	0,5795	0,5773	0,5751	0,5729	0,5708	0,5686	0,5665	0,5644	0,5623	0,5602	0,5582	0,5562	0,5541	0,5521	0,5502	0,5482	0,5462
82,4	0,5829	0,5806	0,5784	0,5761	0,574	0,5718	0,5696	0,5675	0,5654	0,5633	0,5612	0,5591	0,5571	0,555	0,553	0,551	0,549	0,5471	0,5451
82,5	0,5817	0,5795	0,5772	0,575	0,5728	0,5706	0,5685	0,5663	0,5642	0,5621	0,56	0,558	0,5559	0,5539	0,5519	0,5499	0,5479	0,5459	0,544
82,6	0,5806	0,5783	0,5761	0,5739	0,5717	0,5695	0,5673	0,5652	0,5631	0,561	0,5589	0,5568	0,5548	0,5527	0,5507	0,5487	0,5468	0,5448	0,5428
82,7	0,5794	0,5772	0,5749	0,5727	0,5705	0,5683	0,5662	0,5641	0,5619	0,5598	0,5578	0,5557	0,5536	0,5516	0,5496	0,5476	0,5456	0,5436	0,5417
82,8	0,5783	0,576	0,5738	0,5716	0,5694	0,5672	0,565	0,5629	0,5608	0,5587	0,5566	0,5545	0,5525	0,5505	0,5484	0,5465	0,5445	0,5425	0,5406
82,9	0,5771	0,5749	0,5726	0,5704	0,5682	0,5661	0,5639	0,5618	0,5596	0,5575	0,5555	0,5534	0,5513	0,5493	0,5473	0,5453	0,5433	0,5414	0,5394
83	0,576	0,5737	0,5715	0,5693	0,5671	0,5649	0,5628	0,5606	0,5585	0,5564	0,5543	0,5522	0,5502	0,5482	0,5462	0,5442	0,5422	0,5402	0,5383
83,1	0,5748	0,5726	0,5703	0,5681	0,5659	0,5638	0,5616	0,5595	0,5573	0,5552	0,5532	0,5511	0,5491	0,547	0,545	0,543	0,541	0,5391	0,5371
83,2	0,5737	0,5714	0,5692	0,567	0,5648	0,5626	0,5604	0,5583	0,5562	0,5541	0,552	0,55	0,5479	0,5459	0,5439	0,5419	0,5399	0,5379	0,536
83,3	0,5725	0,5703	0,568	0,5658	0,5636	0,5614	0,5593	0,5572	0,555	0,5529	0,5509	0,5488	0,5468	0,5447	0,5427	0,5407	0,5387	0,5368	0,5348
83,4	0,5714	0,5691	0,5669	0,5647	0,5625	0,5603	0,5581	0,556	0,5539	0,5518	0,5497	0,5476	0,5456	0,5436	0,5416	0,5396	0,5376	0,5356	0,5337
83,5	0,5702	0,568	0,5657	0,5635	0,5613	0,5591	0,557	0,5548	0,5527	0,5506	0,5486	0,5465	0,5444	0,5424	0,5404	0,5384	0,5364	0,5345	0,5325
83,6	0,569	0,5668	0,5646	0,5623	0,5601	0,558	0,5558	0,5537	0,5516	0,5495	0,5474	0,5453	0,5433	0,5413	0,5392	0,5373	0,5353	0,5333	0,5314
83,7	0,5679	0,5656	0,5634	0,5612	0,559	0,5568	0,5547	0,5525	0,5504	0,5483	0,5462	0,5442	0,5421	0,5401	0,5381	0,5361	0,5341	0,5322	0,5302
83,8	0,5667	0,5645	0,5622	0,56	0,5578	0,5557	0,5535	0,5514	0,5493	0,5472	0,5451	0,543	0,541	0,5389	0,5369	0,5349	0,533	0,531	0,5291
83,9	0,5656	0,5633	0,5611	0,5589	0,5567	0,5545	0,5523	0,5502	0,5481	0,546	0,5439	0,5419	0,5398	0,5378	0,5358	0,5338	0,5318	0,5298	0,5279
84	0,5644	0,5621	0,5599	0,5577	0,5555	0,5533	0,5512	0,549	0,5469	0,5448	0,5427	0,5407	0,5386	0,5366	0,5346	0,5326	0,5306	0,5287	0,5267
84,1	0,5632	0,561	0,5587	0,5565	0,5543	0,5522	0,55	0,5479	0,5458	0,5437	0,5416	0,5395	0,5375	0,5355	0,5334	0,5315	0,5295	0,5275	0,5256
84,2	0,562	0,5598	0,5576	0,5553	0,5532	0,551	0,5488	0,5467	0,5446	0,5425	0,5404	0,5384	0,5363	0,5343	0,5323	0,5303	0,5283	0,5263	0,5244
84,3	0,5609	0,5586	0,5564	0,5542	0,552	0,5498	0,5477	0,5455	0,5434	0,5413	0,5392	0,5372	0,5351	0,5331	0,5311	0,5291	0,5271	0,5252	0,5232
84,4	0,5597	0,5574	0,5552	0,553	0,5508	0,5486	0,5465	0,5444	0,5422	0,5402	0,5381	0,536	0,534	0,5319	0,5299	0,5279	0,526	0,524	0,5221
84,5	0,5585	0,5563	0,554	0,5518	0,5496	0,5475	0,5453	0,5432	0,5411	0,539	0,5369	0,5348	0,5328	0,5308	0,5288	0,5268	0,5248	0,5228	0,5209
84,6	0,5573	0,5551	0,5529	0,5506	0,5485	0,5463	0,5441	0,542	0,5399	0,5378	0,5357	0,5337	0,5316	0,5296	0,5276	0,5256	0,5236	0,5217	0,5197
84,7	0,5562	0,5539	0,5517	0,5495	0,5473	0,5451	0,543	0,5408	0,5387	0,5366	0,5346	0,5325	0,5305	0,5284	0,5264	0,5244	0,5225	0,5205	0,5186
84,8	0,555	0,5527	0,5505	0,5483	0,5461	0,5439	0,5418	0,5397	0,5375	0,5354	0,5334	0,5313	0,5293	0,5272	0,5252	0,5233	0,5213	0,5193	0,5174
84,9	0,5538	0,5515	0,5493	0,5471	0,5449	0,5427	0,5406	0,5385	0,5364	0,5343	0,5322	0,5301	0,5281	0,5261	0,5241	0,5221	0,5201	0,5181	0,5162

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
81,5	0,5533	0,5514	0,5495	0,5476	0,5457	0,5439	0,542	0,5402	0,5384	0,5366	0,5348	0,533	0,5312	0,5295	0,5277	0,526	0,5243	0,5225	0,5209
81,6	0,5522	0,5503	0,5484	0,5465	0,5446	0,5427	0,5409	0,5391	0,5372	0,5354	0,5336	0,5319	0,5301	0,5283	0,5266	0,5249	0,5231	0,5214	0,5197
81,7	0,5511	0,5492	0,5473	0,5454	0,5435	0,5416	0,5398	0,5379	0,5361	0,5343	0,5325	0,5307	0,529	0,5272	0,5255	0,5237	0,522	0,5203	0,5186
81,8	0,55	0,548	0,5461	0,5442	0,5424	0,5405	0,5387	0,5368	0,535	0,5332	0,5314	0,5296	0,5278	0,5261	0,5243	0,5226	0,5209	0,5192	0,5175
81,9	0,5488	0,5469	0,545	0,5431	0,5412	0,5394	0,5375	0,5357	0,5339	0,5321	0,5303	0,5285	0,5267	0,525	0,5232	0,5215	0,5198	0,5181	0,5164
82	0,5477	0,5458	0,5439	0,542	0,5401	0,5382	0,5364	0,5346	0,5327	0,5309	0,5291	0,5274	0,5256	0,5238	0,5221	0,5204	0,5187	0,5169	0,5153
82,1	0,5466	0,5447	0,5427	0,5409	0,539	0,5371	0,5353	0,5334	0,5316	0,5298	0,528	0,5262	0,5245	0,5227	0,521	0,5192	0,5175	0,5158	0,5141
82,2	0,5454	0,5435	0,5416	0,5397	0,5379	0,536	0,5341	0,5323	0,5305	0,5287	0,5269	0,5251	0,5233	0,5216	0,5198	0,5181	0,5164	0,5147	0,513
82,3	0,5443	0,5424	0,5405	0,5386	0,5367	0,5349	0,533	0,5312	0,5294	0,5276	0,5258	0,524	0,5222	0,5205	0,5187	0,517	0,5153	0,5136	0,5119
82,4	0,5432	0,5413	0,5394	0,5375	0,5356	0,5337	0,5319	0,53	0,5282	0,5264	0,5246	0,5229	0,5211	0,5193	0,5176	0,5159	0,5141	0,5124	0,5107
82,5	0,542	0,5401	0,5382	0,5363	0,5345	0,5326	0,5307	0,5289	0,5271	0,5253	0,5235	0,5217	0,52	0,5182	0,5165	0,5147	0,513	0,5113	0,5096
82,6	0,5409	0,539	0,5371	0,5352	0,5333	0,5315	0,5296	0,5278	0,526	0,5242	0,5224	0,5206	0,5188	0,5171	0,5153	0,5136	0,5119	0,5102	0,5085
82,7	0,5398	0,5378	0,5359	0,5341	0,5322	0,5303	0,5285	0,5266	0,5248	0,523	0,5212	0,5195	0,5177	0,5159	0,5142	0,5125	0,5107	0,509	0,5074
82,8	0,5386	0,5367	0,5348	0,5329	0,531	0,5292	0,5273	0,5255	0,5237	0,5219	0,5201	0,5183	0,5165	0,5148	0,5131	0,5113	0,5096	0,5079	0,5062
82,9	0,5375	0,5356	0,5337	0,5318	0,5299	0,528	0,5262	0,5244	0,5225	0,5207	0,519	0,5172	0,5154	0,5137	0,5119	0,5102	0,5085	0,5068	0,5051
83	0,5363	0,5344	0,5325	0,5306	0,5288	0,5269	0,5251	0,5232	0,5214	0,5196	0,5178	0,516	0,5143	0,5125	0,5108	0,5091	0,5073	0,5056	0,5039
83,1	0,5352	0,5333	0,5314	0,5295	0,5276	0,5258	0,5239	0,5221	0,5203	0,5185	0,5167	0,5149	0,5131	0,5114	0,5096	0,5079	0,5062	0,5045	0,5028
83,2	0,534	0,5321	0,5302	0,5283	0,5265	0,5246	0,5228	0,5209	0,5191	0,5173	0,5155	0,5137	0,512	0,5102	0,5085	0,5068	0,5051	0,5033	0,5017
83,3	0,5329	0,531	0,5291	0,5272	0,5253	0,5235	0,5216	0,5198	0,518	0,5162	0,5144	0,5126	0,5108	0,5091	0,5073	0,5056	0,5039	0,5022	0,5005
83,4	0,5317	0,5298	0,5279	0,526	0,5242	0,5223	0,5205	0,5186	0,5168	0,515	0,5132	0,5115	0,5097	0,5079	0,5062	0,5045	0,5028	0,5011	0,4994
83,5	0,5306	0,5287	0,5268	0,5249	0,523	0,5212	0,5193	0,5175	0,5157	0,5139	0,5121	0,5103	0,5085	0,5068	0,5051	0,5033	0,5016	0,4999	0,4982
83,6	0,5294	0,5275	0,5256	0,5237	0,5219	0,52	0,5182	0,5163	0,5145	0,5127	0,5109	0,5092	0,5074	0,5056	0,5039	0,5022	0,5005	0,4988	0,4971
83,7	0,5283	0,5264	0,5245	0,5226	0,5207	0,5189	0,517	0,5152	0,5134	0,5116	0,5098	0,508	0,5062	0,5045	0,5028	0,501	0,4993	0,4976	0,4959
83,8	0,5271	0,5252	0,5233	0,5214	0,5196	0,5177	0,5159	0,514	0,5122	0,5104	0,5086	0,5068	0,5051	0,5033	0,5016	0,4999	0,4982	0,4965	0,4948
83,9	0,526	0,5241	0,5222	0,5203	0,5184	0,5165	0,5147	0,5129	0,5111	0,5093	0,5075	0,5057	0,5039	0,5022	0,5004	0,4987	0,497	0,4953	0,4936
84	0,5248	0,5229	0,521	0,5191	0,5172	0,5154	0,5135	0,5117	0,5099	0,5081	0,5063	0,5045	0,5028	0,501	0,4993	0,4976	0,4959	0,4942	0,4925
84,1	0,5236	0,5217	0,5198	0,5179	0,5161	0,5142	0,5124	0,5106	0,5087	0,5069	0,5051	0,5034	0,5016	0,4999	0,4981	0,4964	0,4947	0,493	0,4913
84,2	0,5225	0,5206	0,5187	0,5168	0,5149	0,5131	0,5112	0,5094	0,5076	0,5058	0,504	0,5022	0,5005	0,4987	0,497	0,4952	0,4935	0,4918	0,4901
84,3	0,5213	0,5194	0,5175	0,5156	0,5137	0,5119	0,5101	0,5082	0,5064	0,5046	0,5028	0,5011	0,4993	0,4975	0,4958	0,4941	0,4924	0,4907	0,489
84,4	0,5201	0,5182	0,5163	0,5144	0,5126	0,5107	0,5089	0,5071	0,5052	0,5034	0,5017	0,4999	0,4981	0,4964	0,4946	0,4929	0,4912	0,4895	0,4878
84,5	0,519	0,5171	0,5152	0,5133	0,5114	0,5096	0,5077	0,5059	0,5041	0,5023	0,5005	0,4987	0,497	0,4952	0,4935	0,4918	0,49	0,4883	0,4867
84,6	0,5178	0,5159	0,514	0,5121	0,5102	0,5084	0,5065	0,5047	0,5029	0,5011	0,4993	0,4976	0,4958	0,494	0,4923	0,4906	0,4889	0,4872	0,4855
84,7	0,5166	0,5147	0,5128	0,5109	0,5091	0,5072	0,5054	0,5035	0,5017	0,4999	0,4982	0,4964	0,4946	0,4929	0,4911	0,4894	0,4877	0,486	0,4843
84,8	0,5154	0,5135	0,5116	0,5098	0,5079	0,506	0,5042	0,5024	0,5006	0,4988	0,497	0,4952	0,4934	0,4917	0,49	0,4882	0,4865	0,4848	0,4832
84,9	0,5143	0,5124	0,5105	0,5086	0,5067	0,5049	0,503	0,5012	0,4994	0,4976	0,4958	0,494	0,4923	0,4905	0,4888	0,4871	0,4854	0,4837	0,482

Table of internal index of viability and vitality (critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
81,5	0,5192	0,5175	0,5158	0,5142	0,5125	0,5109	0,5093	0,5077
81,6	0,5181	0,5164	0,5147	0,5131	0,5114	0,5098	0,5082	0,5066
81,7	0,5169	0,5153	0,5136	0,512	0,5103	0,5087	0,5071	0,5055
81,8	0,5158	0,5141	0,5125	0,5108	0,5092	0,5076	0,506	0,5043
81,9	0,5147	0,513	0,5114	0,5097	0,5081	0,5065	0,5048	0,5032
82	0,5136	0,5119	0,5102	0,5086	0,507	0,5053	0,5037	0,5021
82,1	0,5124	0,5108	0,5091	0,5075	0,5058	0,5042	0,5026	0,501
82,2	0,5113	0,5097	0,508	0,5063	0,5047	0,5031	0,5015	0,4999
82,3	0,5102	0,5085	0,5069	0,5052	0,5036	0,502	0,5003	0,4987
82,4	0,5091	0,5074	0,5057	0,5041	0,5025	0,5008	0,4992	0,4976
82,5	0,5079	0,5063	0,5046	0,503	0,5013	0,4997	0,4981	0,4965
82,6	0,5068	0,5051	0,5035	0,5018	0,5002	0,4986	0,497	0,4954
82,7	0,5057	0,504	0,5023	0,5007	0,4991	0,4974	0,4958	0,4942
82,8	0,5045	0,5029	0,5012	0,4996	0,4979	0,4963	0,4947	0,4931
82,9	0,5034	0,5017	0,5001	0,4984	0,4968	0,4952	0,4936	0,492
83	0,5023	0,5006	0,4989	0,4973	0,4957	0,494	0,4924	0,4908
83,1	0,5011	0,4995	0,4978	0,4962	0,4945	0,4929	0,4913	0,4897
83,2	0,5	0,4983	0,4967	0,495	0,4934	0,4918	0,4901	0,4885
83,3	0,4988	0,4972	0,4955	0,4939	0,4922	0,4906	0,489	0,4874
83,4	0,4977	0,496	0,4944	0,4927	0,4911	0,4895	0,4879	0,4863
83,5	0,4965	0,4949	0,4932	0,4916	0,4899	0,4883	0,4867	0,4851
83,6	0,4954	0,4937	0,4921	0,4904	0,4888	0,4872	0,4856	0,484
83,7	0,4942	0,4926	0,4909	0,4893	0,4877	0,486	0,4844	0,4828
83,8	0,4931	0,4914	0,4898	0,4881	0,4865	0,4849	0,4833	0,4817
83,9	0,4919	0,4903	0,4886	0,487	0,4853	0,4837	0,4821	0,4805
84	0,4908	0,4891	0,4875	0,4858	0,4842	0,4826	0,481	0,4794
84,1	0,4896	0,488	0,4863	0,4847	0,483	0,4814	0,4798	0,4782
84,2	0,4885	0,4868	0,4852	0,4835	0,4819	0,4803	0,4787	0,477
84,3	0,4873	0,4856	0,484	0,4824	0,4807	0,4791	0,4775	0,4759
84,4	0,4861	0,4845	0,4828	0,4812	0,4796	0,4779	0,4763	0,4747
84,5	0,485	0,4833	0,4817	0,48	0,4784	0,4768	0,4752	0,4736
84,6	0,4838	0,4822	0,4805	0,4789	0,4772	0,4756	0,474	0,4724
84,7	0,4826	0,481	0,4793	0,4777	0,4761	0,4744	0,4728	0,4712
84,8	0,4815	0,4798	0,4782	0,4765	0,4749	0,4733	0,4717	0,4701
84,9	0,4803	0,4786	0,477	0,4754	0,4737	0,4721	0,4705	0,4689

Table of internal index of viability and vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
85	1,1031	1,081	1,0608	1,0422	1,025	1,009	0,9939	0,9798	0,9665	0,9539	0,942	0,9306	0,9198	0,9094	0,8995	0,89	0,8808	0,872	0,8635

Table of internal index of viabilityand vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
85	0,8553	0,8474	0,8397	0,8323	0,8251	0,8181	0,8113	0,8047	0,7983	0,7921	0,786	0,7801	0,7743	0,7686	0,7631	0,7577	0,7524	0,7473	0,7422

Table of internal index of viabilityand vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
85	0,7373	0,7324	0,7277	0,7231	0,7185	0,714	0,7096	0,7053	0,7011	0,6969	0,6928	0,6888	0,6848	0,6809	0,6771	0,6733	0,6696	0,666	0,6624

Table of internal index of viabilityand vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
85	0,6588	0,6553	0,6519	0,6485	0,6452	0,6419	0,6386	0,6354	0,6322	0,6291	0,626	0,623	0,62	0,617	0,6141	0,6112	0,6083	0,6055	0,6027

Table of internal index of viabilityand vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
85	0,5999	0,5972	0,5945	0,5918	0,5891	0,5865	0,5839	0,5814	0,5788	0,5763	0,5739	0,5714	0,569	0,5666	0,5642	0,5618	0,5595	0,5572	0,5549

Table of internal index of viabilityand vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
85	0,5526	0,5504	0,5481	0,5459	0,5437	0,5416	0,5394	0,5373	0,5352	0,5331	0,531	0,529	0,5269	0,5249	0,5229	0,5209	0,5189	0,517	0,515

Table of internal index of viabilityand vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
85	0,5131	0,5112	0,5093	0,5074	0,5055	0,5037	0,5018	0,5	0,4982	0,4964	0,4946	0,4929	0,4911	0,4894	0,4876	0,4859	0,4842	0,4825	0,4808

Table of internal index of viabilityand vitality
(critical index of infant mortality, gene pool quality α)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
85	0,4791	0,4775	0,4758	0,4742	0,4725	0,4709	0,4693	0,4677

ADDENDUM

A_2

Parameters of external viability of population (γ)

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
50	0,6919	0,7065	0,7201	0,7328	0,7448	0,7561	0,7669	0,7772	0,787	0,7964	0,8055	0,8142	0,8225	0,8307	0,8385	0,8461	0,8534	0,8606	0,8675
50,1	0,6963	0,7109	0,7245	0,7373	0,7493	0,7607	0,7716	0,7819	0,7917	0,8012	0,8103	0,819	0,8274	0,8355	0,8434	0,851	0,8584	0,8656	0,8726
50,2	0,7007	0,7153	0,729	0,7418	0,7539	0,7654	0,7762	0,7866	0,7965	0,806	0,8151	0,8238	0,8323	0,8405	0,8483	0,856	0,8634	0,8706	0,8776
50,3	0,7051	0,7198	0,7335	0,7464	0,7585	0,77	0,7809	0,7913	0,8013	0,8108	0,8199	0,8287	0,8372	0,8454	0,8533	0,861	0,8684	0,8757	0,8827
50,4	0,7095	0,7243	0,7381	0,751	0,7632	0,7747	0,7857	0,7961	0,8061	0,8156	0,8248	0,8336	0,8421	0,8503	0,8583	0,866	0,8735	0,8807	0,8878
50,5	0,7139	0,7288	0,7426	0,7556	0,7678	0,7794	0,7904	0,8009	0,8109	0,8205	0,8297	0,8385	0,8471	0,8553	0,8633	0,871	0,8785	0,8858	0,8929
50,6	0,7184	0,7333	0,7472	0,7602	0,7725	0,7841	0,7951	0,8057	0,8157	0,8253	0,8346	0,8435	0,852	0,8603	0,8683	0,8761	0,8836	0,8909	0,898
50,7	0,7229	0,7379	0,7518	0,7649	0,7772	0,7889	0,7999	0,8105	0,8206	0,8302	0,8395	0,8484	0,857	0,8654	0,8734	0,8812	0,8887	0,8961	0,9032
50,8	0,7274	0,7424	0,7564	0,7695	0,7819	0,7936	0,8047	0,8153	0,8254	0,8351	0,8445	0,8534	0,8621	0,8704	0,8785	0,8863	0,8939	0,9012	0,9084
50,9	0,7319	0,747	0,7611	0,7742	0,7867	0,7984	0,8096	0,8202	0,8304	0,8401	0,8494	0,8584	0,8671	0,8755	0,8836	0,8914	0,899	0,9064	0,9136
51	0,7365	0,7516	0,7657	0,779	0,7914	0,8032	0,8144	0,8251	0,8353	0,8451	0,8544	0,8635	0,8722	0,8806	0,8887	0,8966	0,9042	0,9116	0,9188
51,1	0,741	0,7563	0,7704	0,7837	0,7962	0,808	0,8193	0,83	0,8402	0,85	0,8595	0,8685	0,8773	0,8857	0,8939	0,9017	0,9094	0,9169	0,9241
51,2	0,7456	0,7609	0,7751	0,7885	0,801	0,8129	0,8242	0,8349	0,8452	0,8551	0,8645	0,8736	0,8824	0,8908	0,899	0,907	0,9146	0,9221	0,9294
51,3	0,7503	0,7656	0,7799	0,7932	0,8058	0,8178	0,8291	0,8399	0,8502	0,8601	0,8696	0,8787	0,8875	0,896	0,9042	0,9122	0,9199	0,9274	0,9347
51,4	0,7549	0,7703	0,7846	0,7981	0,8107	0,8227	0,8341	0,8449	0,8552	0,8652	0,8747	0,8838	0,8927	0,9012	0,9094	0,9174	0,9252	0,9327	0,94
51,5	0,7596	0,775	0,7894	0,8029	0,8156	0,8276	0,839	0,8499	0,8603	0,8702	0,8798	0,889	0,8978	0,9064	0,9147	0,9227	0,9305	0,938	0,9454
51,6	0,7643	0,7798	0,7942	0,8077	0,8205	0,8325	0,844	0,8549	0,8654	0,8753	0,8849	0,8942	0,9031	0,9116	0,92	0,928	0,9358	0,9434	0,9507
51,7	0,769	0,7845	0,799	0,8126	0,8254	0,8375	0,849	0,86	0,8704	0,8805	0,8901	0,8994	0,9083	0,9169	0,9252	0,9333	0,9412	0,9487	0,9561
51,8	0,7737	0,7893	0,8039	0,8175	0,8304	0,8425	0,8541	0,8651	0,8756	0,8856	0,8953	0,9046	0,9135	0,9222	0,9306	0,9387	0,9465	0,9542	0,9616
51,9	0,7785	0,7941	0,8087	0,8224	0,8353	0,8475	0,8591	0,8702	0,8807	0,8908	0,9005	0,9098	0,9188	0,9275	0,9359	0,944	0,9519	0,9596	0,967
52	0,7832	0,799	0,8136	0,8274	0,8403	0,8526	0,8642	0,8753	0,8859	0,896	0,9057	0,9151	0,9241	0,9328	0,9413	0,9494	0,9573	0,965	0,9725
52,1	0,788	0,8038	0,8186	0,8324	0,8454	0,8576	0,8693	0,8804	0,8911	0,9012	0,911	0,9204	0,9295	0,9382	0,9467	0,9548	0,9628	0,9705	0,978
52,2	0,7929	0,8087	0,8235	0,8374	0,8504	0,8627	0,8745	0,8856	0,8963	0,9065	0,9163	0,9257	0,9348	0,9436	0,9521	0,9603	0,9683	0,976	0,9835
52,3	0,7977	0,8136	0,8285	0,8424	0,8555	0,8678	0,8796	0,8908	0,9015	0,9118	0,9216	0,9311	0,9402	0,949	0,9575	0,9658	0,9738	0,9815	0,9891
52,4	0,8026	0,8186	0,8335	0,8474	0,8606	0,873	0,8848	0,896	0,9068	0,9171	0,9269	0,9364	0,9456	0,9544	0,963	0,9713	0,9793	0,9871	0,9947
52,5	0,8075	0,8235	0,8385	0,8525	0,8657	0,8782	0,89	0,9013	0,9121	0,9224	0,9323	0,9418	0,951	0,9599	0,9685	0,9768	0,9848	0,9927	1,0003
52,6	0,8124	0,8285	0,8435	0,8576	0,8708	0,8833	0,8952	0,9066	0,9174	0,9277	0,9377	0,9473	0,9565	0,9654	0,974	0,9823	0,9904	0,9983	1,0059
52,7	0,8173	0,8335	0,8486	0,8627	0,876	0,8885	0,9005	0,9119	0,9227	0,9331	0,9431	0,9527	0,962	0,9709	0,9795	0,9879	0,996	1,0039	1,0115
52,8	0,8223	0,8385	0,8537	0,8678	0,8812	0,8938	0,9058	0,9172	0,9281	0,9385	0,9485	0,9582	0,9675	0,9764	0,9851	0,9935	1,0016	1,0096	1,0172
52,9	0,8273	0,8436	0,8588	0,873	0,8864	0,899	0,9111	0,9225	0,9335	0,9439	0,954	0,9637	0,973	0,982	0,9907	0,9991	1,0073	1,0152	1,0229
53	0,8323	0,8487	0,8639	0,8782	0,8916	0,9043	0,9164	0,9279	0,9389	0,9494	0,9595	0,9692	0,9786	0,9876	0,9963	1,0048	1,013	1,0209	1,0287
53,1	0,8374	0,8538	0,8691	0,8834	0,8969	0,9096	0,9218	0,9333	0,9443	0,9549	0,965	0,9747	0,9841	0,9932	1,002	1,0105	1,0187	1,0267	1,0344
53,2	0,8424	0,8589	0,8743	0,8886	0,9022	0,915	0,9271	0,9387	0,9498	0,9604	0,9705	0,9803	0,9897	0,9988	1,0076	1,0162	1,0244	1,0324	1,0402
53,3	0,8475	0,8641	0,8795	0,8939	0,9075	0,9203	0,9325	0,9442	0,9553	0,9659	0,9761	0,9859	0,9954	1,0045	1,0133	1,0219	1,0302	1,0382	1,046
53,4	0,8526	0,8692	0,8847	0,8992	0,9128	0,9257	0,938	0,9496	0,9608	0,9715	0,9817	0,9915	1,001	1,0102	1,0191	1,0276	1,036	1,044	1,0519

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
50	0,8743	0,8809	0,8873	0,8936	0,8997	0,9057	0,9115	0,9172	0,9228	0,9283	0,9337	0,939	0,9442	0,9493	0,9542	0,9592	0,964	0,9687	0,9734
50,1	0,8794	0,886	0,8924	0,8987	0,9048	0,9108	0,9167	0,9224	0,9281	0,9336	0,939	0,9443	0,9495	0,9546	0,9596	0,9645	0,9693	0,9741	0,9788
50,2	0,8844	0,8911	0,8975	0,9038	0,91	0,916	0,9219	0,9277	0,9333	0,9388	0,9443	0,9496	0,9548	0,9599	0,9649	0,9699	0,9747	0,9795	0,9842
50,3	0,8895	0,8962	0,9027	0,909	0,9152	0,9212	0,9271	0,9329	0,9386	0,9441	0,9496	0,9549	0,9601	0,9653	0,9703	0,9753	0,9801	0,9849	0,9896
50,4	0,8946	0,9013	0,9078	0,9142	0,9204	0,9265	0,9324	0,9382	0,9439	0,9494	0,9549	0,9602	0,9655	0,9707	0,9757	0,9807	0,9856	0,9904	0,9951
50,5	0,8998	0,9065	0,913	0,9194	0,9256	0,9317	0,9377	0,9435	0,9492	0,9548	0,9603	0,9656	0,9709	0,9761	0,9811	0,9861	0,991	0,9959	1,0006
50,6	0,9049	0,9117	0,9182	0,9246	0,9309	0,937	0,943	0,9488	0,9545	0,9601	0,9656	0,971	0,9763	0,9815	0,9866	0,9916	0,9965	1,0014	1,0061
50,7	0,9101	0,9169	0,9235	0,9299	0,9362	0,9423	0,9483	0,9542	0,9599	0,9655	0,971	0,9764	0,9818	0,987	0,9921	0,9971	1,002	1,0069	1,0117
50,8	0,9153	0,9221	0,9287	0,9352	0,9415	0,9476	0,9536	0,9595	0,9653	0,9709	0,9765	0,9819	0,9872	0,9924	0,9976	1,0026	1,0076	1,0124	1,0172
50,9	0,9206	0,9274	0,934	0,9405	0,9468	0,953	0,959	0,9649	0,9707	0,9764	0,9819	0,9874	0,9927	0,9979	1,0031	1,0082	1,0131	1,018	1,0228
51	0,9258	0,9327	0,9393	0,9458	0,9522	0,9583	0,9644	0,9703	0,9761	0,9818	0,9874	0,9928	0,9982	1,0035	1,0086	1,0137	1,0187	1,0236	1,0284
51,1	0,9311	0,938	0,9446	0,9512	0,9575	0,9637	0,9698	0,9758	0,9816	0,9873	0,9929	0,9984	1,0038	1,009	1,0142	1,0193	1,0243	1,0292	1,0341
51,2	0,9364	0,9433	0,95	0,9565	0,9629	0,9692	0,9753	0,9812	0,9871	0,9928	0,9984	1,0039	1,0093	1,0146	1,0198	1,0249	1,03	1,0349	1,0398
51,3	0,9418	0,9487	0,9554	0,9619	0,9684	0,9746	0,9807	0,9867	0,9926	0,9983	1,004	1,0095	1,0149	1,0202	1,0254	1,0306	1,0356	1,0406	1,0454
51,4	0,9471	0,954	0,9608	0,9674	0,9738	0,9801	0,9862	0,9922	0,9981	1,0039	1,0095	1,0151	1,0205	1,0258	1,0311	1,0362	1,0413	1,0463	1,0512
51,5	0,9525	0,9594	0,9662	0,9728	0,9793	0,9856	0,9917	0,9978	1,0037	1,0095	1,0151	1,0207	1,0261	1,0315	1,0368	1,0419	1,047	1,052	1,0569
51,6	0,9579	0,9649	0,9717	0,9783	0,9848	0,9911	0,9973	1,0033	1,0093	1,0151	1,0208	1,0263	1,0318	1,0372	1,0425	1,0476	1,0527	1,0577	1,0627
51,7	0,9633	0,9703	0,9771	0,9838	0,9903	0,9967	1,0029	1,0089	1,0149	1,0207	1,0264	1,032	1,0375	1,0429	1,0482	1,0534	1,0585	1,0635	1,0685
51,8	0,9688	0,9758	0,9826	0,9893	0,9958	1,0022	1,0084	1,0145	1,0205	1,0264	1,0321	1,0377	1,0432	1,0486	1,0539	1,0592	1,0643	1,0693	1,0743
51,9	0,9743	0,9813	0,9882	0,9949	1,0014	1,0078	1,0141	1,0202	1,0262	1,032	1,0378	1,0434	1,0489	1,0544	1,0597	1,0649	1,0701	1,0752	1,0801
52	0,9798	0,9868	0,9937	1,0005	1,007	1,0134	1,0197	1,0259	1,0319	1,0377	1,0435	1,0492	1,0547	1,0602	1,0655	1,0708	1,0759	1,081	1,086
52,1	0,9853	0,9924	0,9993	1,0061	1,0126	1,0191	1,0254	1,0315	1,0376	1,0435	1,0493	1,0549	1,0605	1,066	1,0713	1,0766	1,0818	1,0869	1,0919
52,2	0,9908	0,998	1,0049	1,0117	1,0183	1,0248	1,0311	1,0373	1,0433	1,0492	1,055	1,0607	1,0663	1,0718	1,0772	1,0825	1,0877	1,0928	1,0978
52,3	0,9964	1,0036	1,0105	1,0173	1,024	1,0305	1,0368	1,043	1,0491	1,055	1,0608	1,0666	1,0722	1,0777	1,0831	1,0884	1,0936	1,0987	1,1038
52,4	1,002	1,0092	1,0162	1,023	1,0297	1,0362	1,0425	1,0488	1,0549	1,0608	1,0667	1,0724	1,078	1,0835	1,089	1,0943	1,0995	1,1047	1,1097
52,5	1,0077	1,0149	1,0219	1,0287	1,0354	1,0419	1,0483	1,0546	1,0607	1,0667	1,0725	1,0783	1,0839	1,0895	1,0949	1,1003	1,1055	1,1107	1,1158
52,6	1,0133	1,0205	1,0276	1,0344	1,0412	1,0477	1,0541	1,0604	1,0665	1,0725	1,0784	1,0842	1,0898	1,0954	1,1009	1,1062	1,1115	1,1167	1,1218
52,7	1,019	1,0262	1,0333	1,0402	1,0469	1,0535	1,0599	1,0662	1,0724	1,0784	1,0843	1,0901	1,0958	1,1014	1,1068	1,1122	1,1175	1,1227	1,1278
52,8	1,0247	1,032	1,0391	1,046	1,0527	1,0593	1,0658	1,0721	1,0783	1,0843	1,0903	1,0961	1,1018	1,1074	1,1129	1,1183	1,1236	1,1288	1,1339
52,9	1,0304	1,0377	1,0449	1,0518	1,0586	1,0652	1,0717	1,078	1,0842	1,0903	1,0962	1,102	1,1078	1,1134	1,1189	1,1243	1,1296	1,1349	1,14
53	1,0362	1,0435	1,0507	1,0576	1,0644	1,0711	1,0776	1,0839	1,0901	1,0962	1,1022	1,108	1,1138	1,1194	1,125	1,1304	1,1357	1,141	1,1462
53,1	1,042	1,0493	1,0565	1,0635	1,0703	1,077	1,0835	1,0899	1,0961	1,1022	1,1082	1,1141	1,1198	1,1255	1,1311	1,1365	1,1419	1,1471	1,1523
53,2	1,0478	1,0552	1,0624	1,0694	1,0762	1,0829	1,0895	1,0958	1,1021	1,1082	1,1143	1,1202	1,1259	1,1316	1,1372	1,1426	1,148	1,1533	1,1585
53,3	1,0536	1,061	1,0682	1,0753	1,0822	1,0889	1,0954	1,1019	1,1081	1,1143	1,1203	1,1262	1,132	1,1377	1,1433	1,1488	1,1542	1,1595	1,1647
53,4	1,0595	1,0669	1,0742	1,0812	1,0881	1,0949	1,1014	1,1079	1,1142	1,1204	1,1264	1,1324	1,1382	1,1439	1,1495	1,155	1,1604	1,1657	1,171

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
50	0,978	0,9825	0,9869	0,9913	0,9956	0,9999	1,0041	1,0082	1,0123	1,0163	1,0203	1,0242	1,0281	1,0319	1,0357	1,0394	1,0431	1,0468	1,0504
50,1	0,9834	0,9879	0,9924	0,9968	1,0011	1,0054	1,0096	1,0137	1,0178	1,0219	1,0259	1,0298	1,0337	1,0375	1,0413	1,0451	1,0487	1,0524	1,056
50,2	0,9888	0,9934	0,9978	1,0023	1,0066	1,0109	1,0151	1,0193	1,0234	1,0274	1,0314	1,0354	1,0393	1,0431	1,0469	1,0507	1,0544	1,0581	1,0617
50,3	0,9943	0,9988	1,0033	1,0078	1,0121	1,0164	1,0207	1,0248	1,029	1,033	1,037	1,041	1,0449	1,0488	1,0526	1,0564	1,0601	1,0638	1,0674
50,4	0,9998	1,0044	1,0089	1,0133	1,0177	1,022	1,0262	1,0304	1,0346	1,0387	1,0427	1,0467	1,0506	1,0545	1,0583	1,0621	1,0658	1,0695	1,0732
50,5	1,0053	1,0099	1,0144	1,0189	1,0232	1,0276	1,0318	1,0361	1,0402	1,0443	1,0483	1,0523	1,0563	1,0602	1,064	1,0678	1,0715	1,0753	1,0789
50,6	1,0108	1,0154	1,02	1,0244	1,0288	1,0332	1,0375	1,0417	1,0459	1,05	1,054	1,058	1,062	1,0659	1,0697	1,0735	1,0773	1,081	1,0847
50,7	1,0164	1,021	1,0256	1,03	1,0345	1,0388	1,0431	1,0474	1,0515	1,0557	1,0597	1,0637	1,0677	1,0716	1,0755	1,0793	1,0831	1,0868	1,0905
50,8	1,022	1,0266	1,0312	1,0357	1,0401	1,0445	1,0488	1,053	1,0572	1,0614	1,0655	1,0695	1,0735	1,0774	1,0813	1,0851	1,0889	1,0926	1,0963
50,9	1,0276	1,0322	1,0368	1,0413	1,0458	1,0502	1,0545	1,0588	1,063	1,0671	1,0712	1,0753	1,0793	1,0832	1,0871	1,0909	1,0947	1,0985	1,1022
51	1,0332	1,0379	1,0425	1,047	1,0515	1,0559	1,0602	1,0645	1,0687	1,0729	1,077	1,081	1,0851	1,089	1,0929	1,0968	1,1006	1,1044	1,1081
51,1	1,0389	1,0435	1,0482	1,0527	1,0572	1,0616	1,066	1,0703	1,0745	1,0787	1,0828	1,0869	1,0909	1,0949	1,0988	1,1027	1,1065	1,1103	1,114
51,2	1,0445	1,0492	1,0539	1,0584	1,0629	1,0674	1,0717	1,0761	1,0803	1,0845	1,0886	1,0927	1,0967	1,1007	1,1047	1,1085	1,1124	1,1162	1,1199
51,3	1,0502	1,055	1,0596	1,0642	1,0687	1,0732	1,0775	1,0819	1,0861	1,0903	1,0945	1,0986	1,1026	1,1066	1,1106	1,1145	1,1183	1,1221	1,1259
51,4	1,056	1,0607	1,0654	1,07	1,0745	1,079	1,0834	1,0877	1,092	1,0962	1,1004	1,1045	1,1085	1,1126	1,1165	1,1204	1,1243	1,1281	1,1319
51,5	1,0617	1,0665	1,0712	1,0758	1,0803	1,0848	1,0892	1,0936	1,0979	1,1021	1,1063	1,1104	1,1145	1,1185	1,1225	1,1264	1,1303	1,1341	1,1379
51,6	1,0675	1,0723	1,077	1,0816	1,0862	1,0907	1,0951	1,0995	1,1038	1,108	1,1122	1,1164	1,1204	1,1245	1,1285	1,1324	1,1363	1,1401	1,1439
51,7	1,0733	1,0781	1,0828	1,0875	1,092	1,0966	1,101	1,1054	1,1097	1,114	1,1182	1,1223	1,1264	1,1305	1,1345	1,1384	1,1423	1,1462	1,15
51,8	1,0792	1,084	1,0887	1,0934	1,098	1,1025	1,1069	1,1113	1,1157	1,1199	1,1242	1,1283	1,1324	1,1365	1,1405	1,1445	1,1484	1,1523	1,1561
51,9	1,085	1,0898	1,0946	1,0993	1,1039	1,1084	1,1129	1,1173	1,1217	1,1259	1,1302	1,1344	1,1385	1,1426	1,1466	1,1506	1,1545	1,1584	1,1622
52	1,0909	1,0957	1,1005	1,1052	1,1098	1,1144	1,1189	1,1233	1,1277	1,132	1,1362	1,1404	1,1446	1,1486	1,1527	1,1567	1,1606	1,1645	1,1684
52,1	1,0968	1,1017	1,1065	1,1112	1,1158	1,1204	1,1249	1,1293	1,1337	1,138	1,1423	1,1465	1,1506	1,1548	1,1588	1,1628	1,1668	1,1707	1,1745
52,2	1,1028	1,1076	1,1124	1,1172	1,1218	1,1264	1,1309	1,1354	1,1398	1,1441	1,1484	1,1526	1,1568	1,1609	1,1649	1,169	1,1729	1,1769	1,1807
52,3	1,1087	1,1136	1,1184	1,1232	1,1278	1,1324	1,137	1,1414	1,1459	1,1502	1,1545	1,1587	1,1629	1,167	1,1711	1,1751	1,1791	1,1831	1,187
52,4	1,1147	1,1196	1,1244	1,1292	1,1339	1,1385	1,1431	1,1475	1,152	1,1563	1,1606	1,1649	1,1691	1,1732	1,1773	1,1814	1,1854	1,1893	1,1932
52,5	1,1207	1,1257	1,1305	1,1353	1,14	1,1446	1,1492	1,1537	1,1581	1,1625	1,1668	1,1711	1,1753	1,1794	1,1836	1,1876	1,1916	1,1956	1,1995
52,6	1,1268	1,1317	1,1366	1,1414	1,1461	1,1507	1,1553	1,1598	1,1643	1,1687	1,173	1,1773	1,1815	1,1857	1,1898	1,1939	1,1979	1,2019	1,2058
52,7	1,1329	1,1378	1,1427	1,1475	1,1522	1,1569	1,1615	1,166	1,1705	1,1749	1,1792	1,1835	1,1878	1,192	1,1961	1,2002	1,2042	1,2082	1,2121
52,8	1,139	1,1439	1,1488	1,1536	1,1584	1,1631	1,1677	1,1722	1,1767	1,1811	1,1855	1,1898	1,1941	1,1983	1,2024	1,2065	1,2106	1,2145	1,2185
52,9	1,1451	1,1501	1,155	1,1598	1,1646	1,1693	1,1739	1,1785	1,183	1,1874	1,1918	1,1961	1,2004	1,2046	1,2087	1,2128	1,2169	1,2209	1,2249
53	1,1512	1,1563	1,1612	1,166	1,1708	1,1755	1,1801	1,1847	1,1892	1,1937	1,1981	1,2024	1,2067	1,2109	1,2151	1,2192	1,2233	1,2273	1,2313
53,1	1,1574	1,1624	1,1674	1,1722	1,177	1,1818	1,1864	1,191	1,1956	1,2	1,2044	1,2088	1,2131	1,2173	1,2215	1,2256	1,2297	1,2338	1,2378
53,2	1,1636	1,1687	1,1736	1,1785	1,1833	1,1881	1,1927	1,1973	1,2019	1,2064	1,2108	1,2152	1,2195	1,2237	1,2279	1,2321	1,2362	1,2402	1,2442
53,3	1,1699	1,1749	1,1799	1,1848	1,1896	1,1944	1,1991	1,2037	1,2082	1,2128	1,2172	1,2216	1,2259	1,2302	1,2344	1,2385	1,2427	1,2467	1,2507
53,4	1,1761	1,1812	1,1862	1,1911	1,196	1,2007	1,2054	1,2101	1,2146	1,2192	1,2236	1,228	1,2323	1,2366	1,2409	1,245	1,2492	1,2532	1,2573

Table of external index of viability and vitality
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e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
50	1,0539	1,0574	1,0609	1,0644	1,0678	1,0712	1,0745	1,0778	1,0811	1,0843	1,0875	1,0907	1,0938	1,097	1,1001	1,1031	1,1062	1,1092	1,1121
50,1	1,0596	1,0631	1,0666	1,0701	1,0735	1,0769	1,0802	1,0836	1,0868	1,0901	1,0933	1,0965	1,0997	1,1028	1,1059	1,109	1,112	1,115	1,118
50,2	1,0653	1,0688	1,0724	1,0758	1,0792	1,0827	1,086	1,0893	1,0926	1,0959	1,0991	1,1023	1,1055	1,1086	1,1117	1,1148	1,1179	1,1209	1,1239
50,3	1,071	1,0746	1,0781	1,0816	1,085	1,0884	1,0918	1,0951	1,0984	1,1017	1,105	1,1082	1,1113	1,1145	1,1176	1,1207	1,1238	1,1268	1,1298
50,4	1,0768	1,0803	1,0839	1,0874	1,0908	1,0942	1,0976	1,101	1,1043	1,1076	1,1108	1,114	1,1172	1,1204	1,1235	1,1266	1,1297	1,1327	1,1357
50,5	1,0825	1,0861	1,0897	1,0932	1,0966	1,1001	1,1035	1,1068	1,1101	1,1134	1,1167	1,1199	1,1231	1,1263	1,1294	1,1325	1,1356	1,1387	1,1417
50,6	1,0883	1,0919	1,0955	1,099	1,1025	1,1059	1,1093	1,1127	1,116	1,1193	1,1226	1,1258	1,1291	1,1322	1,1354	1,1385	1,1416	1,1447	1,1477
50,7	1,0942	1,0978	1,1013	1,1049	1,1084	1,1118	1,1152	1,1186	1,1219	1,1253	1,1285	1,1318	1,135	1,1382	1,1414	1,1445	1,1476	1,1507	1,1537
50,8	1,1	1,1036	1,1072	1,1107	1,1142	1,1177	1,1211	1,1245	1,1279	1,1312	1,1345	1,1378	1,141	1,1442	1,1474	1,1505	1,1536	1,1567	1,1598
50,9	1,1059	1,1095	1,1131	1,1166	1,1202	1,1236	1,1271	1,1305	1,1339	1,1372	1,1405	1,1438	1,147	1,1502	1,1534	1,1565	1,1597	1,1628	1,1658
51	1,1118	1,1154	1,119	1,1226	1,1261	1,1296	1,133	1,1365	1,1398	1,1432	1,1465	1,1498	1,153	1,1563	1,1595	1,1626	1,1658	1,1689	1,1719
51,1	1,1177	1,1213	1,125	1,1285	1,1321	1,1356	1,139	1,1425	1,1459	1,1492	1,1525	1,1558	1,1591	1,1623	1,1655	1,1687	1,1718	1,175	1,1781
51,2	1,1236	1,1273	1,1309	1,1345	1,1381	1,1416	1,1451	1,1485	1,1519	1,1553	1,1586	1,1619	1,1652	1,1684	1,1716	1,1748	1,178	1,1811	1,1842
51,3	1,1296	1,1333	1,1369	1,1405	1,1441	1,1476	1,1511	1,1546	1,158	1,1613	1,1647	1,168	1,1713	1,1746	1,1778	1,181	1,1841	1,1873	1,1904
51,4	1,1356	1,1393	1,143	1,1466	1,1501	1,1537	1,1572	1,1606	1,1641	1,1675	1,1708	1,1741	1,1774	1,1807	1,1839	1,1871	1,1903	1,1935	1,1966
51,5	1,1416	1,1454	1,149	1,1526	1,1562	1,1598	1,1633	1,1667	1,1702	1,1736	1,177	1,1803	1,1836	1,1869	1,1901	1,1933	1,1965	1,1997	1,2028
51,6	1,1477	1,1514	1,1551	1,1587	1,1623	1,1659	1,1694	1,1729	1,1763	1,1797	1,1831	1,1865	1,1898	1,1931	1,1963	1,1996	1,2028	1,2059	1,209
51,7	1,1538	1,1575	1,1612	1,1648	1,1684	1,172	1,1755	1,179	1,1825	1,1859	1,1893	1,1927	1,196	1,1993	1,2026	1,2058	1,209	1,2122	1,2153
51,8	1,1599	1,1636	1,1673	1,171	1,1746	1,1782	1,1817	1,1852	1,1887	1,1921	1,1955	1,1989	1,2022	1,2056	1,2088	1,2121	1,2153	1,2185	1,2216
51,9	1,166	1,1698	1,1735	1,1771	1,1808	1,1844	1,1879	1,1914	1,1949	1,1984	1,2018	1,2052	1,2085	1,2118	1,2151	1,2184	1,2216	1,2248	1,228
52	1,1722	1,1759	1,1797	1,1833	1,187	1,1906	1,1941	1,1977	1,2012	1,2046	1,2081	1,2115	1,2148	1,2182	1,2214	1,2247	1,228	1,2312	1,2343
52,1	1,1784	1,1821	1,1859	1,1896	1,1932	1,1968	1,2004	1,204	1,2075	1,2109	1,2144	1,2178	1,2211	1,2245	1,2278	1,2311	1,2343	1,2375	1,2407
52,2	1,1846	1,1884	1,1921	1,1958	1,1995	1,2031	1,2067	1,2102	1,2138	1,2172	1,2207	1,2241	1,2275	1,2309	1,2342	1,2375	1,2407	1,2439	1,2471
52,3	1,1908	1,1946	1,1984	1,2021	1,2058	1,2094	1,213	1,2166	1,2201	1,2236	1,2271	1,2305	1,2339	1,2372	1,2406	1,2439	1,2471	1,2504	1,2536
52,4	1,1971	1,2009	1,2047	1,2084	1,2121	1,2157	1,2193	1,2229	1,2265	1,23	1,2334	1,2369	1,2403	1,2437	1,247	1,2503	1,2536	1,2568	1,2601
52,5	1,2034	1,2072	1,211	1,2147	1,2184	1,2221	1,2257	1,2293	1,2329	1,2364	1,2399	1,2433	1,2467	1,2501	1,2534	1,2568	1,2601	1,2633	1,2666
52,6	1,2097	1,2135	1,2173	1,2211	1,2248	1,2285	1,2321	1,2357	1,2393	1,2428	1,2463	1,2498	1,2532	1,2566	1,2599	1,2633	1,2666	1,2698	1,2731
52,7	1,216	1,2199	1,2237	1,2275	1,2312	1,2349	1,2385	1,2421	1,2457	1,2493	1,2528	1,2562	1,2597	1,2631	1,2664	1,2698	1,2731	1,2764	1,2796
52,8	1,2224	1,2263	1,2301	1,2339	1,2376	1,2413	1,245	1,2486	1,2522	1,2557	1,2593	1,2627	1,2662	1,2696	1,273	1,2764	1,2797	1,283	1,2862
52,9	1,2288	1,2327	1,2365	1,2403	1,2441	1,2478	1,2515	1,2551	1,2587	1,2623	1,2658	1,2693	1,2727	1,2762	1,2796	1,2829	1,2863	1,2896	1,2928
53	1,2353	1,2391	1,243	1,2468	1,2506	1,2543	1,258	1,2616	1,2652	1,2688	1,2723	1,2758	1,2793	1,2828	1,2862	1,2895	1,2929	1,2962	1,2995
53,1	1,2417	1,2456	1,2495	1,2533	1,2571	1,2608	1,2645	1,2682	1,2718	1,2754	1,2789	1,2824	1,2859	1,2894	1,2928	1,2962	1,2995	1,3028	1,3061
53,2	1,2482	1,2521	1,256	1,2598	1,2636	1,2674	1,2711	1,2747	1,2784	1,282	1,2855	1,2891	1,2926	1,296	1,2994	1,3028	1,3062	1,3095	1,3128
53,3	1,2547	1,2586	1,2625	1,2664	1,2702	1,2739	1,2777	1,2813	1,285	1,2886	1,2922	1,2957	1,2992	1,3027	1,3061	1,3095	1,3129	1,3163	1,3196
53,4	1,2613	1,2652	1,2691	1,273	1,2768	1,2805	1,2843	1,288	1,2916	1,2953	1,2988	1,3024	1,3059	1,3094	1,3128	1,3163	1,3196	1,323	1,3263

Table of external index of viability and vitality
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e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
50	1,1151	1,118	1,1209	1,1238	1,1266	1,1295	1,1323	1,1351	1,1378	1,1406	1,1433	1,146	1,1487	1,1513	1,154	1,1566	1,1592	1,1618	1,1643
50,1	1,121	1,1239	1,1268	1,1297	1,1326	1,1354	1,1382	1,141	1,1438	1,1465	1,1493	1,152	1,1547	1,1573	1,16	1,1626	1,1652	1,1678	1,1704
50,2	1,1269	1,1298	1,1327	1,1356	1,1385	1,1413	1,1442	1,147	1,1498	1,1525	1,1553	1,158	1,1607	1,1633	1,166	1,1686	1,1713	1,1739	1,1764
50,3	1,1328	1,1358	1,1387	1,1416	1,1445	1,1473	1,1502	1,153	1,1558	1,1585	1,1613	1,164	1,1667	1,1694	1,1721	1,1747	1,1773	1,1799	1,1825
50,4	1,1387	1,1417	1,1447	1,1476	1,1505	1,1533	1,1562	1,159	1,1618	1,1646	1,1673	1,1701	1,1728	1,1755	1,1781	1,1808	1,1834	1,186	1,1886
50,5	1,1447	1,1477	1,1506	1,1536	1,1565	1,1593	1,1622	1,165	1,1678	1,1706	1,1734	1,1761	1,1789	1,1816	1,1842	1,1869	1,1895	1,1922	1,1948
50,6	1,1507	1,1537	1,1567	1,1596	1,1625	1,1654	1,1683	1,1711	1,1739	1,1767	1,1795	1,1822	1,185	1,1877	1,1904	1,193	1,1957	1,1983	1,2009
50,7	1,1568	1,1597	1,1627	1,1657	1,1686	1,1715	1,1743	1,1772	1,18	1,1828	1,1856	1,1884	1,1911	1,1938	1,1965	1,1992	1,2019	1,2045	1,2071
50,8	1,1628	1,1658	1,1688	1,1717	1,1747	1,1776	1,1805	1,1833	1,1861	1,189	1,1918	1,1945	1,1973	1,2	1,2027	1,2054	1,2081	1,2107	1,2133
50,9	1,1689	1,1719	1,1749	1,1779	1,1808	1,1837	1,1866	1,1895	1,1923	1,1951	1,1979	1,2007	1,2035	1,2062	1,2089	1,2116	1,2143	1,2169	1,2196
51	1,175	1,178	1,181	1,184	1,1869	1,1899	1,1928	1,1956	1,1985	1,2013	1,2041	1,2069	1,2097	1,2124	1,2152	1,2178	1,2205	1,2232	1,2258
51,1	1,1811	1,1841	1,1872	1,1901	1,1931	1,196	1,1989	1,2018	1,2047	1,2075	1,2104	1,2132	1,2159	1,2187	1,2214	1,2241	1,2268	1,2295	1,2321
51,2	1,1873	1,1903	1,1933	1,1963	1,1993	1,2022	1,2052	1,2081	1,2109	1,2138	1,2166	1,2194	1,2222	1,225	1,2277	1,2304	1,2331	1,2358	1,2385
51,3	1,1935	1,1965	1,1995	1,2025	1,2055	1,2085	1,2114	1,2143	1,2172	1,2201	1,2229	1,2257	1,2285	1,2313	1,234	1,2367	1,2395	1,2421	1,2448
51,4	1,1997	1,2027	1,2058	1,2088	1,2118	1,2147	1,2177	1,2206	1,2235	1,2263	1,2292	1,232	1,2348	1,2376	1,2404	1,2431	1,2458	1,2485	1,2512
51,5	1,2059	1,209	1,212	1,215	1,218	1,221	1,224	1,2269	1,2298	1,2327	1,2355	1,2383	1,2412	1,244	1,2467	1,2495	1,2522	1,2549	1,2576
51,6	1,2122	1,2153	1,2183	1,2213	1,2243	1,2273	1,2303	1,2332	1,2361	1,239	1,2419	1,2447	1,2475	1,2503	1,2531	1,2559	1,2586	1,2613	1,264
51,7	1,2185	1,2216	1,2246	1,2277	1,2307	1,2337	1,2366	1,2396	1,2425	1,2454	1,2483	1,2511	1,2539	1,2568	1,2595	1,2623	1,265	1,2678	1,2705
51,8	1,2248	1,2279	1,231	1,234	1,237	1,24	1,243	1,246	1,2489	1,2518	1,2547	1,2575	1,2604	1,2632	1,266	1,2688	1,2715	1,2743	1,277
51,9	1,2311	1,2342	1,2373	1,2404	1,2434	1,2464	1,2494	1,2524	1,2553	1,2582	1,2611	1,264	1,2668	1,2697	1,2725	1,2753	1,278	1,2808	1,2835
52	1,2375	1,2406	1,2437	1,2468	1,2498	1,2528	1,2558	1,2588	1,2618	1,2647	1,2676	1,2705	1,2733	1,2762	1,279	1,2818	1,2845	1,2873	1,29
52,1	1,2439	1,247	1,2501	1,2532	1,2563	1,2593	1,2623	1,2653	1,2682	1,2712	1,2741	1,277	1,2798	1,2827	1,2855	1,2883	1,2911	1,2938	1,2966
52,2	1,2503	1,2535	1,2566	1,2597	1,2627	1,2658	1,2688	1,2718	1,2747	1,2777	1,2806	1,2835	1,2864	1,2892	1,2921	1,2949	1,2977	1,3004	1,3032
52,3	1,2568	1,2599	1,2631	1,2662	1,2692	1,2723	1,2753	1,2783	1,2813	1,2842	1,2872	1,2901	1,2929	1,2958	1,2986	1,3015	1,3043	1,307	1,3098
52,4	1,2632	1,2664	1,2696	1,2727	1,2757	1,2788	1,2818	1,2849	1,2878	1,2908	1,2937	1,2967	1,2995	1,3024	1,3053	1,3081	1,3109	1,3137	1,3165
52,5	1,2698	1,2729	1,2761	1,2792	1,2823	1,2854	1,2884	1,2914	1,2944	1,2974	1,3003	1,3033	1,3062	1,3091	1,3119	1,3147	1,3176	1,3204	1,3231
52,6	1,2763	1,2795	1,2826	1,2858	1,2889	1,292	1,295	1,298	1,301	1,304	1,307	1,3099	1,3128	1,3157	1,3186	1,3214	1,3243	1,3271	1,3299
52,7	1,2829	1,2861	1,2892	1,2924	1,2955	1,2986	1,3016	1,3047	1,3077	1,3107	1,3137	1,3166	1,3195	1,3224	1,3253	1,3281	1,331	1,3338	1,3366
52,8	1,2895	1,2927	1,2958	1,299	1,3021	1,3052	1,3083	1,3113	1,3144	1,3174	1,3203	1,3233	1,3262	1,3291	1,332	1,3349	1,3377	1,3406	1,3434
52,9	1,2961	1,2993	1,3025	1,3057	1,3088	1,3119	1,315	1,318	1,3211	1,3241	1,3271	1,33	1,333	1,3359	1,3388	1,3416	1,3445	1,3473	1,3502
53	1,3027	1,306	1,3092	1,3123	1,3155	1,3186	1,3217	1,3248	1,3278	1,3308	1,3338	1,3368	1,3397	1,3427	1,3456	1,3485	1,3513	1,3542	1,357
53,1	1,3094	1,3126	1,3159	1,319	1,3222	1,3253	1,3284	1,3315	1,3346	1,3376	1,3406	1,3436	1,3465	1,3495	1,3524	1,3553	1,3582	1,361	1,3638
53,2	1,3161	1,3194	1,3226	1,3258	1,3289	1,3321	1,3352	1,3383	1,3413	1,3444	1,3474	1,3504	1,3534	1,3563	1,3592	1,3621	1,365	1,3679	1,3707
53,3	1,3229	1,3261	1,3293	1,3325	1,3357	1,3389	1,342	1,3451	1,3482	1,3512	1,3542	1,3572	1,3602	1,3632	1,3661	1,369	1,3719	1,3748	1,3776
53,4	1,3296	1,3329	1,3361	1,3393	1,3425	1,3457	1,3488	1,3519	1,355	1,3581	1,3611	1,3641	1,3671	1,3701	1,373	1,3759	1,3788	1,3817	1,3846

Table of external index of viability and vitality
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e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
50	1,1669	1,1694	1,1719	1,1744	1,1769	1,1793	1,1818	1,1842	1,1866	1,189	1,1914	1,1937	1,1961	1,1984	1,2007	1,203	1,2053	1,2076	1,2099
50,1	1,1729	1,1754	1,178	1,1805	1,183	1,1854	1,1879	1,1903	1,1927	1,1951	1,1975	1,1999	1,2022	1,2046	1,2069	1,2092	1,2115	1,2138	1,2161
50,2	1,179	1,1815	1,1841	1,1866	1,1891	1,1915	1,194	1,1964	1,1988	1,2013	1,2036	1,206	1,2084	1,2107	1,2131	1,2154	1,2177	1,22	1,2223
50,3	1,1851	1,1876	1,1902	1,1927	1,1952	1,1977	1,2001	1,2026	1,205	1,2074	1,2098	1,2122	1,2146	1,2169	1,2193	1,2216	1,2239	1,2262	1,2285
50,4	1,1912	1,1938	1,1963	1,1988	1,2013	1,2038	1,2063	1,2087	1,2112	1,2136	1,216	1,2184	1,2208	1,2232	1,2255	1,2279	1,2302	1,2325	1,2348
50,5	1,1973	1,1999	1,2025	1,205	1,2075	1,21	1,2125	1,215	1,2174	1,2198	1,2223	1,2246	1,227	1,2294	1,2318	1,2341	1,2364	1,2388	1,241
50,6	1,2035	1,2061	1,2087	1,2112	1,2137	1,2162	1,2187	1,2212	1,2236	1,2261	1,2285	1,2309	1,2333	1,2357	1,2381	1,2404	1,2427	1,2451	1,2474
50,7	1,2097	1,2123	1,2149	1,2174	1,22	1,2225	1,225	1,2274	1,2299	1,2324	1,2348	1,2372	1,2396	1,242	1,2444	1,2467	1,2491	1,2514	1,2537
50,8	1,216	1,2185	1,2211	1,2237	1,2262	1,2287	1,2312	1,2337	1,2362	1,2387	1,2411	1,2435	1,2459	1,2483	1,2507	1,2531	1,2554	1,2578	1,2601
50,9	1,2222	1,2248	1,2274	1,2299	1,2325	1,235	1,2375	1,24	1,2425	1,245	1,2474	1,2499	1,2523	1,2547	1,2571	1,2594	1,2618	1,2641	1,2665
51	1,2285	1,2311	1,2337	1,2363	1,2388	1,2413	1,2439	1,2464	1,2489	1,2513	1,2538	1,2562	1,2586	1,2611	1,2634	1,2658	1,2682	1,2705	1,2729
51,1	1,2348	1,2374	1,24	1,2426	1,2452	1,2477	1,2502	1,2527	1,2552	1,2577	1,2602	1,2626	1,2651	1,2675	1,2699	1,2723	1,2746	1,277	1,2793
51,2	1,2411	1,2437	1,2464	1,2489	1,2515	1,2541	1,2566	1,2591	1,2616	1,2641	1,2666	1,269	1,2715	1,2739	1,2763	1,2787	1,2811	1,2834	1,2858
51,3	1,2475	1,2501	1,2527	1,2553	1,2579	1,2605	1,263	1,2655	1,268	1,2705	1,273	1,2755	1,2779	1,2804	1,2828	1,2852	1,2876	1,2899	1,2923
51,4	1,2539	1,2565	1,2591	1,2617	1,2643	1,2669	1,2694	1,272	1,2745	1,277	1,2795	1,282	1,2844	1,2869	1,2893	1,2917	1,2941	1,2965	1,2988
51,5	1,2603	1,2629	1,2656	1,2682	1,2708	1,2733	1,2759	1,2784	1,281	1,2835	1,286	1,2885	1,2909	1,2934	1,2958	1,2982	1,3006	1,303	1,3054
51,6	1,2667	1,2694	1,272	1,2746	1,2772	1,2798	1,2824	1,2849	1,2875	1,29	1,2925	1,295	1,2975	1,2999	1,3023	1,3048	1,3072	1,3096	1,312
51,7	1,2732	1,2758	1,2785	1,2811	1,2837	1,2863	1,2889	1,2915	1,294	1,2965	1,2991	1,3015	1,304	1,3065	1,3089	1,3114	1,3138	1,3162	1,3186
51,8	1,2797	1,2823	1,285	1,2876	1,2903	1,2929	1,2955	1,298	1,3006	1,3031	1,3056	1,3081	1,3106	1,3131	1,3155	1,318	1,3204	1,3228	1,3252
51,9	1,2862	1,2889	1,2915	1,2942	1,2968	1,2994	1,302	1,3046	1,3072	1,3097	1,3122	1,3147	1,3172	1,3197	1,3222	1,3246	1,3271	1,3295	1,3319
52	1,2927	1,2954	1,2981	1,3008	1,3034	1,306	1,3086	1,3112	1,3138	1,3163	1,3189	1,3214	1,3239	1,3264	1,3288	1,3313	1,3337	1,3362	1,3386
52,1	1,2993	1,302	1,3047	1,3074	1,31	1,3126	1,3152	1,3178	1,3204	1,323	1,3255	1,3281	1,3306	1,333	1,3355	1,338	1,3404	1,3429	1,3453
52,2	1,3059	1,3086	1,3113	1,314	1,3166	1,3193	1,3219	1,3245	1,3271	1,3297	1,3322	1,3347	1,3373	1,3398	1,3422	1,3447	1,3472	1,3496	1,352
52,3	1,3125	1,3153	1,318	1,3207	1,3233	1,326	1,3286	1,3312	1,3338	1,3364	1,3389	1,3415	1,344	1,3465	1,349	1,3515	1,3539	1,3564	1,3588
52,4	1,3192	1,3219	1,3246	1,3273	1,33	1,3327	1,3353	1,3379	1,3405	1,3431	1,3457	1,3482	1,3508	1,3533	1,3558	1,3583	1,3607	1,3632	1,3656
52,5	1,3259	1,3286	1,3313	1,334	1,3367	1,3394	1,342	1,3447	1,3473	1,3499	1,3524	1,355	1,3575	1,3601	1,3626	1,3651	1,3676	1,37	1,3725
52,6	1,3326	1,3354	1,3381	1,3408	1,3435	1,3462	1,3488	1,3514	1,3541	1,3567	1,3592	1,3618	1,3644	1,3669	1,3694	1,3719	1,3744	1,3769	1,3793
52,7	1,3394	1,3421	1,3449	1,3476	1,3503	1,3529	1,3556	1,3583	1,3609	1,3635	1,3661	1,3687	1,3712	1,3738	1,3763	1,3788	1,3813	1,3838	1,3862
52,8	1,3461	1,3489	1,3516	1,3544	1,3571	1,3598	1,3624	1,3651	1,3677	1,3703	1,3729	1,3755	1,3781	1,3806	1,3832	1,3857	1,3882	1,3907	1,3931
52,9	1,3529	1,3557	1,3585	1,3612	1,3639	1,3666	1,3693	1,372	1,3746	1,3772	1,3798	1,3824	1,385	1,3876	1,3901	1,3926	1,3951	1,3976	1,4001
53	1,3598	1,3626	1,3653	1,3681	1,3708	1,3735	1,3762	1,3788	1,3815	1,3841	1,3867	1,3893	1,3919	1,3945	1,397	1,3996	1,4021	1,4046	1,4071
53,1	1,3666	1,3694	1,3722	1,3749	1,3777	1,3804	1,3831	1,3858	1,3884	1,3911	1,3937	1,3963	1,3989	1,4015	1,404	1,4066	1,4091	1,4116	1,4141
53,2	1,3735	1,3763	1,3791	1,3819	1,3846	1,3873	1,39	1,3927	1,3954	1,398	1,4007	1,4033	1,4059	1,4085	1,411	1,4136	1,4161	1,4186	1,4211
53,3	1,3805	1,3833	1,3861	1,3888	1,3916	1,3943	1,397	1,3997	1,4024	1,405	1,4077	1,4103	1,4129	1,4155	1,4181	1,4206	1,4232	1,4257	1,4282
53,4	1,3874	1,3902	1,393	1,3958	1,3986	1,4013	1,404	1,4067	1,4094	1,4121	1,4147	1,4174	1,42	1,4226	1,4251	1,4277	1,4303	1,4328	1,4353

Table of external index of viability and vitality
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e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
50	1,2121	1,2144	1,2166	1,2188	1,221	1,2232	1,2254	1,2275	1,2297	1,2318	1,2339	1,236	1,2381	1,2402	1,2423	1,2444	1,2464	1,2485	1,2505
50,1	1,2183	1,2206	1,2228	1,225	1,2272	1,2294	1,2316	1,2337	1,2359	1,238	1,2402	1,2423	1,2444	1,2465	1,2486	1,2507	1,2527	1,2548	1,2568
50,2	1,2245	1,2268	1,229	1,2312	1,2334	1,2356	1,2378	1,24	1,2422	1,2443	1,2465	1,2486	1,2507	1,2528	1,2549	1,257	1,259	1,2611	1,2632
50,3	1,2308	1,233	1,2353	1,2375	1,2397	1,2419	1,2441	1,2463	1,2485	1,2506	1,2528	1,2549	1,257	1,2591	1,2612	1,2633	1,2654	1,2675	1,2695
50,4	1,237	1,2393	1,2416	1,2438	1,246	1,2482	1,2504	1,2526	1,2548	1,257	1,2591	1,2612	1,2634	1,2655	1,2676	1,2697	1,2718	1,2739	1,2759
50,5	1,2433	1,2456	1,2479	1,2501	1,2523	1,2546	1,2568	1,259	1,2612	1,2633	1,2655	1,2676	1,2697	1,2719	1,274	1,2761	1,2782	1,2803	1,2823
50,6	1,2497	1,2519	1,2542	1,2565	1,2587	1,2609	1,2631	1,2653	1,2675	1,2697	1,2719	1,274	1,2762	1,2783	1,2804	1,2825	1,2846	1,2867	1,2888
50,7	1,256	1,2583	1,2606	1,2628	1,2651	1,2673	1,2695	1,2717	1,2739	1,2761	1,2783	1,2804	1,2826	1,2847	1,2869	1,289	1,2911	1,2932	1,2952
50,8	1,2624	1,2647	1,267	1,2692	1,2715	1,2737	1,2759	1,2782	1,2803	1,2825	1,2847	1,2869	1,289	1,2912	1,2933	1,2954	1,2976	1,2997	1,3017
50,9	1,2688	1,2711	1,2734	1,2756	1,2779	1,2801	1,2824	1,2846	1,2868	1,289	1,2912	1,2934	1,2955	1,2977	1,2998	1,3019	1,3041	1,3062	1,3083
51	1,2752	1,2775	1,2798	1,2821	1,2844	1,2866	1,2888	1,2911	1,2933	1,2955	1,2977	1,2999	1,302	1,3042	1,3063	1,3085	1,3106	1,3127	1,3148
51,1	1,2817	1,284	1,2863	1,2886	1,2908	1,2931	1,2954	1,2976	1,2998	1,302	1,3042	1,3064	1,3086	1,3107	1,3129	1,315	1,3172	1,3193	1,3214
51,2	1,2881	1,2905	1,2928	1,2951	1,2973	1,2996	1,3019	1,3041	1,3063	1,3086	1,3108	1,313	1,3151	1,3173	1,3195	1,3216	1,3238	1,3259	1,328
51,3	1,2946	1,297	1,2993	1,3016	1,3039	1,3062	1,3084	1,3107	1,3129	1,3151	1,3173	1,3196	1,3217	1,3239	1,3261	1,3282	1,3304	1,3325	1,3346
51,4	1,3012	1,3035	1,3058	1,3082	1,3104	1,3127	1,315	1,3173	1,3195	1,3217	1,324	1,3262	1,3284	1,3305	1,3327	1,3349	1,337	1,3392	1,3413
51,5	1,3077	1,3101	1,3124	1,3147	1,317	1,3193	1,3216	1,3239	1,3261	1,3284	1,3306	1,3328	1,335	1,3372	1,3394	1,3415	1,3437	1,3458	1,348
51,6	1,3143	1,3167	1,319	1,3213	1,3237	1,326	1,3282	1,3305	1,3328	1,335	1,3373	1,3395	1,3417	1,3439	1,3461	1,3482	1,3504	1,3526	1,3547
51,7	1,3209	1,3233	1,3257	1,328	1,3303	1,3326	1,3349	1,3372	1,3394	1,3417	1,3439	1,3462	1,3484	1,3506	1,3528	1,355	1,3571	1,3593	1,3614
51,8	1,3276	1,33	1,3323	1,3347	1,337	1,3393	1,3416	1,3439	1,3461	1,3484	1,3507	1,3529	1,3551	1,3573	1,3595	1,3617	1,3639	1,3661	1,3682
51,9	1,3343	1,3366	1,339	1,3413	1,3437	1,346	1,3483	1,3506	1,3529	1,3551	1,3574	1,3597	1,3619	1,3641	1,3663	1,3685	1,3707	1,3729	1,375
52	1,341	1,3433	1,3457	1,3481	1,3504	1,3527	1,3551	1,3574	1,3596	1,3619	1,3642	1,3664	1,3687	1,3709	1,3731	1,3753	1,3775	1,3797	1,3818
52,1	1,3477	1,3501	1,3525	1,3548	1,3572	1,3595	1,3618	1,3641	1,3664	1,3687	1,371	1,3732	1,3755	1,3777	1,3799	1,3821	1,3843	1,3865	1,3887
52,2	1,3545	1,3569	1,3592	1,3616	1,364	1,3663	1,3686	1,3709	1,3732	1,3755	1,3778	1,3801	1,3823	1,3846	1,3868	1,389	1,3912	1,3934	1,3956
52,3	1,3612	1,3636	1,366	1,3684	1,3708	1,3731	1,3755	1,3778	1,3801	1,3824	1,3847	1,3869	1,3892	1,3914	1,3937	1,3959	1,3981	1,4003	1,4025
52,4	1,368	1,3705	1,3729	1,3753	1,3776	1,38	1,3823	1,3847	1,387	1,3893	1,3916	1,3938	1,3961	1,3984	1,4006	1,4028	1,4051	1,4073	1,4094
52,5	1,3749	1,3773	1,3797	1,3821	1,3845	1,3869	1,3892	1,3915	1,3939	1,3962	1,3985	1,4008	1,403	1,4053	1,4075	1,4098	1,412	1,4142	1,4164
52,6	1,3818	1,3842	1,3866	1,389	1,3914	1,3938	1,3961	1,3985	1,4008	1,4031	1,4054	1,4077	1,41	1,4123	1,4145	1,4168	1,419	1,4212	1,4234
52,7	1,3887	1,3911	1,3935	1,3959	1,3983	1,4007	1,4031	1,4054	1,4078	1,4101	1,4124	1,4147	1,417	1,4193	1,4215	1,4238	1,426	1,4282	1,4305
52,8	1,3956	1,398	1,4005	1,4029	1,4053	1,4077	1,4101	1,4124	1,4148	1,4171	1,4194	1,4217	1,424	1,4263	1,4286	1,4308	1,4331	1,4353	1,4375
52,9	1,4026	1,405	1,4075	1,4099	1,4123	1,4147	1,4171	1,4194	1,4218	1,4241	1,4264	1,4288	1,4311	1,4333	1,4356	1,4379	1,4401	1,4424	1,4446
53	1,4096	1,412	1,4145	1,4169	1,4193	1,4217	1,4241	1,4265	1,4288	1,4312	1,4335	1,4358	1,4381	1,4404	1,4427	1,445	1,4473	1,4495	1,4517
53,1	1,4166	1,419	1,4215	1,4239	1,4264	1,4288	1,4312	1,4335	1,4359	1,4383	1,4406	1,4429	1,4452	1,4475	1,4498	1,4521	1,4544	1,4566	1,4589
53,2	1,4236	1,4261	1,4286	1,431	1,4334	1,4359	1,4383	1,4406	1,443	1,4454	1,4477	1,4501	1,4524	1,4547	1,457	1,4593	1,4616	1,4638	1,4661
53,3	1,4307	1,4332	1,4357	1,4381	1,4406	1,443	1,4454	1,4478	1,4502	1,4525	1,4549	1,4572	1,4596	1,4619	1,4642	1,4665	1,4688	1,471	1,4733
53,4	1,4378	1,4403	1,4428	1,4452	1,4477	1,4501	1,4525	1,4549	1,4573	1,4597	1,4621	1,4644	1,4668	1,4691	1,4714	1,4737	1,476	1,4783	1,4805

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
50	1,2525	1,2545	1,2566	1,2585	1,2605	1,2625	1,2645	1,2664
50,1	1,2588	1,2609	1,2629	1,2649	1,2669	1,2689	1,2708	1,2728
50,2	1,2652	1,2672	1,2692	1,2712	1,2732	1,2752	1,2772	1,2792
50,3	1,2716	1,2736	1,2756	1,2776	1,2796	1,2816	1,2836	1,2856
50,4	1,278	1,28	1,282	1,284	1,2861	1,2881	1,2901	1,292
50,5	1,2844	1,2864	1,2885	1,2905	1,2925	1,2945	1,2965	1,2985
50,6	1,2908	1,2929	1,2949	1,297	1,299	1,301	1,303	1,305
50,7	1,2973	1,2994	1,3014	1,3035	1,3055	1,3075	1,3095	1,3115
50,8	1,3038	1,3059	1,3079	1,31	1,312	1,314	1,3161	1,3181
50,9	1,3103	1,3124	1,3145	1,3165	1,3186	1,3206	1,3226	1,3246
51	1,3169	1,319	1,321	1,3231	1,3252	1,3272	1,3292	1,3312
51,1	1,3235	1,3256	1,3277	1,3297	1,3318	1,3338	1,3358	1,3379
51,2	1,3301	1,3322	1,3343	1,3363	1,3384	1,3405	1,3425	1,3445
51,3	1,3367	1,3388	1,3409	1,343	1,3451	1,3471	1,3492	1,3512
51,4	1,3434	1,3455	1,3476	1,3497	1,3518	1,3538	1,3559	1,3579
51,5	1,3501	1,3522	1,3543	1,3564	1,3585	1,3606	1,3626	1,3647
51,6	1,3568	1,3589	1,3611	1,3632	1,3652	1,3673	1,3694	1,3714
51,7	1,3636	1,3657	1,3678	1,3699	1,372	1,3741	1,3762	1,3782
51,8	1,3704	1,3725	1,3746	1,3767	1,3788	1,3809	1,383	1,3851
51,9	1,3772	1,3793	1,3814	1,3835	1,3857	1,3877	1,3898	1,3919
52	1,384	1,3862	1,3883	1,3904	1,3925	1,3946	1,3967	1,3988
52,1	1,3909	1,393	1,3952	1,3973	1,3994	1,4015	1,4036	1,4057
52,2	1,3978	1,3999	1,4021	1,4042	1,4063	1,4084	1,4105	1,4126
52,3	1,4047	1,4068	1,409	1,4111	1,4133	1,4154	1,4175	1,4196
52,4	1,4116	1,4138	1,416	1,4181	1,4203	1,4224	1,4245	1,4266
52,5	1,4186	1,4208	1,423	1,4251	1,4273	1,4294	1,4315	1,4336
52,6	1,4256	1,4278	1,43	1,4322	1,4343	1,4364	1,4386	1,4407
52,7	1,4327	1,4348	1,437	1,4392	1,4414	1,4435	1,4456	1,4478
52,8	1,4397	1,4419	1,4441	1,4463	1,4485	1,4506	1,4528	1,4549
52,9	1,4468	1,449	1,4512	1,4534	1,4556	1,4577	1,4599	1,462
53	1,454	1,4562	1,4584	1,4606	1,4627	1,4649	1,4671	1,4692
53,1	1,4611	1,4633	1,4655	1,4677	1,4699	1,4721	1,4743	1,4764
53,2	1,4683	1,4705	1,4727	1,4749	1,4771	1,4793	1,4815	1,4837
53,3	1,4755	1,4778	1,48	1,4822	1,4844	1,4866	1,4888	1,4909
53,4	1,4828	1,485	1,4873	1,4895	1,4917	1,4939	1,496	1,4982

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
53,5	0,8578	0,8744	0,89	0,9045	0,9182	0,9312	0,9434	0,9551	0,9663	0,977	0,9873	0,9972	1,0067	1,0159	1,0248	1,0334	1,0418	1,0499	1,0577
53,6	0,8629	0,8797	0,8953	0,9098	0,9236	0,9366	0,9489	0,9607	0,9719	0,9826	0,993	1,0029	1,0124	1,0217	1,0306	1,0392	1,0476	1,0557	1,0636
53,7	0,8681	0,8849	0,9006	0,9152	0,929	0,9421	0,9544	0,9662	0,9775	0,9883	0,9986	1,0086	1,0182	1,0274	1,0364	1,0451	1,0535	1,0616	1,0696
53,8	0,8733	0,8902	0,9059	0,9206	0,9345	0,9475	0,96	0,9718	0,9831	0,9939	1,0043	1,0143	1,024	1,0332	1,0422	1,0509	1,0594	1,0675	1,0755
53,9	0,8786	0,8955	0,9113	0,926	0,9399	0,9531	0,9655	0,9774	0,9888	0,9996	1,01	1,0201	1,0297	1,0391	1,0481	1,0568	1,0653	1,0735	1,0815
54	0,8838	0,9008	0,9167	0,9315	0,9454	0,9586	0,9711	0,983	0,9944	1,0053	1,0158	1,0259	1,0356	1,0449	1,054	1,0627	1,0712	1,0795	1,0875
54,1	0,8891	0,9062	0,9221	0,9369	0,9509	0,9642	0,9767	0,9887	1,0001	1,0111	1,0216	1,0317	1,0414	1,0508	1,0599	1,0687	1,0772	1,0855	1,0935
54,2	0,8945	0,9116	0,9275	0,9424	0,9565	0,9698	0,9824	0,9944	1,0059	1,0168	1,0274	1,0375	1,0473	1,0567	1,0658	1,0747	1,0832	1,0915	1,0996
54,3	0,8998	0,917	0,933	0,948	0,9621	0,9754	0,9881	1,0001	1,0116	1,0226	1,0332	1,0434	1,0532	1,0627	1,0718	1,0807	1,0892	1,0976	1,1057
54,4	0,9052	0,9224	0,9385	0,9535	0,9677	0,9811	0,9938	1,0059	1,0174	1,0285	1,0391	1,0493	1,0591	1,0686	1,0778	1,0867	1,0953	1,1037	1,1118
54,5	0,9106	0,9279	0,944	0,9591	0,9733	0,9867	0,9995	1,0116	1,0232	1,0343	1,045	1,0552	1,0651	1,0746	1,0838	1,0927	1,1014	1,1098	1,1179
54,6	0,916	0,9334	0,9495	0,9647	0,979	0,9924	1,0052	1,0174	1,0291	1,0402	1,0509	1,0612	1,0711	1,0806	1,0899	1,0988	1,1075	1,1159	1,1241
54,7	0,9214	0,9389	0,9551	0,9703	0,9846	0,9982	1,011	1,0232	1,0349	1,0461	1,0568	1,0672	1,0771	1,0867	1,096	1,1049	1,1136	1,1221	1,1303
54,8	0,9269	0,9444	0,9607	0,976	0,9904	1,0039	1,0168	1,0291	1,0408	1,052	1,0628	1,0732	1,0831	1,0928	1,1021	1,1111	1,1198	1,1283	1,1365
54,9	0,9324	0,95	0,9664	0,9817	0,9961	1,0097	1,0227	1,035	1,0467	1,058	1,0688	1,0792	1,0892	1,0989	1,1082	1,1173	1,126	1,1345	1,1428
55	0,938	0,9556	0,972	0,9874	1,0019	1,0155	1,0285	1,0409	1,0527	1,064	1,0748	1,0853	1,0953	1,105	1,1144	1,1234	1,1322	1,1408	1,1491
55,1	0,9435	0,9612	0,9777	0,9931	1,0077	1,0214	1,0344	1,0468	1,0587	1,07	1,0809	1,0914	1,1014	1,1112	1,1206	1,1297	1,1385	1,1471	1,1554
55,2	0,9491	0,9669	0,9834	0,9989	1,0135	1,0273	1,0403	1,0528	1,0647	1,0761	1,087	1,0975	1,1076	1,1174	1,1268	1,1359	1,1448	1,1534	1,1617
55,3	0,9547	0,9726	0,9892	1,0047	1,0193	1,0332	1,0463	1,0588	1,0707	1,0821	1,0931	1,1036	1,1138	1,1236	1,1331	1,1422	1,1511	1,1597	1,1681
55,4	0,9604	0,9783	0,9949	1,0105	1,0252	1,0391	1,0523	1,0648	1,0768	1,0882	1,0992	1,1098	1,12	1,1298	1,1393	1,1485	1,1575	1,1661	1,1745
55,5	0,966	0,984	1,0007	1,0164	1,0311	1,045	1,0583	1,0708	1,0829	1,0944	1,1054	1,116	1,1262	1,1361	1,1456	1,1549	1,1638	1,1725	1,181
55,6	0,9717	0,9898	1,0065	1,0223	1,037	1,051	1,0643	1,0769	1,089	1,1005	1,1116	1,1223	1,1325	1,1424	1,152	1,1613	1,1702	1,179	1,1874
55,7	0,9774	0,9955	1,0124	1,0282	1,043	1,0571	1,0704	1,083	1,0951	1,1067	1,1178	1,1285	1,1388	1,1488	1,1584	1,1677	1,1767	1,1854	1,1939
55,8	0,9832	1,0014	1,0183	1,0341	1,049	1,0631	1,0765	1,0892	1,1013	1,1129	1,1241	1,1348	1,1452	1,1551	1,1648	1,1741	1,1831	1,1919	1,2004
55,9	0,989	1,0072	1,0242	1,0401	1,055	1,0692	1,0826	1,0953	1,1075	1,1192	1,1304	1,1412	1,1515	1,1615	1,1712	1,1806	1,1896	1,1985	1,207
56	0,9948	1,0131	1,0301	1,0461	1,0611	1,0753	1,0887	1,1015	1,1138	1,1255	1,1367	1,1475	1,1579	1,168	1,1777	1,1871	1,1962	1,205	1,2136
56,1	1,0006	1,019	1,0361	1,0521	1,0672	1,0814	1,0949	1,1078	1,12	1,1318	1,1431	1,1539	1,1644	1,1744	1,1842	1,1936	1,2027	1,2116	1,2202
56,2	1,0065	1,0249	1,0421	1,0582	1,0733	1,0876	1,1011	1,114	1,1263	1,1381	1,1494	1,1603	1,1708	1,1809	1,1907	1,2002	1,2093	1,2182	1,2269
56,3	1,0124	1,0309	1,0481	1,0642	1,0794	1,0938	1,1074	1,1203	1,1327	1,1445	1,1559	1,1668	1,1773	1,1874	1,1973	1,2067	1,2159	1,2249	1,2335
56,4	1,0183	1,0369	1,0542	1,0704	1,0856	1,1	1,1136	1,1266	1,139	1,1509	1,1623	1,1733	1,1838	1,194	1,2038	1,2134	1,2226	1,2316	1,2403
56,5	1,0243	1,0429	1,0603	1,0765	1,0918	1,1062	1,1199	1,133	1,1454	1,1573	1,1688	1,1798	1,1904	1,2006	1,2105	1,22	1,2293	1,2383	1,247
56,6	1,0303	1,049	1,0664	1,0827	1,098	1,1125	1,1263	1,1393	1,1519	1,1638	1,1753	1,1863	1,1969	1,2072	1,2171	1,2267	1,236	1,245	1,2538
56,7	1,0363	1,0551	1,0725	1,0889	1,1043	1,1188	1,1326	1,1458	1,1583	1,1703	1,1818	1,1929	1,2036	1,2138	1,2238	1,2334	1,2427	1,2518	1,2606
56,8	1,0423	1,0612	1,0787	1,0951	1,1106	1,1252	1,139	1,1522	1,1648	1,1768	1,1884	1,1995	1,2102	1,2205	1,2305	1,2402	1,2495	1,2586	1,2674
56,9	1,0484	1,0673	1,0849	1,1014	1,1169	1,1316	1,1454	1,1587	1,1713	1,1834	1,195	1,2061	1,2169	1,2272	1,2372	1,2469	1,2563	1,2654	1,2743

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
53,5	1,0654	1,0729	1,0801	1,0872	1,0941	1,1009	1,1075	1,1139	1,1203	1,1265	1,1326	1,1385	1,1443	1,1501	1,1557	1,1612	1,1667	1,172	1,1773
53,6	1,0713	1,0788	1,0861	1,0932	1,1001	1,1069	1,1136	1,12	1,1264	1,1326	1,1387	1,1447	1,1505	1,1563	1,1619	1,1675	1,1729	1,1783	1,1836
53,7	1,0773	1,0848	1,0921	1,0992	1,1062	1,113	1,1197	1,1262	1,1325	1,1388	1,1449	1,1509	1,1568	1,1625	1,1682	1,1738	1,1792	1,1846	1,1899
53,8	1,0832	1,0908	1,0981	1,1053	1,1123	1,1191	1,1258	1,1323	1,1387	1,145	1,1511	1,1571	1,163	1,1688	1,1745	1,1801	1,1856	1,191	1,1963
53,9	1,0892	1,0968	1,1042	1,1114	1,1184	1,1252	1,1319	1,1385	1,1449	1,1512	1,1573	1,1634	1,1693	1,1751	1,1808	1,1864	1,1919	1,1973	1,2026
54	1,0953	1,1029	1,1103	1,1175	1,1245	1,1314	1,1381	1,1447	1,1511	1,1574	1,1636	1,1696	1,1756	1,1814	1,1871	1,1928	1,1983	1,2037	1,2091
54,1	1,1013	1,1089	1,1164	1,1236	1,1307	1,1376	1,1443	1,1509	1,1574	1,1637	1,1699	1,176	1,1819	1,1878	1,1935	1,1992	1,2047	1,2102	1,2155
54,2	1,1074	1,1151	1,1225	1,1298	1,1369	1,1438	1,1505	1,1572	1,1636	1,17	1,1762	1,1823	1,1883	1,1942	1,1999	1,2056	1,2111	1,2166	1,222
54,3	1,1135	1,1212	1,1287	1,136	1,1431	1,15	1,1568	1,1635	1,17	1,1763	1,1826	1,1887	1,1947	1,2006	1,2063	1,212	1,2176	1,2231	1,2285
54,4	1,1197	1,1274	1,1349	1,1422	1,1493	1,1563	1,1631	1,1698	1,1763	1,1827	1,1889	1,1951	1,2011	1,207	1,2128	1,2185	1,2241	1,2296	1,235
54,5	1,1259	1,1336	1,1411	1,1484	1,1556	1,1626	1,1694	1,1761	1,1827	1,1891	1,1954	1,2015	1,2076	1,2135	1,2193	1,225	1,2306	1,2362	1,2416
54,6	1,1321	1,1398	1,1473	1,1547	1,1619	1,1689	1,1758	1,1825	1,189	1,1955	1,2018	1,208	1,214	1,22	1,2258	1,2316	1,2372	1,2427	1,2482
54,7	1,1383	1,1461	1,1536	1,161	1,1682	1,1753	1,1821	1,1889	1,1955	1,2019	1,2082	1,2144	1,2205	1,2265	1,2324	1,2381	1,2438	1,2493	1,2548
54,8	1,1445	1,1523	1,1599	1,1673	1,1746	1,1816	1,1886	1,1953	1,2019	1,2084	1,2147	1,221	1,2271	1,2331	1,239	1,2447	1,2504	1,256	1,2615
54,9	1,1508	1,1587	1,1663	1,1737	1,181	1,1881	1,195	1,2018	1,2084	1,2149	1,2213	1,2275	1,2336	1,2397	1,2456	1,2513	1,257	1,2626	1,2681
55	1,1571	1,165	1,1726	1,1801	1,1874	1,1945	1,2015	1,2083	1,2149	1,2214	1,2278	1,2341	1,2402	1,2463	1,2522	1,258	1,2637	1,2693	1,2749
55,1	1,1635	1,1714	1,1791	1,1865	1,1938	1,201	1,208	1,2148	1,2215	1,228	1,2344	1,2407	1,2469	1,2529	1,2589	1,2647	1,2704	1,2761	1,2816
55,2	1,1699	1,1778	1,1855	1,193	1,2003	1,2075	1,2145	1,2213	1,228	1,2346	1,241	1,2473	1,2535	1,2596	1,2656	1,2714	1,2772	1,2828	1,2884
55,3	1,1763	1,1842	1,1919	1,1995	1,2068	1,214	1,221	1,2279	1,2346	1,2412	1,2477	1,254	1,2602	1,2663	1,2723	1,2782	1,2839	1,2896	1,2952
55,4	1,1827	1,1907	1,1984	1,206	1,2134	1,2206	1,2276	1,2345	1,2413	1,2479	1,2544	1,2607	1,2669	1,2731	1,279	1,2849	1,2907	1,2964	1,302
55,5	1,1892	1,1972	1,2049	1,2125	1,2199	1,2272	1,2343	1,2412	1,2479	1,2546	1,2611	1,2674	1,2737	1,2798	1,2858	1,2918	1,2976	1,3033	1,3089
55,6	1,1957	1,2037	1,2115	1,2191	1,2265	1,2338	1,2409	1,2478	1,2546	1,2613	1,2678	1,2742	1,2805	1,2866	1,2927	1,2986	1,3044	1,3101	1,3158
55,7	1,2022	1,2102	1,2181	1,2257	1,2332	1,2405	1,2476	1,2545	1,2614	1,268	1,2746	1,281	1,2873	1,2935	1,2995	1,3055	1,3113	1,3171	1,3227
55,8	1,2087	1,2168	1,2247	1,2323	1,2398	1,2471	1,2543	1,2613	1,2681	1,2748	1,2814	1,2878	1,2941	1,3003	1,3064	1,3124	1,3182	1,324	1,3297
55,9	1,2153	1,2234	1,2313	1,239	1,2465	1,2539	1,261	1,268	1,2749	1,2816	1,2882	1,2947	1,301	1,3072	1,3133	1,3193	1,3252	1,331	1,3367
56	1,2219	1,2301	1,238	1,2457	1,2532	1,2606	1,2678	1,2748	1,2817	1,2885	1,2951	1,3016	1,3079	1,3141	1,3203	1,3263	1,3322	1,338	1,3437
56,1	1,2286	1,2367	1,2447	1,2524	1,26	1,2674	1,2746	1,2817	1,2886	1,2953	1,302	1,3085	1,3148	1,3211	1,3272	1,3333	1,3392	1,345	1,3508
56,2	1,2353	1,2435	1,2514	1,2592	1,2668	1,2742	1,2814	1,2885	1,2955	1,3023	1,3089	1,3154	1,3218	1,3281	1,3343	1,3403	1,3463	1,3521	1,3578
56,3	1,242	1,2502	1,2582	1,266	1,2736	1,281	1,2883	1,2954	1,3024	1,3092	1,3159	1,3224	1,3288	1,3351	1,3413	1,3474	1,3533	1,3592	1,365
56,4	1,2487	1,257	1,265	1,2728	1,2805	1,2879	1,2952	1,3023	1,3093	1,3162	1,3228	1,3294	1,3359	1,3422	1,3484	1,3545	1,3605	1,3663	1,3721
56,5	1,2555	1,2638	1,2718	1,2797	1,2873	1,2948	1,3021	1,3093	1,3163	1,3232	1,3299	1,3365	1,3429	1,3493	1,3555	1,3616	1,3676	1,3735	1,3793
56,6	1,2623	1,2706	1,2787	1,2866	1,2942	1,3018	1,3091	1,3163	1,3233	1,3302	1,3369	1,3435	1,35	1,3564	1,3626	1,3688	1,3748	1,3807	1,3865
56,7	1,2691	1,2775	1,2856	1,2935	1,3012	1,3087	1,3161	1,3233	1,3304	1,3373	1,344	1,3507	1,3572	1,3636	1,3698	1,376	1,382	1,3879	1,3938
56,8	1,276	1,2844	1,2925	1,3004	1,3082	1,3157	1,3231	1,3304	1,3374	1,3444	1,3512	1,3578	1,3643	1,3707	1,377	1,3832	1,3893	1,3952	1,4011
56,9	1,2829	1,2913	1,2995	1,3074	1,3152	1,3228	1,3302	1,3374	1,3445	1,3515	1,3583	1,365	1,3715	1,378	1,3843	1,3905	1,3965	1,4025	1,4084

Table of external index of viability and vitality
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e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
53,5	1,1824	1,1875	1,1925	1,1975	1,2023	1,2071	1,2118	1,2165	1,2211	1,2256	1,2301	1,2345	1,2388	1,2431	1,2474	1,2516	1,2557	1,2598	1,2638
53,6	1,1887	1,1939	1,1989	1,2038	1,2087	1,2135	1,2182	1,2229	1,2275	1,2321	1,2365	1,241	1,2453	1,2496	1,2539	1,2581	1,2623	1,2664	1,2704
53,7	1,1951	1,2002	1,2053	1,2102	1,2151	1,2199	1,2247	1,2294	1,234	1,2386	1,2431	1,2475	1,2519	1,2562	1,2605	1,2647	1,2689	1,273	1,2771
53,8	1,2015	1,2066	1,2117	1,2167	1,2216	1,2264	1,2312	1,2359	1,2405	1,2451	1,2496	1,254	1,2584	1,2628	1,2671	1,2713	1,2755	1,2796	1,2837
53,9	1,2079	1,213	1,2181	1,2231	1,228	1,2329	1,2377	1,2424	1,247	1,2516	1,2562	1,2606	1,265	1,2694	1,2737	1,2779	1,2821	1,2863	1,2904
54	1,2143	1,2195	1,2246	1,2296	1,2345	1,2394	1,2442	1,2489	1,2536	1,2582	1,2628	1,2672	1,2717	1,276	1,2803	1,2846	1,2888	1,293	1,2971
54,1	1,2208	1,226	1,2311	1,2361	1,2411	1,246	1,2508	1,2555	1,2602	1,2648	1,2694	1,2739	1,2783	1,2827	1,287	1,2913	1,2955	1,2997	1,3038
54,2	1,2273	1,2325	1,2376	1,2427	1,2476	1,2525	1,2574	1,2621	1,2668	1,2715	1,276	1,2805	1,285	1,2894	1,2937	1,298	1,3023	1,3065	1,3106
54,3	1,2338	1,239	1,2442	1,2492	1,2542	1,2591	1,264	1,2688	1,2735	1,2781	1,2827	1,2872	1,2917	1,2961	1,3005	1,3048	1,309	1,3132	1,3174
54,4	1,2404	1,2456	1,2508	1,2558	1,2608	1,2658	1,2706	1,2754	1,2802	1,2848	1,2894	1,294	1,2985	1,3029	1,3073	1,3116	1,3158	1,3201	1,3242
54,5	1,2469	1,2522	1,2574	1,2625	1,2675	1,2724	1,2773	1,2821	1,2869	1,2916	1,2962	1,3007	1,3052	1,3097	1,3141	1,3184	1,3227	1,3269	1,3311
54,6	1,2535	1,2588	1,264	1,2691	1,2742	1,2791	1,284	1,2889	1,2936	1,2983	1,3029	1,3075	1,312	1,3165	1,3209	1,3252	1,3295	1,3338	1,338
54,7	1,2602	1,2655	1,2707	1,2758	1,2809	1,2859	1,2908	1,2956	1,3004	1,3051	1,3098	1,3143	1,3189	1,3233	1,3278	1,3321	1,3364	1,3407	1,3449
54,8	1,2669	1,2722	1,2774	1,2826	1,2876	1,2926	1,2975	1,3024	1,3072	1,3119	1,3166	1,3212	1,3257	1,3302	1,3346	1,339	1,3433	1,3476	1,3518
54,9	1,2736	1,2789	1,2841	1,2893	1,2944	1,2994	1,3044	1,3092	1,314	1,3188	1,3235	1,3281	1,3326	1,3371	1,3416	1,346	1,3503	1,3546	1,3588
55	1,2803	1,2856	1,2909	1,2961	1,3012	1,3062	1,3112	1,3161	1,3209	1,3257	1,3303	1,335	1,3396	1,3441	1,3485	1,3529	1,3573	1,3616	1,3658
55,1	1,2871	1,2924	1,2977	1,3029	1,308	1,3131	1,3181	1,323	1,3278	1,3326	1,3373	1,3419	1,3465	1,351	1,3555	1,3599	1,3643	1,3686	1,3729
55,2	1,2938	1,2992	1,3045	1,3098	1,3149	1,32	1,3249	1,3299	1,3347	1,3395	1,3442	1,3489	1,3535	1,358	1,3625	1,367	1,3713	1,3757	1,38
55,3	1,3007	1,3061	1,3114	1,3166	1,3218	1,3269	1,3319	1,3368	1,3417	1,3465	1,3512	1,3559	1,3605	1,3651	1,3696	1,374	1,3784	1,3828	1,3871
55,4	1,3075	1,313	1,3183	1,3235	1,3287	1,3338	1,3388	1,3438	1,3487	1,3535	1,3583	1,3629	1,3676	1,3722	1,3767	1,3811	1,3855	1,3899	1,3942
55,5	1,3144	1,3198	1,3252	1,3305	1,3357	1,3408	1,3458	1,3508	1,3557	1,3605	1,3653	1,37	1,3747	1,3793	1,3838	1,3883	1,3927	1,3971	1,4014
55,6	1,3213	1,3268	1,3322	1,3374	1,3426	1,3478	1,3528	1,3578	1,3628	1,3676	1,3724	1,3771	1,3818	1,3864	1,3909	1,3954	1,3998	1,4042	1,4086
55,7	1,3283	1,3338	1,3391	1,3445	1,3497	1,3548	1,3599	1,3649	1,3698	1,3747	1,3795	1,3842	1,3889	1,3935	1,3981	1,4026	1,4071	1,4115	1,4158
55,8	1,3353	1,3407	1,3462	1,3515	1,3567	1,3619	1,367	1,372	1,377	1,3818	1,3867	1,3914	1,3961	1,4007	1,4053	1,4098	1,4143	1,4187	1,4231
55,9	1,3423	1,3478	1,3532	1,3586	1,3638	1,369	1,3741	1,3791	1,3841	1,389	1,3938	1,3986	1,4033	1,408	1,4126	1,4171	1,4216	1,426	1,4304
56	1,3493	1,3548	1,3603	1,3657	1,3709	1,3761	1,3812	1,3863	1,3913	1,3962	1,401	1,4058	1,4106	1,4152	1,4198	1,4244	1,4289	1,4333	1,4377
56,1	1,3564	1,3619	1,3674	1,3728	1,3781	1,3833	1,3884	1,3935	1,3985	1,4034	1,4083	1,4131	1,4178	1,4225	1,4271	1,4317	1,4362	1,4407	1,4451
56,2	1,3635	1,3691	1,3745	1,3799	1,3853	1,3905	1,3957	1,4007	1,4058	1,4107	1,4156	1,4204	1,4252	1,4298	1,4345	1,4391	1,4436	1,4481	1,4525
56,3	1,3706	1,3762	1,3817	1,3871	1,3925	1,3977	1,4029	1,408	1,413	1,418	1,4229	1,4277	1,4325	1,4372	1,4419	1,4464	1,451	1,4555	1,4599
56,4	1,3778	1,3834	1,3889	1,3944	1,3997	1,405	1,4102	1,4153	1,4204	1,4253	1,4302	1,4351	1,4399	1,4446	1,4493	1,4539	1,4584	1,4629	1,4674
56,5	1,385	1,3907	1,3962	1,4016	1,407	1,4123	1,4175	1,4226	1,4277	1,4327	1,4376	1,4425	1,4473	1,452	1,4567	1,4613	1,4659	1,4704	1,4749
56,6	1,3923	1,3979	1,4035	1,4089	1,4143	1,4196	1,4248	1,43	1,4351	1,4401	1,445	1,4499	1,4547	1,4595	1,4642	1,4688	1,4734	1,4779	1,4824
56,7	1,3996	1,4052	1,4108	1,4163	1,4216	1,427	1,4322	1,4374	1,4425	1,4475	1,4525	1,4574	1,4622	1,467	1,4717	1,4763	1,481	1,4855	1,49
56,8	1,4069	1,4125	1,4181	1,4236	1,429	1,4344	1,4396	1,4448	1,4499	1,455	1,46	1,4649	1,4697	1,4745	1,4792	1,4839	1,4885	1,4931	1,4976
56,9	1,4142	1,4199	1,4255	1,431	1,4365	1,4418	1,4471	1,4523	1,4574	1,4625	1,4675	1,4724	1,4773	1,4821	1,4868	1,4915	1,4961	1,5007	1,5052

Table of external index of viability and vitality
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e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
53,5	1,2678	1,2718	1,2757	1,2796	1,2834	1,2872	1,2909	1,2946	1,2983	1,3019	1,3055	1,3091	1,3126	1,3161	1,3196	1,323	1,3264	1,3298	1,3331
53,6	1,2744	1,2784	1,2823	1,2862	1,29	1,2939	1,2976	1,3013	1,305	1,3087	1,3123	1,3158	1,3194	1,3229	1,3264	1,3298	1,3332	1,3366	1,3399
53,7	1,2811	1,2851	1,289	1,2929	1,2967	1,3006	1,3043	1,3081	1,3117	1,3154	1,319	1,3226	1,3262	1,3297	1,3332	1,3366	1,34	1,3434	1,3468
53,8	1,2877	1,2917	1,2957	1,2996	1,3035	1,3073	1,3111	1,3148	1,3185	1,3222	1,3258	1,3294	1,333	1,3365	1,34	1,3435	1,3469	1,3503	1,3537
53,9	1,2944	1,2984	1,3024	1,3063	1,3102	1,314	1,3178	1,3216	1,3253	1,329	1,3326	1,3362	1,3398	1,3433	1,3468	1,3503	1,3538	1,3572	1,3606
54	1,3011	1,3052	1,3091	1,3131	1,317	1,3208	1,3246	1,3284	1,3321	1,3358	1,3395	1,3431	1,3467	1,3502	1,3538	1,3572	1,3607	1,3641	1,3675
54,1	1,3079	1,3119	1,3159	1,3199	1,3238	1,3276	1,3315	1,3352	1,339	1,3427	1,3463	1,35	1,3536	1,3571	1,3607	1,3642	1,3676	1,3711	1,3745
54,2	1,3147	1,3187	1,3227	1,3267	1,3306	1,3345	1,3383	1,3421	1,3459	1,3496	1,3533	1,3569	1,3605	1,3641	1,3676	1,3711	1,3746	1,378	1,3815
54,3	1,3215	1,3256	1,3296	1,3335	1,3375	1,3414	1,3452	1,349	1,3528	1,3565	1,3602	1,3638	1,3675	1,371	1,3746	1,3781	1,3816	1,3851	1,3885
54,4	1,3283	1,3324	1,3364	1,3404	1,3444	1,3483	1,3521	1,3559	1,3597	1,3635	1,3672	1,3708	1,3745	1,378	1,3816	1,3851	1,3886	1,3921	1,3956
54,5	1,3352	1,3393	1,3433	1,3473	1,3513	1,3552	1,3591	1,3629	1,3667	1,3704	1,3742	1,3778	1,3815	1,3851	1,3887	1,3922	1,3957	1,3992	1,4026
54,6	1,3421	1,3462	1,3503	1,3543	1,3582	1,3622	1,366	1,3699	1,3737	1,3775	1,3812	1,3849	1,3885	1,3922	1,3957	1,3993	1,4028	1,4063	1,4098
54,7	1,3491	1,3532	1,3572	1,3612	1,3652	1,3692	1,3731	1,3769	1,3807	1,3845	1,3882	1,3919	1,3956	1,3992	1,4028	1,4064	1,4099	1,4134	1,4169
54,8	1,356	1,3601	1,3642	1,3683	1,3722	1,3762	1,3801	1,384	1,3878	1,3916	1,3953	1,399	1,4027	1,4064	1,41	1,4136	1,4171	1,4206	1,4241
54,9	1,363	1,3671	1,3712	1,3753	1,3793	1,3833	1,3872	1,391	1,3949	1,3987	1,4025	1,4062	1,4099	1,4135	1,4172	1,4207	1,4243	1,4278	1,4313
55	1,37	1,3742	1,3783	1,3824	1,3864	1,3903	1,3943	1,3982	1,402	1,4058	1,4096	1,4134	1,4171	1,4207	1,4244	1,428	1,4315	1,435	1,4386
55,1	1,3771	1,3813	1,3854	1,3895	1,3935	1,3975	1,4014	1,4053	1,4092	1,413	1,4168	1,4206	1,4243	1,4279	1,4316	1,4352	1,4388	1,4423	1,4458
55,2	1,3842	1,3884	1,3925	1,3966	1,4006	1,4046	1,4086	1,4125	1,4164	1,4202	1,424	1,4278	1,4315	1,4352	1,4389	1,4425	1,4461	1,4496	1,4531
55,3	1,3913	1,3955	1,3996	1,4037	1,4078	1,4118	1,4158	1,4197	1,4236	1,4275	1,4313	1,435	1,4388	1,4425	1,4462	1,4498	1,4534	1,4569	1,4605
55,4	1,3985	1,4027	1,4068	1,4109	1,415	1,419	1,423	1,4269	1,4309	1,4347	1,4385	1,4423	1,4461	1,4498	1,4535	1,4571	1,4607	1,4643	1,4679
55,5	1,4056	1,4099	1,414	1,4182	1,4222	1,4263	1,4303	1,4342	1,4382	1,442	1,4459	1,4497	1,4534	1,4571	1,4608	1,4645	1,4681	1,4717	1,4753
55,6	1,4129	1,4171	1,4213	1,4254	1,4295	1,4336	1,4376	1,4415	1,4455	1,4494	1,4532	1,457	1,4608	1,4645	1,4682	1,4719	1,4755	1,4791	1,4827
55,7	1,4201	1,4243	1,4286	1,4327	1,4368	1,4409	1,4449	1,4489	1,4528	1,4567	1,4606	1,4644	1,4682	1,4719	1,4757	1,4793	1,483	1,4866	1,4902
55,8	1,4274	1,4316	1,4359	1,44	1,4441	1,4482	1,4523	1,4563	1,4602	1,4641	1,468	1,4718	1,4756	1,4794	1,4831	1,4868	1,4905	1,4941	1,4977
55,9	1,4347	1,439	1,4432	1,4474	1,4515	1,4556	1,4597	1,4637	1,4676	1,4716	1,4754	1,4793	1,4831	1,4869	1,4906	1,4943	1,498	1,5016	1,5052
56	1,4421	1,4463	1,4506	1,4548	1,4589	1,463	1,4671	1,4711	1,4751	1,479	1,4829	1,4868	1,4906	1,4944	1,4981	1,5019	1,5055	1,5092	1,5128
56,1	1,4494	1,4537	1,458	1,4622	1,4664	1,4705	1,4746	1,4786	1,4826	1,4865	1,4904	1,4943	1,4981	1,5019	1,5057	1,5094	1,5131	1,5168	1,5204
56,2	1,4568	1,4612	1,4654	1,4697	1,4738	1,478	1,482	1,4861	1,4901	1,4941	1,498	1,5019	1,5057	1,5095	1,5133	1,517	1,5207	1,5244	1,5281
56,3	1,4643	1,4686	1,4729	1,4771	1,4813	1,4855	1,4896	1,4936	1,4976	1,5016	1,5056	1,5095	1,5133	1,5172	1,5209	1,5247	1,5284	1,5321	1,5357
56,4	1,4718	1,4761	1,4804	1,4847	1,4889	1,493	1,4971	1,5012	1,5052	1,5092	1,5132	1,5171	1,521	1,5248	1,5286	1,5323	1,5361	1,5398	1,5434
56,5	1,4793	1,4836	1,4879	1,4922	1,4964	1,5006	1,5047	1,5088	1,5129	1,5169	1,5208	1,5247	1,5286	1,5325	1,5363	1,5401	1,5438	1,5475	1,5512
56,6	1,4868	1,4912	1,4955	1,4998	1,504	1,5082	1,5124	1,5165	1,5205	1,5245	1,5285	1,5324	1,5363	1,5402	1,544	1,5478	1,5516	1,5553	1,559
56,7	1,4944	1,4988	1,5031	1,5074	1,5117	1,5159	1,52	1,5241	1,5282	1,5322	1,5362	1,5402	1,5441	1,548	1,5518	1,5556	1,5594	1,5631	1,5668
56,8	1,502	1,5064	1,5108	1,5151	1,5193	1,5236	1,5277	1,5319	1,5359	1,54	1,544	1,5479	1,5519	1,5558	1,5596	1,5634	1,5672	1,5709	1,5746
56,9	1,5097	1,5141	1,5185	1,5228	1,5271	1,5313	1,5355	1,5396	1,5437	1,5478	1,5518	1,5557	1,5597	1,5636	1,5674	1,5712	1,575	1,5788	1,5825

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
53,5	1,3364	1,3397	1,3429	1,3462	1,3494	1,3525	1,3557	1,3588	1,3619	1,365	1,368	1,371	1,374	1,377	1,3799	1,3829	1,3858	1,3887	1,3915
53,6	1,3432	1,3465	1,3498	1,353	1,3562	1,3594	1,3626	1,3657	1,3688	1,3719	1,3749	1,378	1,381	1,384	1,3869	1,3899	1,3928	1,3957	1,3985
53,7	1,3501	1,3534	1,3567	1,3599	1,3631	1,3663	1,3695	1,3726	1,3757	1,3788	1,3819	1,3849	1,388	1,3909	1,3939	1,3969	1,3998	1,4027	1,4056
53,8	1,357	1,3603	1,3636	1,3668	1,3701	1,3733	1,3764	1,3796	1,3827	1,3858	1,3889	1,3919	1,395	1,398	1,4009	1,4039	1,4068	1,4097	1,4126
53,9	1,3639	1,3672	1,3705	1,3738	1,377	1,3802	1,3834	1,3866	1,3897	1,3928	1,3959	1,399	1,402	1,405	1,408	1,411	1,4139	1,4168	1,4197
54	1,3709	1,3742	1,3775	1,3808	1,384	1,3872	1,3904	1,3936	1,3967	1,3999	1,403	1,406	1,4091	1,4121	1,4151	1,4181	1,421	1,424	1,4269
54,1	1,3778	1,3812	1,3845	1,3878	1,391	1,3943	1,3975	1,4007	1,4038	1,4069	1,41	1,4131	1,4162	1,4192	1,4222	1,4252	1,4281	1,4311	1,434
54,2	1,3848	1,3882	1,3915	1,3948	1,3981	1,4013	1,4045	1,4077	1,4109	1,414	1,4171	1,4202	1,4233	1,4263	1,4294	1,4323	1,4353	1,4383	1,4412
54,3	1,3919	1,3952	1,3986	1,4019	1,4052	1,4084	1,4116	1,4148	1,418	1,4212	1,4243	1,4274	1,4305	1,4335	1,4365	1,4395	1,4425	1,4455	1,4484
54,4	1,399	1,4023	1,4057	1,409	1,4123	1,4155	1,4188	1,422	1,4252	1,4283	1,4315	1,4346	1,4376	1,4407	1,4437	1,4468	1,4498	1,4527	1,4557
54,5	1,406	1,4094	1,4128	1,4161	1,4194	1,4227	1,4259	1,4292	1,4323	1,4355	1,4387	1,4418	1,4449	1,4479	1,451	1,454	1,457	1,46	1,4629
54,6	1,4132	1,4166	1,42	1,4233	1,4266	1,4299	1,4331	1,4364	1,4396	1,4427	1,4459	1,449	1,4521	1,4552	1,4583	1,4613	1,4643	1,4673	1,4703
54,7	1,4203	1,4237	1,4271	1,4305	1,4338	1,4371	1,4404	1,4436	1,4468	1,45	1,4532	1,4563	1,4594	1,4625	1,4656	1,4686	1,4716	1,4746	1,4776
54,8	1,4275	1,4309	1,4343	1,4377	1,441	1,4443	1,4476	1,4509	1,4541	1,4573	1,4605	1,4636	1,4667	1,4698	1,4729	1,476	1,479	1,482	1,485
54,9	1,4348	1,4382	1,4416	1,445	1,4483	1,4516	1,4549	1,4582	1,4614	1,4646	1,4678	1,471	1,4741	1,4772	1,4803	1,4833	1,4864	1,4894	1,4924
55	1,442	1,4455	1,4489	1,4523	1,4556	1,4589	1,4622	1,4655	1,4687	1,472	1,4752	1,4783	1,4815	1,4846	1,4877	1,4907	1,4938	1,4968	1,4998
55,1	1,4493	1,4528	1,4562	1,4596	1,4629	1,4663	1,4696	1,4729	1,4761	1,4793	1,4826	1,4857	1,4889	1,492	1,4951	1,4982	1,5013	1,5043	1,5073
55,2	1,4566	1,4601	1,4635	1,4669	1,4703	1,4737	1,477	1,4803	1,4835	1,4868	1,49	1,4932	1,4963	1,4995	1,5026	1,5057	1,5087	1,5118	1,5148
55,3	1,464	1,4675	1,4709	1,4743	1,4777	1,4811	1,4844	1,4877	1,491	1,4942	1,4974	1,5006	1,5038	1,507	1,5101	1,5132	1,5163	1,5193	1,5224
55,4	1,4714	1,4749	1,4783	1,4817	1,4851	1,4885	1,4918	1,4952	1,4984	1,5017	1,5049	1,5081	1,5113	1,5145	1,5176	1,5207	1,5238	1,5269	1,5299
55,5	1,4788	1,4823	1,4858	1,4892	1,4926	1,496	1,4993	1,5026	1,5059	1,5092	1,5125	1,5157	1,5189	1,522	1,5252	1,5283	1,5314	1,5345	1,5375
55,6	1,4863	1,4898	1,4932	1,4967	1,5001	1,5035	1,5068	1,5102	1,5135	1,5168	1,52	1,5232	1,5265	1,5296	1,5328	1,5359	1,539	1,5421	1,5452
55,7	1,4937	1,4972	1,5007	1,5042	1,5076	1,511	1,5144	1,5177	1,5211	1,5243	1,5276	1,5308	1,5341	1,5373	1,5404	1,5436	1,5467	1,5498	1,5528
55,8	1,5012	1,5048	1,5083	1,5117	1,5152	1,5186	1,522	1,5253	1,5287	1,532	1,5352	1,5385	1,5417	1,5449	1,5481	1,5512	1,5544	1,5575	1,5606
55,9	1,5088	1,5123	1,5159	1,5193	1,5228	1,5262	1,5296	1,533	1,5363	1,5396	1,5429	1,5461	1,5494	1,5526	1,5558	1,5589	1,5621	1,5652	1,5683
56	1,5164	1,5199	1,5235	1,527	1,5304	1,5338	1,5372	1,5406	1,544	1,5473	1,5506	1,5539	1,5571	1,5603	1,5635	1,5667	1,5698	1,573	1,5761
56,1	1,524	1,5276	1,5311	1,5346	1,5381	1,5415	1,5449	1,5483	1,5517	1,555	1,5583	1,5616	1,5649	1,5681	1,5713	1,5745	1,5776	1,5808	1,5839
56,2	1,5317	1,5352	1,5388	1,5423	1,5458	1,5492	1,5527	1,556	1,5594	1,5628	1,5661	1,5694	1,5726	1,5759	1,5791	1,5823	1,5854	1,5886	1,5917
56,3	1,5394	1,5429	1,5465	1,55	1,5535	1,557	1,5604	1,5638	1,5672	1,5705	1,5739	1,5772	1,5804	1,5837	1,5869	1,5901	1,5933	1,5965	1,5996
56,4	1,5471	1,5507	1,5542	1,5578	1,5613	1,5648	1,5682	1,5716	1,575	1,5784	1,5817	1,585	1,5883	1,5916	1,5948	1,598	1,6012	1,6044	1,6075
56,5	1,5548	1,5584	1,562	1,5656	1,5691	1,5726	1,576	1,5795	1,5829	1,5862	1,5896	1,5929	1,5962	1,5995	1,6027	1,6059	1,6091	1,6123	1,6154
56,6	1,5626	1,5662	1,5698	1,5734	1,5769	1,5804	1,5839	1,5873	1,5907	1,5941	1,5975	1,6008	1,6041	1,6074	1,6107	1,6139	1,6171	1,6203	1,6234
56,7	1,5705	1,5741	1,5777	1,5813	1,5848	1,5883	1,5918	1,5952	1,5986	1,6021	1,6054	1,6088	1,6121	1,6154	1,6186	1,6219	1,6251	1,6283	1,6315
56,8	1,5783	1,5819	1,5856	1,5891	1,5927	1,5962	1,5997	1,6032	1,6066	1,61	1,6134	1,6167	1,6201	1,6234	1,6266	1,6299	1,6331	1,6363	1,6395
56,9	1,5862	1,5899	1,5935	1,5971	1,6006	1,6042	1,6077	1,6111	1,6146	1,618	1,6214	1,6248	1,6281	1,6314	1,6347	1,638	1,6412	1,6444	1,6476

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
53,5	1,3944	1,3972	1,4	1,4028	1,4056	1,4083	1,411	1,4138	1,4165	1,4191	1,4218	1,4244	1,4271	1,4297	1,4322	1,4348	1,4374	1,4399	1,4425
53,6	1,4014	1,4042	1,407	1,4098	1,4126	1,4154	1,4181	1,4208	1,4235	1,4262	1,4289	1,4315	1,4342	1,4368	1,4394	1,442	1,4445	1,4471	1,4496
53,7	1,4084	1,4113	1,4141	1,4169	1,4197	1,4225	1,4252	1,4279	1,4306	1,4333	1,436	1,4387	1,4413	1,4439	1,4465	1,4491	1,4517	1,4543	1,4568
53,8	1,4155	1,4184	1,4212	1,424	1,4268	1,4296	1,4323	1,4351	1,4378	1,4405	1,4432	1,4458	1,4485	1,4511	1,4537	1,4563	1,4589	1,4615	1,464
53,9	1,4226	1,4255	1,4283	1,4311	1,4339	1,4367	1,4395	1,4422	1,445	1,4477	1,4504	1,453	1,4557	1,4583	1,461	1,4636	1,4661	1,4687	1,4713
54	1,4298	1,4326	1,4355	1,4383	1,4411	1,4439	1,4467	1,4494	1,4522	1,4549	1,4576	1,4603	1,4629	1,4656	1,4682	1,4708	1,4734	1,476	1,4786
54,1	1,4369	1,4398	1,4426	1,4455	1,4483	1,4511	1,4539	1,4567	1,4594	1,4621	1,4648	1,4675	1,4702	1,4729	1,4755	1,4781	1,4807	1,4833	1,4859
54,2	1,4441	1,447	1,4499	1,4527	1,4556	1,4584	1,4611	1,4639	1,4667	1,4694	1,4721	1,4748	1,4775	1,4802	1,4828	1,4854	1,4881	1,4907	1,4932
54,3	1,4513	1,4542	1,4571	1,46	1,4628	1,4656	1,4684	1,4712	1,474	1,4767	1,4794	1,4821	1,4848	1,4875	1,4902	1,4928	1,4954	1,498	1,5006
54,4	1,4586	1,4615	1,4644	1,4673	1,4701	1,4729	1,4757	1,4785	1,4813	1,484	1,4868	1,4895	1,4922	1,4949	1,4975	1,5002	1,5028	1,5054	1,508
54,5	1,4659	1,4688	1,4717	1,4746	1,4774	1,4803	1,4831	1,4859	1,4887	1,4914	1,4942	1,4969	1,4996	1,5023	1,505	1,5076	1,5102	1,5129	1,5155
54,6	1,4732	1,4761	1,479	1,4819	1,4848	1,4876	1,4905	1,4933	1,496	1,4988	1,5016	1,5043	1,507	1,5097	1,5124	1,5151	1,5177	1,5203	1,523
54,7	1,4806	1,4835	1,4864	1,4893	1,4922	1,495	1,4979	1,5007	1,5035	1,5063	1,509	1,5118	1,5145	1,5172	1,5199	1,5226	1,5252	1,5278	1,5305
54,8	1,4879	1,4909	1,4938	1,4967	1,4996	1,5025	1,5053	1,5081	1,5109	1,5137	1,5165	1,5192	1,522	1,5247	1,5274	1,5301	1,5327	1,5354	1,538
54,9	1,4954	1,4983	1,5013	1,5042	1,5071	1,5099	1,5128	1,5156	1,5184	1,5212	1,524	1,5268	1,5295	1,5322	1,5349	1,5376	1,5403	1,5429	1,5456
55	1,5028	1,5058	1,5087	1,5116	1,5145	1,5174	1,5203	1,5231	1,5259	1,5287	1,5315	1,5343	1,5371	1,5398	1,5425	1,5452	1,5479	1,5505	1,5532
55,1	1,5103	1,5133	1,5162	1,5192	1,5221	1,525	1,5278	1,5307	1,5335	1,5363	1,5391	1,5419	1,5446	1,5474	1,5501	1,5528	1,5555	1,5582	1,5608
55,2	1,5178	1,5208	1,5237	1,5267	1,5296	1,5325	1,5354	1,5383	1,5411	1,5439	1,5467	1,5495	1,5523	1,555	1,5578	1,5605	1,5632	1,5658	1,5685
55,3	1,5254	1,5284	1,5313	1,5343	1,5372	1,5401	1,543	1,5459	1,5487	1,5516	1,5543	1,5571	1,5599	1,5627	1,5654	1,5682	1,5709	1,5736	1,5762
55,4	1,5329	1,536	1,5389	1,5419	1,5448	1,5477	1,5506	1,5535	1,5564	1,5592	1,562	1,5648	1,5676	1,5704	1,5731	1,5759	1,5786	1,5813	1,584
55,5	1,5406	1,5436	1,5466	1,5495	1,5525	1,5554	1,5583	1,5612	1,5641	1,5669	1,5697	1,5725	1,5753	1,5781	1,5809	1,5836	1,5863	1,589	1,5917
55,6	1,5482	1,5512	1,5542	1,5572	1,5602	1,5631	1,566	1,5689	1,5718	1,5746	1,5775	1,5803	1,5831	1,5859	1,5887	1,5914	1,5941	1,5968	1,5996
55,7	1,5559	1,5589	1,5619	1,5649	1,5679	1,5708	1,5737	1,5767	1,5795	1,5824	1,5853	1,5881	1,5909	1,5937	1,5965	1,5992	1,602	1,6047	1,6074
55,8	1,5636	1,5666	1,5697	1,5727	1,5756	1,5786	1,5815	1,5844	1,5873	1,5902	1,5931	1,5959	1,5987	1,6015	1,6043	1,6071	1,6098	1,6125	1,6153
55,9	1,5713	1,5744	1,5774	1,5804	1,5834	1,5864	1,5893	1,5923	1,5951	1,598	1,6009	1,6038	1,6066	1,6094	1,6122	1,6149	1,6177	1,6205	1,6232
56	1,5791	1,5822	1,5852	1,5882	1,5912	1,5942	1,5972	1,6001	1,603	1,6059	1,6088	1,6116	1,6145	1,6173	1,6201	1,6229	1,6256	1,6284	1,6311
56,1	1,587	1,59	1,5931	1,5961	1,5991	1,6021	1,605	1,608	1,6109	1,6138	1,6167	1,6196	1,6224	1,6252	1,628	1,6308	1,6336	1,6364	1,6391
56,2	1,5948	1,5979	1,6009	1,604	1,607	1,61	1,613	1,6159	1,6188	1,6217	1,6246	1,6275	1,6304	1,6332	1,636	1,6388	1,6416	1,6444	1,6471
56,3	1,6027	1,6058	1,6089	1,6119	1,6149	1,6179	1,6209	1,6239	1,6268	1,6297	1,6326	1,6355	1,6384	1,6412	1,644	1,6469	1,6496	1,6524	1,6552
56,4	1,6106	1,6137	1,6168	1,6198	1,6229	1,6259	1,6289	1,6318	1,6348	1,6377	1,6406	1,6435	1,6464	1,6492	1,6521	1,6549	1,6577	1,6605	1,6633
56,5	1,6186	1,6217	1,6248	1,6278	1,6309	1,6339	1,6369	1,6399	1,6428	1,6458	1,6487	1,6516	1,6545	1,6573	1,6602	1,663	1,6658	1,6686	1,6714
56,6	1,6266	1,6297	1,6328	1,6359	1,6389	1,6419	1,6449	1,6479	1,6509	1,6538	1,6568	1,6597	1,6626	1,6654	1,6683	1,6711	1,674	1,6768	1,6795
56,7	1,6346	1,6377	1,6408	1,6439	1,647	1,65	1,653	1,656	1,659	1,662	1,6649	1,6678	1,6707	1,6736	1,6765	1,6793	1,6821	1,6849	1,6877
56,8	1,6427	1,6458	1,6489	1,652	1,6551	1,6581	1,6612	1,6642	1,6672	1,6701	1,6731	1,676	1,6789	1,6818	1,6847	1,6875	1,6903	1,6932	1,696
56,9	1,6508	1,6539	1,657	1,6601	1,6632	1,6663	1,6693	1,6723	1,6753	1,6783	1,6812	1,6842	1,6871	1,69	1,6929	1,6958	1,6986	1,7014	1,7042

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
53,5	1,445	1,4475	1,4499	1,4524	1,4549	1,4573	1,4597	1,4621	1,4645	1,4669	1,4693	1,4716	1,474	1,4763	1,4786	1,481	1,4832	1,4855	1,4878
53,6	1,4521	1,4546	1,4571	1,4596	1,4621	1,4645	1,4669	1,4694	1,4718	1,4742	1,4765	1,4789	1,4813	1,4836	1,4859	1,4882	1,4905	1,4928	1,4951
53,7	1,4593	1,4619	1,4644	1,4668	1,4693	1,4717	1,4742	1,4766	1,479	1,4814	1,4838	1,4862	1,4885	1,4909	1,4932	1,4955	1,4979	1,5002	1,5024
53,8	1,4666	1,4691	1,4716	1,4741	1,4766	1,479	1,4815	1,4839	1,4863	1,4887	1,4911	1,4935	1,4959	1,4982	1,5006	1,5029	1,5052	1,5075	1,5098
53,9	1,4738	1,4764	1,4789	1,4814	1,4838	1,4863	1,4888	1,4912	1,4936	1,4961	1,4985	1,5008	1,5032	1,5056	1,5079	1,5103	1,5126	1,5149	1,5172
54	1,4811	1,4837	1,4862	1,4887	1,4912	1,4937	1,4961	1,4986	1,501	1,5034	1,5058	1,5082	1,5106	1,513	1,5153	1,5177	1,52	1,5223	1,5246
54,1	1,4885	1,491	1,4935	1,496	1,4985	1,501	1,5035	1,5059	1,5084	1,5108	1,5132	1,5157	1,518	1,5204	1,5228	1,5251	1,5275	1,5298	1,5321
54,2	1,4958	1,4984	1,5009	1,5034	1,5059	1,5084	1,5109	1,5134	1,5158	1,5183	1,5207	1,5231	1,5255	1,5279	1,5302	1,5326	1,5349	1,5373	1,5396
54,3	1,5032	1,5058	1,5083	1,5108	1,5134	1,5158	1,5183	1,5208	1,5233	1,5257	1,5281	1,5306	1,533	1,5354	1,5377	1,5401	1,5424	1,5448	1,5471
54,4	1,5106	1,5132	1,5157	1,5183	1,5208	1,5233	1,5258	1,5283	1,5308	1,5332	1,5356	1,5381	1,5405	1,5429	1,5453	1,5476	1,55	1,5523	1,5547
54,5	1,5181	1,5207	1,5232	1,5258	1,5283	1,5308	1,5333	1,5358	1,5383	1,5407	1,5432	1,5456	1,548	1,5504	1,5528	1,5552	1,5576	1,5599	1,5623
54,6	1,5256	1,5281	1,5307	1,5333	1,5358	1,5383	1,5408	1,5433	1,5458	1,5483	1,5507	1,5532	1,5556	1,558	1,5604	1,5628	1,5652	1,5675	1,5699
54,7	1,5331	1,5357	1,5382	1,5408	1,5434	1,5459	1,5484	1,5509	1,5534	1,5559	1,5583	1,5608	1,5632	1,5656	1,568	1,5704	1,5728	1,5752	1,5776
54,8	1,5406	1,5432	1,5458	1,5484	1,5509	1,5535	1,556	1,5585	1,561	1,5635	1,566	1,5684	1,5709	1,5733	1,5757	1,5781	1,5805	1,5829	1,5852
54,9	1,5482	1,5508	1,5534	1,556	1,5586	1,5611	1,5636	1,5662	1,5687	1,5712	1,5736	1,5761	1,5785	1,581	1,5834	1,5858	1,5882	1,5906	1,593
55	1,5558	1,5584	1,5611	1,5636	1,5662	1,5688	1,5713	1,5738	1,5763	1,5788	1,5813	1,5838	1,5863	1,5887	1,5911	1,5935	1,596	1,5983	1,6007
55,1	1,5635	1,5661	1,5687	1,5713	1,5739	1,5765	1,579	1,5815	1,5841	1,5866	1,5891	1,5915	1,594	1,5964	1,5989	1,6013	1,6037	1,6061	1,6085
55,2	1,5712	1,5738	1,5764	1,579	1,5816	1,5842	1,5867	1,5893	1,5918	1,5943	1,5968	1,5993	1,6018	1,6042	1,6067	1,6091	1,6115	1,6139	1,6163
55,3	1,5789	1,5815	1,5841	1,5868	1,5893	1,5919	1,5945	1,597	1,5996	1,6021	1,6046	1,6071	1,6096	1,612	1,6145	1,617	1,6194	1,6218	1,6242
55,4	1,5866	1,5893	1,5919	1,5945	1,5971	1,5997	1,6023	1,6049	1,6074	1,6099	1,6124	1,6149	1,6174	1,6199	1,6224	1,6248	1,6272	1,6297	1,6321
55,5	1,5944	1,5971	1,5997	1,6023	1,605	1,6075	1,6101	1,6127	1,6152	1,6178	1,6203	1,6228	1,6253	1,6278	1,6303	1,6327	1,6352	1,6376	1,64
55,6	1,6022	1,6049	1,6075	1,6102	1,6128	1,6154	1,618	1,6206	1,6231	1,6257	1,6282	1,6307	1,6332	1,6357	1,6382	1,6407	1,6431	1,6455	1,648
55,7	1,6101	1,6128	1,6154	1,6181	1,6207	1,6233	1,6259	1,6285	1,631	1,6336	1,6361	1,6387	1,6412	1,6437	1,6462	1,6486	1,6511	1,6535	1,656
55,8	1,618	1,6206	1,6233	1,626	1,6286	1,6312	1,6338	1,6364	1,639	1,6416	1,6441	1,6466	1,6491	1,6517	1,6542	1,6566	1,6591	1,6616	1,664
55,9	1,6259	1,6286	1,6312	1,6339	1,6366	1,6392	1,6418	1,6444	1,647	1,6496	1,6521	1,6547	1,6572	1,6597	1,6622	1,6647	1,6671	1,6696	1,6721
56	1,6338	1,6365	1,6392	1,6419	1,6445	1,6472	1,6498	1,6524	1,655	1,6576	1,6601	1,6627	1,6652	1,6677	1,6702	1,6727	1,6752	1,6777	1,6801
56,1	1,6418	1,6445	1,6472	1,6499	1,6526	1,6552	1,6578	1,6605	1,6631	1,6656	1,6682	1,6708	1,6733	1,6758	1,6784	1,6809	1,6833	1,6858	1,6883
56,2	1,6499	1,6526	1,6553	1,658	1,6606	1,6633	1,6659	1,6685	1,6711	1,6738	1,6763	1,6789	1,6814	1,684	1,6865	1,689	1,6915	1,694	1,6965
56,3	1,6579	1,6606	1,6633	1,6661	1,6687	1,6714	1,674	1,6767	1,6793	1,6819	1,6845	1,687	1,6896	1,6921	1,6947	1,6972	1,6997	1,7022	1,7047
56,4	1,666	1,6687	1,6715	1,6742	1,6769	1,6795	1,6822	1,6848	1,6874	1,6901	1,6927	1,6952	1,6978	1,7003	1,7029	1,7054	1,7079	1,7104	1,7129
56,5	1,6742	1,6769	1,6796	1,6823	1,685	1,6877	1,6904	1,693	1,6956	1,6983	1,7009	1,7035	1,706	1,7086	1,7111	1,7137	1,7162	1,7187	1,7212
56,6	1,6823	1,6851	1,6878	1,6905	1,6932	1,6959	1,6986	1,7012	1,7039	1,7065	1,7091	1,7117	1,7143	1,7169	1,7194	1,7219	1,7245	1,727	1,7295
56,7	1,6905	1,6933	1,696	1,6987	1,7015	1,7041	1,7068	1,7095	1,7122	1,7148	1,7174	1,72	1,7226	1,7252	1,7277	1,7303	1,7328	1,7353	1,7378
56,8	1,6987	1,7015	1,7043	1,707	1,7097	1,7124	1,7151	1,7178	1,7204	1,7231	1,7257	1,7283	1,7309	1,7335	1,7361	1,7386	1,7412	1,7437	1,7462
56,9	1,707	1,7098	1,7126	1,7153	1,718	1,7207	1,7235	1,7261	1,7288	1,7314	1,7341	1,7367	1,7393	1,7419	1,7445	1,747	1,7496	1,7521	1,7547

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
53,5	1,4901	1,4923	1,4945	1,4968	1,499	1,5012	1,5034	1,5056
53,6	1,4974	1,4996	1,5019	1,5041	1,5063	1,5085	1,5107	1,5129
53,7	1,5047	1,507	1,5092	1,5115	1,5137	1,5159	1,5181	1,5203
53,8	1,5121	1,5144	1,5166	1,5189	1,5211	1,5233	1,5255	1,5277
53,9	1,5195	1,5218	1,524	1,5263	1,5285	1,5308	1,533	1,5352
54	1,5269	1,5292	1,5315	1,5338	1,536	1,5382	1,5405	1,5427
54,1	1,5344	1,5367	1,539	1,5412	1,5435	1,5457	1,548	1,5502
54,2	1,5419	1,5442	1,5465	1,5488	1,551	1,5533	1,5555	1,5578
54,3	1,5494	1,5517	1,554	1,5563	1,5586	1,5608	1,5631	1,5653
54,4	1,557	1,5593	1,5616	1,5639	1,5662	1,5684	1,5707	1,5729
54,5	1,5646	1,5669	1,5692	1,5715	1,5738	1,5761	1,5783	1,5806
54,6	1,5722	1,5746	1,5769	1,5792	1,5815	1,5837	1,586	1,5883
54,7	1,5799	1,5822	1,5846	1,5869	1,5892	1,5914	1,5937	1,596
54,8	1,5876	1,5899	1,5923	1,5946	1,5969	1,5992	1,6015	1,6037
54,9	1,5953	1,5977	1,6	1,6023	1,6046	1,6069	1,6092	1,6115
55	1,6031	1,6054	1,6078	1,6101	1,6124	1,6147	1,617	1,6193
55,1	1,6109	1,6132	1,6156	1,6179	1,6203	1,6226	1,6249	1,6272
55,2	1,6187	1,6211	1,6234	1,6258	1,6281	1,6304	1,6328	1,635
55,3	1,6266	1,629	1,6313	1,6337	1,636	1,6383	1,6407	1,643
55,4	1,6345	1,6369	1,6392	1,6416	1,6439	1,6463	1,6486	1,6509
55,5	1,6424	1,6448	1,6472	1,6495	1,6519	1,6542	1,6566	1,6589
55,6	1,6504	1,6528	1,6552	1,6575	1,6599	1,6622	1,6646	1,6669
55,7	1,6584	1,6608	1,6632	1,6656	1,6679	1,6703	1,6726	1,675
55,8	1,6664	1,6688	1,6712	1,6736	1,676	1,6784	1,6807	1,6831
55,9	1,6745	1,6769	1,6793	1,6817	1,6841	1,6865	1,6888	1,6912
56	1,6826	1,685	1,6874	1,6898	1,6922	1,6946	1,697	1,6993
56,1	1,6907	1,6932	1,6956	1,698	1,7004	1,7028	1,7052	1,7075
56,2	1,6989	1,7014	1,7038	1,7062	1,7086	1,711	1,7134	1,7158
56,3	1,7071	1,7096	1,712	1,7144	1,7168	1,7193	1,7216	1,724
56,4	1,7154	1,7178	1,7203	1,7227	1,7251	1,7275	1,7299	1,7323
56,5	1,7237	1,7261	1,7286	1,731	1,7335	1,7359	1,7383	1,7407
56,6	1,732	1,7345	1,7369	1,7394	1,7418	1,7442	1,7466	1,749
56,7	1,7403	1,7428	1,7453	1,7477	1,7502	1,7526	1,755	1,7574
56,8	1,7487	1,7512	1,7537	1,7562	1,7586	1,761	1,7635	1,7659
56,9	1,7572	1,7597	1,7621	1,7646	1,7671	1,7695	1,772	1,7744

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
57	1,0545	1,0735	1,0912	1,1077	1,1233	1,1379	1,1519	1,1652	1,1779	1,19	1,2016	1,2128	1,2236	1,234	1,244	1,2537	1,2632	1,2723	1,2812
57,1	1,0606	1,0797	1,0974	1,114	1,1296	1,1444	1,1584	1,1717	1,1844	1,1966	1,2083	1,2195	1,2303	1,2408	1,2508	1,2606	1,2701	1,2792	1,2881
57,2	1,0668	1,0859	1,1037	1,1204	1,136	1,1509	1,1649	1,1783	1,191	1,2033	1,215	1,2262	1,2371	1,2476	1,2577	1,2675	1,277	1,2862	1,2951
57,3	1,073	1,0922	1,11	1,1268	1,1425	1,1574	1,1715	1,1849	1,1977	1,2099	1,2217	1,233	1,2439	1,2544	1,2645	1,2744	1,2839	1,2931	1,3021
57,4	1,0792	1,0985	1,1164	1,1332	1,149	1,1639	1,178	1,1915	1,2044	1,2167	1,2285	1,2398	1,2507	1,2613	1,2715	1,2813	1,2909	1,3002	1,3092
57,5	1,0855	1,1048	1,1228	1,1396	1,1555	1,1705	1,1846	1,1982	1,2111	1,2234	1,2352	1,2466	1,2576	1,2682	1,2784	1,2883	1,2979	1,3072	1,3162
57,6	1,0918	1,1112	1,1292	1,1461	1,162	1,1771	1,1913	1,2049	1,2178	1,2302	1,2421	1,2535	1,2645	1,2751	1,2854	1,2953	1,3049	1,3143	1,3233
57,7	1,0981	1,1176	1,1357	1,1526	1,1686	1,1837	1,198	1,2116	1,2246	1,237	1,2489	1,2604	1,2714	1,2821	1,2924	1,3023	1,312	1,3214	1,3305
57,8	1,1044	1,124	1,1422	1,1592	1,1752	1,1903	1,2047	1,2183	1,2314	1,2439	1,2558	1,2673	1,2784	1,2891	1,2994	1,3094	1,3191	1,3285	1,3376
57,9	1,1108	1,1304	1,1487	1,1658	1,1819	1,197	1,2114	1,2251	1,2382	1,2507	1,2628	1,2743	1,2854	1,2961	1,3065	1,3165	1,3262	1,3357	1,3448
58	1,1172	1,1369	1,1552	1,1724	1,1885	1,2038	1,2182	1,232	1,2451	1,2577	1,2697	1,2813	1,2924	1,3032	1,3136	1,3237	1,3334	1,3429	1,3521
58,1	1,1237	1,1434	1,1618	1,179	1,1952	1,2105	1,225	1,2388	1,252	1,2646	1,2767	1,2883	1,2995	1,3103	1,3207	1,3309	1,3406	1,3501	1,3594
58,2	1,1301	1,15	1,1685	1,1857	1,202	1,2173	1,2319	1,2457	1,2589	1,2716	1,2837	1,2954	1,3066	1,3174	1,3279	1,3381	1,3479	1,3574	1,3667
58,3	1,1367	1,1566	1,1751	1,1924	1,2087	1,2241	1,2387	1,2526	1,2659	1,2786	1,2908	1,3025	1,3137	1,3246	1,3351	1,3453	1,3552	1,3647	1,374
58,4	1,1432	1,1632	1,1818	1,1992	1,2155	1,231	1,2457	1,2596	1,2729	1,2856	1,2979	1,3096	1,3209	1,3318	1,3424	1,3526	1,3625	1,3721	1,3814
58,5	1,1498	1,1698	1,1885	1,206	1,2224	1,2379	1,2526	1,2666	1,2799	1,2927	1,305	1,3168	1,3281	1,3391	1,3497	1,3599	1,3698	1,3795	1,3888
58,6	1,1564	1,1765	1,1953	1,2128	1,2292	1,2448	1,2596	1,2736	1,287	1,2998	1,3122	1,324	1,3354	1,3464	1,357	1,3672	1,3772	1,3869	1,3962
58,7	1,163	1,1832	1,202	1,2196	1,2362	1,2518	1,2666	1,2807	1,2941	1,307	1,3194	1,3312	1,3427	1,3537	1,3643	1,3746	1,3846	1,3943	1,4037
58,8	1,1697	1,19	1,2089	1,2265	1,2431	1,2588	1,2736	1,2878	1,3013	1,3142	1,3266	1,3385	1,35	1,361	1,3717	1,3821	1,3921	1,4018	1,4113
58,9	1,1764	1,1968	1,2157	1,2334	1,2501	1,2658	1,2807	1,2949	1,3085	1,3214	1,3339	1,3458	1,3573	1,3684	1,3791	1,3895	1,3996	1,4093	1,4188
59	1,1832	1,2036	1,2226	1,2404	1,2571	1,2729	1,2878	1,3021	1,3157	1,3287	1,3412	1,3532	1,3647	1,3758	1,3866	1,397	1,4071	1,4169	1,4264
59,1	1,1899	1,2104	1,2295	1,2473	1,2641	1,28	1,295	1,3093	1,3229	1,336	1,3485	1,3605	1,3721	1,3833	1,3941	1,4045	1,4147	1,4245	1,434
59,2	1,1967	1,2173	1,2365	1,2544	1,2712	1,2871	1,3022	1,3165	1,3302	1,3433	1,3559	1,3679	1,3796	1,3908	1,4016	1,4121	1,4223	1,4321	1,4417
59,3	1,2036	1,2243	1,2434	1,2614	1,2783	1,2943	1,3094	1,3238	1,3375	1,3507	1,3633	1,3754	1,3871	1,3983	1,4092	1,4197	1,4299	1,4398	1,4494
59,4	1,2105	1,2312	1,2505	1,2685	1,2855	1,3015	1,3167	1,3311	1,3449	1,3581	1,3707	1,3829	1,3946	1,4059	1,4168	1,4274	1,4376	1,4475	1,4572
59,5	1,2174	1,2382	1,2575	1,2756	1,2926	1,3087	1,324	1,3384	1,3523	1,3655	1,3782	1,3904	1,4022	1,4135	1,4244	1,435	1,4453	1,4553	1,4649
59,6	1,2243	1,2452	1,2646	1,2828	1,2999	1,316	1,3313	1,3458	1,3597	1,373	1,3857	1,398	1,4097	1,4211	1,4321	1,4427	1,453	1,463	1,4727
59,7	1,2313	1,2523	1,2718	1,29	1,3071	1,3233	1,3386	1,3532	1,3672	1,3805	1,3933	1,4056	1,4174	1,4288	1,4398	1,4505	1,4608	1,4709	1,4806
59,8	1,2383	1,2594	1,2789	1,2972	1,3144	1,3306	1,346	1,3607	1,3747	1,388	1,4009	1,4132	1,4251	1,4365	1,4476	1,4583	1,4687	1,4787	1,4885
59,9	1,2454	1,2665	1,2861	1,3045	1,3217	1,338	1,3535	1,3682	1,3822	1,3956	1,4085	1,4209	1,4328	1,4443	1,4554	1,4661	1,4765	1,4866	1,4964
60	1,2525	1,2737	1,2934	1,3118	1,3291	1,3455	1,361	1,3757	1,3898	1,4033	1,4162	1,4286	1,4405	1,4521	1,4632	1,474	1,4844	1,4946	1,5044
60,1	1,2596	1,2809	1,3006	1,3191	1,3365	1,3529	1,3685	1,3833	1,3974	1,4109	1,4239	1,4363	1,4483	1,4599	1,4711	1,4819	1,4924	1,5025	1,5124
60,2	1,2668	1,2881	1,3079	1,3265	1,3439	1,3604	1,376	1,3909	1,405	1,4186	1,4316	1,4441	1,4561	1,4678	1,479	1,4898	1,5003	1,5105	1,5204
60,3	1,274	1,2954	1,3153	1,3339	1,3514	1,3679	1,3836	1,3985	1,4127	1,4263	1,4394	1,452	1,464	1,4757	1,4869	1,4978	1,5084	1,5186	1,5285
60,4	1,2812	1,3027	1,3227	1,3414	1,3589	1,3755	1,3912	1,4062	1,4205	1,4341	1,4472	1,4598	1,4719	1,4836	1,4949	1,5058	1,5164	1,5267	1,5367

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
57	1,2898	1,2983	1,3064	1,3144	1,3222	1,3298	1,3373	1,3446	1,3517	1,3587	1,3655	1,3722	1,3788	1,3852	1,3915	1,3978	1,4039	1,4099	1,4158
57,1	1,2968	1,3052	1,3135	1,3215	1,3293	1,3369	1,3444	1,3517	1,3589	1,3659	1,3727	1,3794	1,386	1,3925	1,3988	1,4051	1,4112	1,4172	1,4232
57,2	1,3038	1,3123	1,3205	1,3286	1,3364	1,3441	1,3516	1,3589	1,3661	1,3731	1,38	1,3867	1,3933	1,3998	1,4062	1,4124	1,4186	1,4246	1,4306
57,3	1,3108	1,3193	1,3276	1,3357	1,3436	1,3513	1,3588	1,3661	1,3733	1,3804	1,3873	1,394	1,4007	1,4072	1,4136	1,4198	1,426	1,4321	1,438
57,4	1,3179	1,3264	1,3347	1,3428	1,3507	1,3585	1,366	1,3734	1,3806	1,3877	1,3946	1,4014	1,408	1,4146	1,421	1,4273	1,4335	1,4395	1,4455
57,5	1,325	1,3336	1,3419	1,35	1,358	1,3657	1,3733	1,3807	1,3879	1,395	1,402	1,4087	1,4154	1,422	1,4284	1,4347	1,4409	1,4471	1,4531
57,6	1,3321	1,3407	1,3491	1,3572	1,3652	1,373	1,3806	1,388	1,3953	1,4024	1,4093	1,4162	1,4229	1,4295	1,4359	1,4422	1,4485	1,4546	1,4606
57,7	1,3393	1,3479	1,3563	1,3645	1,3725	1,3803	1,3879	1,3953	1,4026	1,4098	1,4168	1,4236	1,4303	1,4369	1,4434	1,4498	1,456	1,4622	1,4682
57,8	1,3465	1,3551	1,3636	1,3718	1,3798	1,3876	1,3952	1,4027	1,41	1,4172	1,4242	1,4311	1,4379	1,4445	1,451	1,4574	1,4636	1,4698	1,4759
57,9	1,3537	1,3624	1,3709	1,3791	1,3871	1,395	1,4027	1,4102	1,4175	1,4247	1,4317	1,4386	1,4454	1,452	1,4586	1,465	1,4712	1,4774	1,4835
58	1,361	1,3697	1,3782	1,3865	1,3945	1,4024	1,4101	1,4176	1,425	1,4322	1,4393	1,4462	1,453	1,4596	1,4662	1,4726	1,4789	1,4851	1,4912
58,1	1,3683	1,3771	1,3856	1,3938	1,4019	1,4098	1,4176	1,4251	1,4325	1,4397	1,4468	1,4538	1,4606	1,4673	1,4738	1,4803	1,4866	1,4928	1,499
58,2	1,3757	1,3844	1,393	1,4013	1,4094	1,4173	1,4251	1,4326	1,4401	1,4473	1,4544	1,4614	1,4682	1,475	1,4815	1,488	1,4943	1,5006	1,5067
58,3	1,383	1,3918	1,4004	1,4087	1,4169	1,4248	1,4326	1,4402	1,4476	1,4549	1,4621	1,4691	1,4759	1,4826	1,4893	1,4957	1,5021	1,5084	1,5146
58,4	1,3904	1,3993	1,4079	1,4162	1,4244	1,4324	1,4402	1,4478	1,4553	1,4626	1,4697	1,4768	1,4836	1,4904	1,497	1,5035	1,5099	1,5162	1,5224
58,5	1,3979	1,4067	1,4154	1,4238	1,432	1,44	1,4478	1,4554	1,4629	1,4703	1,4775	1,4845	1,4914	1,4982	1,5048	1,5114	1,5178	1,5241	1,5303
58,6	1,4054	1,4142	1,4229	1,4313	1,4396	1,4476	1,4555	1,4631	1,4706	1,478	1,4852	1,4923	1,4992	1,506	1,5127	1,5192	1,5257	1,532	1,5382
58,7	1,4129	1,4218	1,4305	1,4389	1,4472	1,4552	1,4631	1,4708	1,4784	1,4858	1,493	1,5001	1,507	1,5138	1,5205	1,5271	1,5336	1,5399	1,5462
58,8	1,4204	1,4294	1,4381	1,4466	1,4549	1,463	1,4709	1,4786	1,4862	1,4935	1,5008	1,5079	1,5149	1,5217	1,5285	1,5351	1,5415	1,5479	1,5542
58,9	1,428	1,437	1,4457	1,4542	1,4626	1,4707	1,4786	1,4864	1,494	1,5014	1,5087	1,5158	1,5228	1,5297	1,5364	1,543	1,5495	1,5559	1,5622
59	1,4357	1,4447	1,4534	1,462	1,4703	1,4784	1,4864	1,4942	1,5018	1,5093	1,5166	1,5237	1,5307	1,5376	1,5444	1,551	1,5576	1,564	1,5703
59,1	1,4433	1,4523	1,4611	1,4697	1,4781	1,4863	1,4942	1,502	1,5097	1,5172	1,5245	1,5317	1,5387	1,5456	1,5524	1,5591	1,5656	1,5721	1,5784
59,2	1,451	1,4601	1,4689	1,4775	1,4859	1,4941	1,5021	1,5099	1,5176	1,5251	1,5325	1,5397	1,5467	1,5537	1,5605	1,5672	1,5737	1,5802	1,5865
59,3	1,4588	1,4678	1,4767	1,4853	1,4938	1,502	1,51	1,5179	1,5256	1,5331	1,5405	1,5477	1,5548	1,5618	1,5686	1,5753	1,5819	1,5883	1,5947
59,4	1,4665	1,4757	1,4845	1,4932	1,5016	1,5099	1,518	1,5258	1,5336	1,5411	1,5485	1,5558	1,5629	1,5699	1,5767	1,5834	1,5901	1,5966	1,6029
59,5	1,4743	1,4835	1,4924	1,5011	1,5096	1,5179	1,526	1,5339	1,5416	1,5492	1,5566	1,5639	1,571	1,578	1,5849	1,5916	1,5983	1,6048	1,6112
59,6	1,4822	1,4914	1,5003	1,509	1,5175	1,5258	1,534	1,5419	1,5497	1,5573	1,5647	1,572	1,5792	1,5862	1,5931	1,5999	1,6065	1,6131	1,6195
59,7	1,4901	1,4993	1,5083	1,517	1,5255	1,5339	1,542	1,55	1,5578	1,5654	1,5729	1,5802	1,5874	1,5945	1,6014	1,6082	1,6148	1,6214	1,6279
59,8	1,498	1,5072	1,5162	1,525	1,5336	1,542	1,5501	1,5581	1,5659	1,5736	1,5811	1,5884	1,5957	1,6027	1,6097	1,6165	1,6232	1,6298	1,6362
59,9	1,506	1,5152	1,5243	1,5331	1,5417	1,5501	1,5583	1,5663	1,5741	1,5818	1,5893	1,5967	1,6039	1,611	1,618	1,6249	1,6316	1,6382	1,6447
60	1,5139	1,5233	1,5323	1,5412	1,5498	1,5582	1,5664	1,5745	1,5824	1,5901	1,5976	1,605	1,6123	1,6194	1,6264	1,6332	1,64	1,6466	1,6531
60,1	1,522	1,5313	1,5404	1,5493	1,5579	1,5664	1,5747	1,5827	1,5906	1,5984	1,6059	1,6134	1,6206	1,6278	1,6348	1,6417	1,6484	1,6551	1,6616
60,2	1,5301	1,5394	1,5486	1,5575	1,5661	1,5746	1,5829	1,591	1,5989	1,6067	1,6143	1,6217	1,629	1,6362	1,6432	1,6502	1,6569	1,6636	1,6702
60,3	1,5382	1,5476	1,5567	1,5657	1,5744	1,5829	1,5912	1,5993	1,6073	1,6151	1,6227	1,6302	1,6375	1,6447	1,6517	1,6587	1,6655	1,6722	1,6788
60,4	1,5463	1,5558	1,565	1,5739	1,5827	1,5912	1,5995	1,6077	1,6157	1,6235	1,6311	1,6386	1,646	1,6532	1,6603	1,6672	1,6741	1,6808	1,6874

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e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
57	1,4216	1,4273	1,4329	1,4384	1,4439	1,4493	1,4546	1,4598	1,4649	1,47	1,475	1,48	1,4849	1,4897	1,4944	1,4991	1,5038	1,5084	1,5129
57,1	1,429	1,4347	1,4403	1,4459	1,4514	1,4568	1,4621	1,4673	1,4725	1,4776	1,4826	1,4876	1,4925	1,4973	1,5021	1,5068	1,5114	1,516	1,5206
57,2	1,4364	1,4422	1,4478	1,4534	1,4589	1,4643	1,4696	1,4749	1,4801	1,4852	1,4902	1,4952	1,5001	1,505	1,5098	1,5145	1,5192	1,5238	1,5283
57,3	1,4439	1,4497	1,4554	1,4609	1,4665	1,4719	1,4772	1,4825	1,4877	1,4928	1,4979	1,5029	1,5078	1,5127	1,5175	1,5222	1,5269	1,5315	1,5361
57,4	1,4514	1,4572	1,4629	1,4685	1,474	1,4795	1,4848	1,4901	1,4953	1,5005	1,5056	1,5106	1,5155	1,5204	1,5252	1,53	1,5347	1,5393	1,5439
57,5	1,459	1,4648	1,4705	1,4761	1,4816	1,4871	1,4925	1,4978	1,503	1,5082	1,5133	1,5183	1,5233	1,5282	1,533	1,5378	1,5425	1,5472	1,5518
57,6	1,4665	1,4724	1,4781	1,4837	1,4893	1,4948	1,5002	1,5055	1,5108	1,516	1,5211	1,5261	1,5311	1,536	1,5408	1,5456	1,5504	1,555	1,5597
57,7	1,4742	1,48	1,4858	1,4914	1,497	1,5025	1,5079	1,5133	1,5185	1,5237	1,5289	1,5339	1,5389	1,5438	1,5487	1,5535	1,5583	1,563	1,5676
57,8	1,4818	1,4877	1,4934	1,4991	1,5047	1,5103	1,5157	1,5211	1,5263	1,5315	1,5367	1,5418	1,5468	1,5517	1,5566	1,5614	1,5662	1,5709	1,5755
57,9	1,4895	1,4954	1,5012	1,5069	1,5125	1,518	1,5235	1,5289	1,5342	1,5394	1,5446	1,5496	1,5547	1,5596	1,5645	1,5694	1,5741	1,5789	1,5835
58	1,4972	1,5031	1,5089	1,5147	1,5203	1,5259	1,5313	1,5367	1,542	1,5473	1,5525	1,5576	1,5626	1,5676	1,5725	1,5773	1,5821	1,5869	1,5916
58,1	1,505	1,5109	1,5167	1,5225	1,5281	1,5337	1,5392	1,5446	1,5499	1,5552	1,5604	1,5655	1,5706	1,5756	1,5805	1,5854	1,5902	1,5949	1,5996
58,2	1,5128	1,5187	1,5246	1,5303	1,536	1,5416	1,5471	1,5525	1,5579	1,5632	1,5684	1,5735	1,5786	1,5836	1,5885	1,5934	1,5982	1,603	1,6077
58,3	1,5206	1,5266	1,5324	1,5382	1,5439	1,5495	1,555	1,5605	1,5659	1,5712	1,5764	1,5815	1,5866	1,5917	1,5966	1,6015	1,6064	1,6112	1,6159
58,4	1,5285	1,5345	1,5403	1,5461	1,5519	1,5575	1,563	1,5685	1,5739	1,5792	1,5844	1,5896	1,5947	1,5998	1,6047	1,6097	1,6145	1,6193	1,6241
58,5	1,5364	1,5424	1,5483	1,5541	1,5598	1,5655	1,571	1,5765	1,5819	1,5873	1,5925	1,5977	1,6028	1,6079	1,6129	1,6178	1,6227	1,6275	1,6323
58,6	1,5443	1,5503	1,5563	1,5621	1,5679	1,5735	1,5791	1,5846	1,59	1,5954	1,6007	1,6059	1,611	1,6161	1,6211	1,626	1,6309	1,6357	1,6405
58,7	1,5523	1,5584	1,5643	1,5701	1,5759	1,5816	1,5872	1,5927	1,5981	1,6035	1,6088	1,614	1,6192	1,6243	1,6293	1,6343	1,6392	1,644	1,6488
58,8	1,5603	1,5664	1,5724	1,5782	1,584	1,5897	1,5953	1,6009	1,6063	1,6117	1,617	1,6223	1,6274	1,6325	1,6376	1,6426	1,6475	1,6523	1,6572
58,9	1,5684	1,5745	1,5804	1,5863	1,5921	1,5979	1,6035	1,6091	1,6145	1,6199	1,6253	1,6305	1,6357	1,6408	1,6459	1,6509	1,6558	1,6607	1,6655
59	1,5765	1,5826	1,5886	1,5945	1,6003	1,606	1,6117	1,6173	1,6228	1,6282	1,6335	1,6388	1,644	1,6492	1,6542	1,6593	1,6642	1,6691	1,6739
59,1	1,5846	1,5907	1,5967	1,6027	1,6085	1,6143	1,62	1,6255	1,631	1,6365	1,6419	1,6472	1,6524	1,6575	1,6626	1,6677	1,6726	1,6775	1,6824
59,2	1,5928	1,5989	1,605	1,6109	1,6168	1,6225	1,6282	1,6338	1,6394	1,6448	1,6502	1,6555	1,6608	1,6659	1,6711	1,6761	1,6811	1,686	1,6909
59,3	1,601	1,6071	1,6132	1,6192	1,6251	1,6309	1,6366	1,6422	1,6477	1,6532	1,6586	1,6639	1,6692	1,6744	1,6795	1,6846	1,6896	1,6945	1,6994
59,4	1,6092	1,6154	1,6215	1,6275	1,6334	1,6392	1,6449	1,6506	1,6561	1,6616	1,667	1,6724	1,6777	1,6829	1,688	1,6931	1,6981	1,7031	1,708
59,5	1,6175	1,6237	1,6298	1,6358	1,6418	1,6476	1,6533	1,659	1,6646	1,6701	1,6755	1,6809	1,6862	1,6914	1,6965	1,7016	1,7067	1,7117	1,7166
59,6	1,6258	1,632	1,6382	1,6442	1,6501	1,656	1,6618	1,6674	1,6731	1,6786	1,684	1,6894	1,6947	1,7	1,7051	1,7103	1,7153	1,7203	1,7252
59,7	1,6342	1,6404	1,6466	1,6526	1,6586	1,6645	1,6702	1,676	1,6816	1,6871	1,6926	1,698	1,7033	1,7086	1,7138	1,7189	1,7239	1,729	1,7339
59,8	1,6426	1,6489	1,655	1,6611	1,6671	1,673	1,6788	1,6845	1,6901	1,6957	1,7012	1,7066	1,7119	1,7172	1,7224	1,7276	1,7327	1,7377	1,7426
59,9	1,651	1,6573	1,6635	1,6696	1,6756	1,6815	1,6873	1,6931	1,6987	1,7043	1,7098	1,7152	1,7206	1,7259	1,7311	1,7363	1,7414	1,7464	1,7514
60	1,6595	1,6658	1,672	1,6781	1,6842	1,6901	1,6959	1,7017	1,7074	1,713	1,7185	1,7239	1,7293	1,7346	1,7399	1,7451	1,7502	1,7552	1,7602
60,1	1,668	1,6744	1,6806	1,6867	1,6928	1,6987	1,7046	1,7103	1,716	1,7217	1,7272	1,7327	1,7381	1,7434	1,7487	1,7538	1,759	1,764	1,7691
60,2	1,6766	1,683	1,6892	1,6954	1,7014	1,7074	1,7133	1,7191	1,7248	1,7304	1,736	1,7414	1,7469	1,7522	1,7575	1,7627	1,7678	1,7729	1,778
60,3	1,6852	1,6916	1,6979	1,704	1,7101	1,7161	1,722	1,7278	1,7335	1,7392	1,7448	1,7503	1,7557	1,7611	1,7664	1,7716	1,7767	1,7818	1,7869
60,4	1,6939	1,7003	1,7065	1,7127	1,7188	1,7248	1,7307	1,7366	1,7423	1,748	1,7536	1,7591	1,7646	1,7699	1,7753	1,7805	1,7857	1,7908	1,7959

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
57	1,5174	1,5218	1,5262	1,5305	1,5348	1,539	1,5432	1,5474	1,5515	1,5556	1,5596	1,5636	1,5675	1,5714	1,5753	1,5791	1,5829	1,5867	1,5904
57,1	1,5251	1,5295	1,5339	1,5383	1,5426	1,5468	1,551	1,5552	1,5593	1,5634	1,5674	1,5714	1,5754	1,5793	1,5832	1,5871	1,5909	1,5946	1,5984
57,2	1,5328	1,5373	1,5417	1,5461	1,5504	1,5547	1,5589	1,5631	1,5672	1,5713	1,5753	1,5794	1,5833	1,5872	1,5912	1,595	1,5988	1,6026	1,6064
57,3	1,5407	1,5451	1,5495	1,5539	1,5582	1,5625	1,5667	1,571	1,5751	1,5792	1,5833	1,5873	1,5913	1,5952	1,5991	1,603	1,6068	1,6106	1,6144
57,4	1,5485	1,553	1,5574	1,5618	1,5661	1,5704	1,5747	1,5789	1,583	1,5872	1,5912	1,5953	1,5993	1,6032	1,6072	1,611	1,6149	1,6187	1,6225
57,5	1,5563	1,5608	1,5653	1,5697	1,574	1,5783	1,5826	1,5868	1,591	1,5951	1,5992	1,6033	1,6073	1,6113	1,6152	1,6191	1,623	1,6268	1,6306
57,6	1,5642	1,5688	1,5732	1,5776	1,582	1,5863	1,5906	1,5948	1,599	1,6032	1,6073	1,6113	1,6154	1,6193	1,6233	1,6272	1,6311	1,6349	1,6387
57,7	1,5722	1,5767	1,5812	1,5856	1,59	1,5943	1,5986	1,6029	1,6071	1,6112	1,6153	1,6194	1,6235	1,6275	1,6314	1,6353	1,6392	1,6431	1,6469
57,8	1,5801	1,5847	1,5892	1,5936	1,598	1,6024	1,6067	1,6109	1,6151	1,6193	1,6234	1,6275	1,6316	1,6356	1,6396	1,6435	1,6474	1,6513	1,6551
57,9	1,5881	1,5927	1,5972	1,6017	1,6061	1,6104	1,6148	1,619	1,6233	1,6275	1,6316	1,6357	1,6398	1,6438	1,6478	1,6517	1,6556	1,6595	1,6634
58	1,5962	1,6008	1,6053	1,6098	1,6142	1,6186	1,6229	1,6272	1,6314	1,6356	1,6398	1,6439	1,648	1,652	1,656	1,66	1,6639	1,6678	1,6716
58,1	1,6043	1,6089	1,6134	1,6179	1,6223	1,6267	1,6311	1,6354	1,6396	1,6438	1,648	1,6521	1,6562	1,6603	1,6643	1,6683	1,6722	1,6761	1,6799
58,2	1,6124	1,617	1,6215	1,6261	1,6305	1,6349	1,6393	1,6436	1,6479	1,6521	1,6563	1,6604	1,6645	1,6686	1,6726	1,6766	1,6805	1,6844	1,6883
58,3	1,6206	1,6252	1,6297	1,6342	1,6387	1,6431	1,6475	1,6519	1,6561	1,6604	1,6646	1,6687	1,6728	1,6769	1,6809	1,6849	1,6889	1,6928	1,6967
58,4	1,6288	1,6334	1,638	1,6425	1,647	1,6514	1,6558	1,6601	1,6644	1,6687	1,6729	1,6771	1,6812	1,6853	1,6893	1,6933	1,6973	1,7013	1,7052
58,5	1,637	1,6416	1,6462	1,6508	1,6553	1,6597	1,6641	1,6685	1,6728	1,677	1,6813	1,6855	1,6896	1,6937	1,6978	1,7018	1,7058	1,7097	1,7136
58,6	1,6452	1,6499	1,6545	1,6591	1,6636	1,6681	1,6725	1,6768	1,6812	1,6854	1,6897	1,6939	1,698	1,7022	1,7062	1,7103	1,7143	1,7182	1,7222
58,7	1,6536	1,6582	1,6629	1,6674	1,672	1,6765	1,6809	1,6853	1,6896	1,6939	1,6981	1,7023	1,7065	1,7106	1,7147	1,7188	1,7228	1,7268	1,7307
58,8	1,6619	1,6666	1,6712	1,6758	1,6804	1,6849	1,6893	1,6937	1,6981	1,7024	1,7066	1,7108	1,715	1,7192	1,7233	1,7273	1,7314	1,7353	1,7393
58,9	1,6703	1,675	1,6797	1,6843	1,6888	1,6933	1,6978	1,7022	1,7066	1,7109	1,7152	1,7194	1,7236	1,7277	1,7318	1,7359	1,74	1,744	1,7479
59	1,6787	1,6834	1,6881	1,6927	1,6973	1,7018	1,7063	1,7107	1,7151	1,7194	1,7237	1,728	1,7322	1,7363	1,7405	1,7446	1,7486	1,7526	1,7566
59,1	1,6872	1,6919	1,6966	1,7012	1,7058	1,7104	1,7149	1,7193	1,7237	1,728	1,7323	1,7366	1,7408	1,745	1,7491	1,7532	1,7573	1,7613	1,7653
59,2	1,6957	1,7004	1,7051	1,7098	1,7144	1,7189	1,7234	1,7279	1,7323	1,7367	1,741	1,7453	1,7495	1,7537	1,7578	1,762	1,766	1,7701	1,7741
59,3	1,7042	1,709	1,7137	1,7184	1,723	1,7276	1,7321	1,7365	1,741	1,7453	1,7497	1,754	1,7582	1,7624	1,7666	1,7707	1,7748	1,7788	1,7829
59,4	1,7128	1,7176	1,7223	1,727	1,7316	1,7362	1,7407	1,7452	1,7497	1,754	1,7584	1,7627	1,767	1,7712	1,7754	1,7795	1,7836	1,7877	1,7917
59,5	1,7214	1,7262	1,731	1,7357	1,7403	1,7449	1,7495	1,754	1,7584	1,7628	1,7672	1,7715	1,7758	1,78	1,7842	1,7883	1,7925	1,7965	1,8006
59,6	1,7301	1,7349	1,7397	1,7444	1,749	1,7536	1,7582	1,7627	1,7672	1,7716	1,776	1,7803	1,7846	1,7888	1,793	1,7972	1,8013	1,8054	1,8095
59,7	1,7388	1,7436	1,7484	1,7531	1,7578	1,7624	1,767	1,7715	1,776	1,7804	1,7848	1,7892	1,7935	1,7977	1,802	1,8061	1,8103	1,8144	1,8184
59,8	1,7475	1,7524	1,7572	1,7619	1,7666	1,7712	1,7758	1,7804	1,7849	1,7893	1,7937	1,7981	1,8024	1,8067	1,8109	1,8151	1,8193	1,8234	1,8274
59,9	1,7563	1,7612	1,766	1,7708	1,7754	1,7801	1,7847	1,7893	1,7938	1,7982	1,8027	1,807	1,8114	1,8156	1,8199	1,8241	1,8283	1,8324	1,8365
60	1,7651	1,77	1,7748	1,7796	1,7843	1,789	1,7936	1,7982	1,8027	1,8072	1,8116	1,816	1,8204	1,8247	1,8289	1,8331	1,8373	1,8415	1,8456
60,1	1,774	1,7789	1,7838	1,7885	1,7933	1,798	1,8026	1,8072	1,8117	1,8162	1,8206	1,825	1,8294	1,8337	1,838	1,8422	1,8464	1,8506	1,8547
60,2	1,7829	1,7878	1,7927	1,7975	1,8022	1,8069	1,8116	1,8162	1,8207	1,8252	1,8297	1,8341	1,8385	1,8428	1,8471	1,8514	1,8556	1,8597	1,8639
60,3	1,7919	1,7968	1,8017	1,8065	1,8113	1,816	1,8206	1,8252	1,8298	1,8343	1,8388	1,8432	1,8476	1,852	1,8563	1,8605	1,8647	1,8689	1,8731
60,4	1,8009	1,8058	1,8107	1,8155	1,8203	1,825	1,8297	1,8343	1,8389	1,8434	1,8479	1,8524	1,8568	1,8611	1,8654	1,8697	1,874	1,8782	1,8823

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
57	1,5941	1,5978	1,6014	1,605	1,6086	1,6121	1,6157	1,6191	1,6226	1,626	1,6294	1,6328	1,6362	1,6395	1,6428	1,6461	1,6493	1,6525	1,6557
57,1	1,6021	1,6058	1,6094	1,6131	1,6166	1,6202	1,6237	1,6272	1,6307	1,6341	1,6375	1,6409	1,6443	1,6476	1,6509	1,6542	1,6575	1,6607	1,6639
57,2	1,6101	1,6138	1,6175	1,6211	1,6247	1,6282	1,6318	1,6353	1,6388	1,6422	1,6456	1,649	1,6524	1,6558	1,6591	1,6624	1,6656	1,6689	1,6721
57,3	1,6181	1,6219	1,6255	1,6292	1,6328	1,6363	1,6399	1,6434	1,6469	1,6504	1,6538	1,6572	1,6606	1,6639	1,6673	1,6706	1,6738	1,6771	1,6803
57,4	1,6262	1,6299	1,6336	1,6373	1,6409	1,6445	1,648	1,6516	1,6551	1,6585	1,662	1,6654	1,6688	1,6722	1,6755	1,6788	1,6821	1,6853	1,6886
57,5	1,6343	1,6381	1,6418	1,6454	1,649	1,6526	1,6562	1,6598	1,6633	1,6667	1,6702	1,6736	1,677	1,6804	1,6838	1,6871	1,6904	1,6937	1,6969
57,6	1,6425	1,6462	1,6499	1,6536	1,6572	1,6608	1,6644	1,668	1,6715	1,675	1,6785	1,6819	1,6853	1,6887	1,6921	1,6954	1,6987	1,702	1,7052
57,7	1,6507	1,6544	1,6581	1,6618	1,6655	1,6691	1,6727	1,6763	1,6798	1,6833	1,6868	1,6902	1,6936	1,697	1,7004	1,7037	1,7071	1,7104	1,7136
57,8	1,6589	1,6627	1,6664	1,6701	1,6737	1,6774	1,681	1,6845	1,6881	1,6916	1,6951	1,6986	1,702	1,7054	1,7088	1,7121	1,7155	1,7188	1,7221
57,9	1,6671	1,6709	1,6747	1,6784	1,682	1,6857	1,6893	1,6929	1,6965	1,7	1,7035	1,707	1,7104	1,7138	1,7172	1,7206	1,7239	1,7272	1,7305
58	1,6755	1,6792	1,683	1,6867	1,6904	1,6941	1,6977	1,7013	1,7048	1,7084	1,7119	1,7154	1,7188	1,7223	1,7257	1,729	1,7324	1,7357	1,739
58,1	1,6838	1,6876	1,6913	1,6951	1,6988	1,7025	1,7061	1,7097	1,7133	1,7168	1,7203	1,7238	1,7273	1,7307	1,7342	1,7375	1,7409	1,7442	1,7476
58,2	1,6922	1,696	1,6997	1,7035	1,7072	1,7109	1,7145	1,7182	1,7217	1,7253	1,7288	1,7323	1,7358	1,7393	1,7427	1,7461	1,7495	1,7528	1,7561
58,3	1,7006	1,7044	1,7082	1,7119	1,7157	1,7194	1,723	1,7267	1,7303	1,7338	1,7374	1,7409	1,7444	1,7478	1,7513	1,7547	1,7581	1,7614	1,7647
58,4	1,709	1,7129	1,7167	1,7204	1,7242	1,7279	1,7315	1,7352	1,7388	1,7424	1,7459	1,7495	1,753	1,7564	1,7599	1,7633	1,7667	1,7701	1,7734
58,5	1,7175	1,7214	1,7252	1,729	1,7327	1,7364	1,7401	1,7437	1,7474	1,751	1,7545	1,7581	1,7616	1,7651	1,7685	1,772	1,7754	1,7787	1,7821
58,6	1,726	1,7299	1,7337	1,7375	1,7413	1,745	1,7487	1,7524	1,756	1,7596	1,7632	1,7667	1,7703	1,7737	1,7772	1,7807	1,7841	1,7875	1,7908
58,7	1,7346	1,7385	1,7423	1,7461	1,7499	1,7536	1,7573	1,761	1,7647	1,7683	1,7719	1,7754	1,779	1,7825	1,7859	1,7894	1,7928	1,7962	1,7996
58,8	1,7432	1,7471	1,751	1,7548	1,7585	1,7623	1,766	1,7697	1,7734	1,777	1,7806	1,7842	1,7877	1,7912	1,7947	1,7982	1,8016	1,805	1,8084
58,9	1,7519	1,7558	1,7596	1,7634	1,7672	1,771	1,7747	1,7784	1,7821	1,7857	1,7894	1,7929	1,7965	1,8	1,8035	1,807	1,8104	1,8139	1,8173
59	1,7606	1,7645	1,7683	1,7722	1,776	1,7797	1,7835	1,7872	1,7909	1,7945	1,7982	1,8018	1,8053	1,8089	1,8124	1,8159	1,8193	1,8228	1,8262
59,1	1,7693	1,7732	1,7771	1,7809	1,7848	1,7885	1,7923	1,796	1,7997	1,8034	1,807	1,8106	1,8142	1,8177	1,8213	1,8248	1,8282	1,8317	1,8351
59,2	1,778	1,782	1,7859	1,7897	1,7936	1,7974	1,8011	1,8049	1,8086	1,8122	1,8159	1,8195	1,8231	1,8267	1,8302	1,8337	1,8372	1,8406	1,8441
59,3	1,7868	1,7908	1,7947	1,7986	1,8024	1,8062	1,81	1,8137	1,8175	1,8212	1,8248	1,8284	1,832	1,8356	1,8392	1,8427	1,8462	1,8496	1,8531
59,4	1,7957	1,7997	1,8036	1,8075	1,8113	1,8151	1,8189	1,8227	1,8264	1,8301	1,8338	1,8374	1,841	1,8446	1,8482	1,8517	1,8552	1,8587	1,8621
59,5	1,8046	1,8085	1,8125	1,8164	1,8202	1,8241	1,8279	1,8317	1,8354	1,8391	1,8428	1,8464	1,8501	1,8537	1,8572	1,8608	1,8643	1,8678	1,8712
59,6	1,8135	1,8175	1,8214	1,8254	1,8292	1,8331	1,8369	1,8407	1,8444	1,8481	1,8518	1,8555	1,8591	1,8627	1,8663	1,8699	1,8734	1,8769	1,8804
59,7	1,8225	1,8265	1,8304	1,8344	1,8383	1,8421	1,8459	1,8497	1,8535	1,8572	1,8609	1,8646	1,8683	1,8719	1,8755	1,879	1,8826	1,8861	1,8896
59,8	1,8315	1,8355	1,8395	1,8434	1,8473	1,8512	1,855	1,8588	1,8626	1,8664	1,8701	1,8738	1,8774	1,881	1,8846	1,8882	1,8918	1,8953	1,8988
59,9	1,8405	1,8446	1,8485	1,8525	1,8564	1,8603	1,8642	1,868	1,8718	1,8755	1,8793	1,8829	1,8866	1,8903	1,8939	1,8974	1,901	1,9045	1,908
60	1,8496	1,8537	1,8577	1,8616	1,8656	1,8695	1,8733	1,8771	1,881	1,8847	1,8885	1,8922	1,8958	1,8995	1,9031	1,9067	1,9103	1,9138	1,9174
60,1	1,8588	1,8628	1,8668	1,8708	1,8747	1,8787	1,8825	1,8864	1,8902	1,894	1,8977	1,9014	1,9051	1,9088	1,9124	1,916	1,9196	1,9232	1,9267
60,2	1,868	1,872	1,876	1,88	1,884	1,8879	1,8918	1,8956	1,8995	1,9033	1,907	1,9108	1,9145	1,9181	1,9218	1,9254	1,929	1,9326	1,9361
60,3	1,8772	1,8813	1,8853	1,8893	1,8933	1,8972	1,9011	1,905	1,9088	1,9126	1,9164	1,9201	1,9238	1,9275	1,9312	1,9348	1,9384	1,942	1,9455
60,4	1,8864	1,8905	1,8946	1,8986	1,9026	1,9065	1,9104	1,9143	1,9182	1,922	1,9258	1,9295	1,9332	1,9369	1,9406	1,9443	1,9479	1,9515	1,955

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
57	1,6589	1,6621	1,6652	1,6683	1,6714	1,6745	1,6775	1,6805	1,6835	1,6865	1,6895	1,6924	1,6954	1,6983	1,7012	1,704	1,7069	1,7097	1,7125
57,1	1,6671	1,6702	1,6734	1,6765	1,6796	1,6827	1,6857	1,6888	1,6918	1,6948	1,6978	1,7007	1,7037	1,7066	1,7095	1,7124	1,7152	1,7181	1,7209
57,2	1,6753	1,6785	1,6816	1,6847	1,6878	1,6909	1,694	1,697	1,7001	1,7031	1,7061	1,709	1,712	1,7149	1,7178	1,7207	1,7236	1,7264	1,7293
57,3	1,6835	1,6867	1,6899	1,693	1,6961	1,6992	1,7023	1,7054	1,7084	1,7114	1,7144	1,7174	1,7203	1,7233	1,7262	1,7291	1,732	1,7348	1,7377
57,4	1,6918	1,695	1,6982	1,7013	1,7045	1,7076	1,7106	1,7137	1,7168	1,7198	1,7228	1,7258	1,7287	1,7317	1,7346	1,7375	1,7404	1,7433	1,7461
57,5	1,7001	1,7033	1,7065	1,7097	1,7128	1,7159	1,719	1,7221	1,7252	1,7282	1,7312	1,7342	1,7372	1,7401	1,7431	1,746	1,7489	1,7518	1,7546
57,6	1,7085	1,7117	1,7149	1,7181	1,7212	1,7243	1,7274	1,7305	1,7336	1,7366	1,7397	1,7427	1,7456	1,7486	1,7516	1,7545	1,7574	1,7603	1,7632
57,7	1,7169	1,7201	1,7233	1,7265	1,7296	1,7328	1,7359	1,739	1,7421	1,7451	1,7482	1,7512	1,7542	1,7571	1,7601	1,763	1,7659	1,7688	1,7717
57,8	1,7253	1,7286	1,7318	1,735	1,7381	1,7413	1,7444	1,7475	1,7506	1,7536	1,7567	1,7597	1,7627	1,7657	1,7687	1,7716	1,7745	1,7774	1,7803
57,9	1,7338	1,737	1,7403	1,7435	1,7466	1,7498	1,7529	1,756	1,7591	1,7622	1,7652	1,7683	1,7713	1,7743	1,7773	1,7802	1,7832	1,7861	1,789
58	1,7423	1,7456	1,7488	1,752	1,7552	1,7583	1,7615	1,7646	1,7677	1,7708	1,7739	1,7769	1,7799	1,7829	1,7859	1,7889	1,7918	1,7947	1,7976
58,1	1,7509	1,7541	1,7574	1,7606	1,7638	1,7669	1,7701	1,7732	1,7763	1,7794	1,7825	1,7856	1,7886	1,7916	1,7946	1,7976	1,8005	1,8034	1,8064
58,2	1,7594	1,7627	1,766	1,7692	1,7724	1,7756	1,7787	1,7819	1,785	1,7881	1,7912	1,7943	1,7973	1,8003	1,8033	1,8063	1,8093	1,8122	1,8151
58,3	1,7681	1,7713	1,7746	1,7779	1,7811	1,7843	1,7874	1,7906	1,7937	1,7968	1,7999	1,803	1,806	1,8091	1,8121	1,8151	1,818	1,821	1,8239
58,4	1,7767	1,78	1,7833	1,7866	1,7898	1,793	1,7961	1,7993	1,8025	1,8056	1,8087	1,8118	1,8148	1,8179	1,8209	1,8239	1,8269	1,8298	1,8328
58,5	1,7854	1,7887	1,792	1,7953	1,7985	1,8017	1,8049	1,8081	1,8113	1,8144	1,8175	1,8206	1,8236	1,8267	1,8297	1,8327	1,8357	1,8387	1,8417
58,6	1,7942	1,7975	1,8008	1,8041	1,8073	1,8105	1,8137	1,8169	1,8201	1,8232	1,8263	1,8294	1,8325	1,8356	1,8386	1,8416	1,8446	1,8476	1,8506
58,7	1,803	1,8063	1,8096	1,8129	1,8161	1,8194	1,8226	1,8258	1,8289	1,8321	1,8352	1,8383	1,8414	1,8445	1,8475	1,8506	1,8536	1,8566	1,8595
58,8	1,8118	1,8151	1,8184	1,8217	1,825	1,8282	1,8315	1,8347	1,8378	1,841	1,8441	1,8473	1,8504	1,8534	1,8565	1,8595	1,8625	1,8655	1,8685
58,9	1,8206	1,824	1,8273	1,8306	1,8339	1,8371	1,8404	1,8436	1,8468	1,85	1,8531	1,8562	1,8593	1,8624	1,8655	1,8685	1,8716	1,8746	1,8776
59	1,8295	1,8329	1,8362	1,8396	1,8428	1,8461	1,8494	1,8526	1,8558	1,8589	1,8621	1,8652	1,8684	1,8714	1,8745	1,8776	1,8806	1,8836	1,8866
59,1	1,8385	1,8419	1,8452	1,8485	1,8518	1,8551	1,8584	1,8616	1,8648	1,868	1,8712	1,8743	1,8774	1,8805	1,8836	1,8867	1,8897	1,8928	1,8958
59,2	1,8475	1,8508	1,8542	1,8575	1,8609	1,8641	1,8674	1,8706	1,8739	1,8771	1,8802	1,8834	1,8865	1,8897	1,8928	1,8958	1,8989	1,9019	1,9049
59,3	1,8565	1,8599	1,8633	1,8666	1,8699	1,8732	1,8765	1,8797	1,883	1,8862	1,8894	1,8925	1,8957	1,8988	1,9019	1,905	1,9081	1,9111	1,9141
59,4	1,8656	1,869	1,8723	1,8757	1,879	1,8823	1,8856	1,8889	1,8921	1,8953	1,8985	1,9017	1,9049	1,908	1,9111	1,9142	1,9173	1,9204	1,9234
59,5	1,8747	1,8781	1,8815	1,8848	1,8882	1,8915	1,8948	1,8981	1,9013	1,9045	1,9078	1,9109	1,9141	1,9172	1,9204	1,9235	1,9266	1,9296	1,9327
59,6	1,8838	1,8872	1,8906	1,894	1,8974	1,9007	1,904	1,9073	1,9106	1,9138	1,917	1,9202	1,9234	1,9265	1,9297	1,9328	1,9359	1,939	1,942
59,7	1,893	1,8965	1,8999	1,9032	1,9066	1,9099	1,9133	1,9165	1,9198	1,9231	1,9263	1,9295	1,9327	1,9359	1,939	1,9421	1,9452	1,9483	1,9514
59,8	1,9022	1,9057	1,9091	1,9125	1,9159	1,9192	1,9226	1,9259	1,9291	1,9324	1,9356	1,9389	1,9421	1,9452	1,9484	1,9515	1,9546	1,9577	1,9608
59,9	1,9115	1,915	1,9184	1,9218	1,9252	1,9286	1,9319	1,9352	1,9385	1,9418	1,945	1,9483	1,9514	1,9546	1,9578	1,961	1,9641	1,9672	1,9703
60	1,9208	1,9243	1,9278	1,9312	1,9346	1,9379	1,9413	1,9446	1,9479	1,9512	1,9544	1,9577	1,9609	1,9641	1,9673	1,9704	1,9736	1,9767	1,9798
60,1	1,9302	1,9337	1,9372	1,9406	1,944	1,9473	1,9507	1,954	1,9574	1,9606	1,9639	1,9672	1,9704	1,9736	1,9768	1,9799	1,9831	1,9862	1,9893
60,2	1,9396	1,9431	1,9466	1,95	1,9534	1,9568	1,9602	1,9635	1,9669	1,9701	1,9734	1,9767	1,9799	1,9831	1,9863	1,9895	1,9927	1,9958	1,9989
60,3	1,9491	1,9526	1,956	1,9595	1,9629	1,9663	1,9697	1,9731	1,9764	1,9797	1,983	1,9863	1,9895	1,9927	1,9959	1,9991	2,0023	2,0054	2,0086
60,4	1,9586	1,9621	1,9656	1,969	1,9725	1,9759	1,9793	1,9826	1,986	1,9893	1,9926	1,9959	1,9991	2,0024	2,0056	2,0088	2,012	2,0151	2,0182

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
57	1,7153	1,7181	1,7209	1,7237	1,7264	1,7291	1,7318	1,7345	1,7372	1,7398	1,7425	1,7451	1,7477	1,7503	1,7529	1,7555	1,758	1,7606	1,7631
57,1	1,7237	1,7265	1,7293	1,732	1,7348	1,7375	1,7402	1,7429	1,7456	1,7483	1,7509	1,7536	1,7562	1,7588	1,7614	1,764	1,7665	1,7691	1,7716
57,2	1,7321	1,7349	1,7377	1,7404	1,7432	1,7459	1,7487	1,7514	1,754	1,7567	1,7594	1,762	1,7647	1,7673	1,7699	1,7725	1,775	1,7776	1,7802
57,3	1,7405	1,7433	1,7461	1,7489	1,7517	1,7544	1,7571	1,7598	1,7625	1,7652	1,7679	1,7706	1,7732	1,7758	1,7784	1,781	1,7836	1,7862	1,7887
57,4	1,749	1,7518	1,7546	1,7574	1,7601	1,7629	1,7656	1,7684	1,7711	1,7738	1,7764	1,7791	1,7818	1,7844	1,787	1,7896	1,7922	1,7948	1,7973
57,5	1,7575	1,7603	1,7631	1,7659	1,7687	1,7715	1,7742	1,7769	1,7796	1,7823	1,785	1,7877	1,7903	1,793	1,7956	1,7982	1,8008	1,8034	1,806
57,6	1,766	1,7688	1,7717	1,7745	1,7772	1,78	1,7828	1,7855	1,7882	1,791	1,7936	1,7963	1,799	1,8016	1,8043	1,8069	1,8095	1,8121	1,8147
57,7	1,7746	1,7774	1,7803	1,7831	1,7859	1,7886	1,7914	1,7942	1,7969	1,7996	1,8023	1,805	1,8077	1,8103	1,813	1,8156	1,8182	1,8208	1,8234
57,8	1,7832	1,7861	1,7889	1,7917	1,7945	1,7973	1,8001	1,8028	1,8056	1,8083	1,811	1,8137	1,8164	1,8191	1,8217	1,8243	1,827	1,8296	1,8322
57,9	1,7918	1,7947	1,7976	1,8004	1,8032	1,806	1,8088	1,8115	1,8143	1,817	1,8198	1,8224	1,8251	1,8278	1,8305	1,8331	1,8358	1,8384	1,841
58	1,8005	1,8034	1,8063	1,8091	1,8119	1,8147	1,8175	1,8203	1,8231	1,8258	1,8285	1,8312	1,8339	1,8366	1,8393	1,8419	1,8446	1,8472	1,8498
58,1	1,8093	1,8121	1,815	1,8179	1,8207	1,8235	1,8263	1,8291	1,8319	1,8346	1,8374	1,8401	1,8428	1,8455	1,8481	1,8508	1,8534	1,8561	1,8587
58,2	1,818	1,8209	1,8238	1,8267	1,8295	1,8323	1,8351	1,8379	1,8407	1,8435	1,8462	1,8489	1,8516	1,8543	1,857	1,8597	1,8623	1,865	1,8676
58,3	1,8269	1,8297	1,8326	1,8355	1,8383	1,8412	1,844	1,8468	1,8496	1,8523	1,8551	1,8578	1,8606	1,8633	1,866	1,8686	1,8713	1,8739	1,8766
58,4	1,8357	1,8386	1,8415	1,8444	1,8472	1,8501	1,8529	1,8557	1,8585	1,8613	1,864	1,8668	1,8695	1,8722	1,8749	1,8776	1,8803	1,8829	1,8856
58,5	1,8446	1,8475	1,8504	1,8533	1,8561	1,859	1,8618	1,8647	1,8675	1,8703	1,873	1,8758	1,8785	1,8812	1,8839	1,8866	1,8893	1,892	1,8946
58,6	1,8535	1,8564	1,8594	1,8623	1,8651	1,868	1,8708	1,8736	1,8765	1,8793	1,882	1,8848	1,8875	1,8903	1,893	1,8957	1,8984	1,9011	1,9037
58,7	1,8625	1,8654	1,8683	1,8712	1,8741	1,877	1,8798	1,8827	1,8855	1,8883	1,8911	1,8939	1,8966	1,8994	1,9021	1,9048	1,9075	1,9102	1,9128
58,8	1,8715	1,8744	1,8774	1,8803	1,8832	1,886	1,8889	1,8918	1,8946	1,8974	1,9002	1,903	1,9057	1,9085	1,9112	1,9139	1,9166	1,9193	1,922
58,9	1,8805	1,8835	1,8864	1,8894	1,8922	1,8951	1,898	1,9009	1,9037	1,9065	1,9093	1,9121	1,9149	1,9176	1,9204	1,9231	1,9258	1,9285	1,9312
59	1,8896	1,8926	1,8955	1,8985	1,9014	1,9043	1,9072	1,91	1,9129	1,9157	1,9185	1,9213	1,9241	1,9269	1,9296	1,9323	1,9351	1,9378	1,9405
59,1	1,8988	1,9017	1,9047	1,9076	1,9106	1,9134	1,9164	1,9192	1,9221	1,9249	1,9277	1,9305	1,9333	1,9361	1,9389	1,9416	1,9443	1,947	1,9498
59,2	1,9079	1,9109	1,9139	1,9168	1,9198	1,9227	1,9256	1,9284	1,9313	1,9342	1,937	1,9398	1,9426	1,9454	1,9481	1,9509	1,9536	1,9564	1,9591
59,3	1,9172	1,9201	1,9231	1,9261	1,929	1,9319	1,9348	1,9377	1,9406	1,9435	1,9463	1,9491	1,9519	1,9547	1,9575	1,9603	1,963	1,9657	1,9685
59,4	1,9264	1,9294	1,9324	1,9353	1,9383	1,9413	1,9442	1,9471	1,9499	1,9528	1,9557	1,9585	1,9613	1,9641	1,9669	1,9696	1,9724	1,9751	1,9779
59,5	1,9357	1,9387	1,9417	1,9447	1,9476	1,9506	1,9535	1,9564	1,9593	1,9622	1,965	1,9679	1,9707	1,9735	1,9763	1,9791	1,9819	1,9846	1,9873
59,6	1,945	1,9481	1,9511	1,9541	1,957	1,96	1,9629	1,9658	1,9687	1,9716	1,9745	1,9773	1,9802	1,983	1,9858	1,9886	1,9913	1,9941	1,9968
59,7	1,9544	1,9575	1,9605	1,9635	1,9664	1,9694	1,9723	1,9753	1,9782	1,9811	1,9839	1,9868	1,9896	1,9925	1,9953	1,9981	2,0009	2,0036	2,0064
59,8	1,9639	1,9669	1,9699	1,9729	1,9759	1,9789	1,9818	1,9848	1,9877	1,9906	1,9935	1,9963	1,9992	2,002	2,0048	2,0076	2,0104	2,0132	2,016
59,9	1,9733	1,9764	1,9794	1,9824	1,9854	1,9884	1,9914	1,9943	1,9972	2,0001	2,003	2,0059	2,0088	2,0116	2,0144	2,0173	2,0201	2,0228	2,0256
60	1,9828	1,9859	1,9889	1,992	1,995	1,998	2,0009	2,0039	2,0068	2,0097	2,0126	2,0155	2,0184	2,0212	2,0241	2,0269	2,0297	2,0325	2,0353
60,1	1,9924	1,9955	1,9985	2,0015	2,0046	2,0076	2,0105	2,0135	2,0165	2,0194	2,0223	2,0252	2,0281	2,0309	2,0338	2,0366	2,0394	2,0422	2,045
60,2	2,002	2,0051	2,0081	2,0112	2,0142	2,0172	2,0202	2,0232	2,0261	2,0291	2,032	2,0349	2,0378	2,0406	2,0435	2,0463	2,0492	2,052	2,0548
60,3	2,0117	2,0147	2,0178	2,0209	2,0239	2,0269	2,0299	2,0329	2,0358	2,0388	2,0417	2,0446	2,0475	2,0504	2,0533	2,0561	2,059	2,0618	2,0646
60,4	2,0213	2,0244	2,0275	2,0306	2,0336	2,0366	2,0396	2,0426	2,0456	2,0486	2,0515	2,0544	2,0573	2,0602	2,0631	2,066	2,0688	2,0716	2,0744

Table of external index of viability and vitality
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e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
57	1,7656	1,7681	1,7706	1,7731	1,7756	1,778	1,7805	1,7829
57,1	1,7741	1,7766	1,7791	1,7816	1,7841	1,7866	1,789	1,7915
57,2	1,7827	1,7852	1,7877	1,7902	1,7927	1,7952	1,7976	1,8
57,3	1,7913	1,7938	1,7963	1,7988	1,8013	1,8038	1,8062	1,8087
57,4	1,7999	1,8024	1,8049	1,8075	1,8099	1,8124	1,8149	1,8174
57,5	1,8085	1,8111	1,8136	1,8161	1,8186	1,8211	1,8236	1,8261
57,6	1,8172	1,8198	1,8223	1,8249	1,8274	1,8299	1,8323	1,8348
57,7	1,826	1,8285	1,8311	1,8336	1,8361	1,8386	1,8411	1,8436
57,8	1,8347	1,8373	1,8399	1,8424	1,8449	1,8475	1,8499	1,8525
57,9	1,8436	1,8461	1,8487	1,8512	1,8538	1,8563	1,8588	1,8613
58	1,8524	1,855	1,8576	1,8601	1,8627	1,8652	1,8677	1,8702
58,1	1,8613	1,8639	1,8665	1,869	1,8716	1,8741	1,8767	1,8792
58,2	1,8702	1,8728	1,8754	1,878	1,8805	1,8831	1,8856	1,8881
58,3	1,8792	1,8818	1,8844	1,887	1,8896	1,8921	1,8946	1,8972
58,4	1,8882	1,8908	1,8934	1,896	1,8986	1,9012	1,9037	1,9062
58,5	1,8973	1,8999	1,9025	1,9051	1,9077	1,9102	1,9128	1,9153
58,6	1,9064	1,909	1,9116	1,9142	1,9168	1,9194	1,922	1,9245
58,7	1,9155	1,9181	1,9208	1,9234	1,926	1,9286	1,9311	1,9337
58,8	1,9247	1,9273	1,9299	1,9326	1,9352	1,9378	1,9404	1,9429
58,9	1,9339	1,9365	1,9392	1,9418	1,9444	1,947	1,9496	1,9522
59	1,9431	1,9458	1,9485	1,9511	1,9537	1,9563	1,9589	1,9615
59,1	1,9524	1,9551	1,9578	1,9604	1,963	1,9657	1,9683	1,9709
59,2	1,9618	1,9645	1,9671	1,9698	1,9724	1,9751	1,9777	1,9803
59,3	1,9712	1,9738	1,9765	1,9792	1,9818	1,9845	1,9871	1,9897
59,4	1,9806	1,9833	1,986	1,9886	1,9913	1,9939	1,9966	1,9992
59,5	1,9901	1,9928	1,9955	1,9981	2,0008	2,0034	2,0061	2,0087
59,6	1,9996	2,0023	2,005	2,0077	2,0103	2,013	2,0156	2,0183
59,7	2,0091	2,0118	2,0146	2,0172	2,0199	2,0226	2,0253	2,0279
59,8	2,0187	2,0215	2,0242	2,0269	2,0296	2,0322	2,0349	2,0376
59,9	2,0284	2,0311	2,0338	2,0365	2,0392	2,0419	2,0446	2,0472
60	2,038	2,0408	2,0435	2,0463	2,049	2,0516	2,0543	2,057
60,1	2,0478	2,0505	2,0533	2,056	2,0587	2,0614	2,0641	2,0668
60,2	2,0576	2,0603	2,0631	2,0658	2,0685	2,0712	2,074	2,0766
60,3	2,0674	2,0701	2,0729	2,0757	2,0784	2,0811	2,0838	2,0865
60,4	2,0772	2,08	2,0828	2,0855	2,0883	2,091	2,0937	2,0964

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
60,5	1,2885	1,3101	1,3301	1,3488	1,3665	1,3831	1,3989	1,4139	1,4282	1,4419	1,4551	1,4677	1,4799	1,4916	1,5029	1,5139	1,5245	1,5348	1,5448
60,6	1,2958	1,3175	1,3376	1,3564	1,3741	1,3908	1,4066	1,4217	1,436	1,4498	1,463	1,4757	1,4879	1,4996	1,511	1,522	1,5327	1,543	1,553
60,7	1,3032	1,3249	1,3451	1,3639	1,3817	1,3985	1,4143	1,4295	1,4439	1,4577	1,4709	1,4836	1,4959	1,5077	1,5191	1,5301	1,5408	1,5512	1,5613
60,8	1,3105	1,3323	1,3526	1,3716	1,3894	1,4062	1,4221	1,4373	1,4518	1,4656	1,4789	1,4917	1,5039	1,5158	1,5272	1,5383	1,549	1,5594	1,5695
60,9	1,318	1,3398	1,3602	1,3792	1,3971	1,4139	1,4299	1,4452	1,4597	1,4736	1,4869	1,4997	1,512	1,5239	1,5354	1,5465	1,5573	1,5677	1,5779
61	1,3254	1,3474	1,3678	1,3869	1,4048	1,4217	1,4378	1,4531	1,4677	1,4816	1,495	1,5078	1,5202	1,5321	1,5436	1,5548	1,5656	1,5761	1,5862
61,1	1,3329	1,355	1,3754	1,3946	1,4126	1,4296	1,4457	1,461	1,4757	1,4896	1,5031	1,516	1,5284	1,5403	1,5519	1,5631	1,5739	1,5844	1,5947
61,2	1,3405	1,3626	1,3831	1,4023	1,4204	1,4375	1,4536	1,469	1,4837	1,4977	1,5112	1,5241	1,5366	1,5486	1,5602	1,5714	1,5823	1,5928	1,6031
61,3	1,348	1,3702	1,3909	1,4101	1,4283	1,4454	1,4616	1,477	1,4918	1,5059	1,5194	1,5323	1,5448	1,5569	1,5685	1,5798	1,5907	1,6013	1,6116
61,4	1,3557	1,3779	1,3986	1,418	1,4362	1,4534	1,4696	1,4851	1,4999	1,514	1,5276	1,5406	1,5532	1,5652	1,5769	1,5882	1,5992	1,6098	1,6201
61,5	1,3633	1,3857	1,4064	1,4259	1,4441	1,4613	1,4777	1,4932	1,5081	1,5222	1,5359	1,5489	1,5615	1,5736	1,5854	1,5967	1,6077	1,6183	1,6287
61,6	1,371	1,3934	1,4143	1,4338	1,4521	1,4694	1,4858	1,5014	1,5163	1,5305	1,5441	1,5573	1,5699	1,5821	1,5938	1,6052	1,6162	1,6269	1,6373
61,7	1,3787	1,4013	1,4222	1,4417	1,4601	1,4775	1,4939	1,5096	1,5245	1,5388	1,5525	1,5656	1,5783	1,5905	1,6023	1,6138	1,6248	1,6355	1,646
61,8	1,3865	1,4091	1,4301	1,4497	1,4682	1,4856	1,5021	1,5178	1,5328	1,5471	1,5609	1,5741	1,5868	1,5991	1,6109	1,6223	1,6334	1,6442	1,6547
61,9	1,3943	1,417	1,4381	1,4578	1,4763	1,4938	1,5103	1,5261	1,5411	1,5555	1,5693	1,5825	1,5953	1,6076	1,6195	1,631	1,6421	1,6529	1,6634
62	1,4022	1,4249	1,4461	1,4658	1,4844	1,502	1,5186	1,5344	1,5495	1,5639	1,5778	1,5911	1,6038	1,6162	1,6281	1,6397	1,6508	1,6617	1,6722
62,1	1,4101	1,4329	1,4541	1,4739	1,4926	1,5102	1,5269	1,5428	1,5579	1,5724	1,5863	1,5996	1,6125	1,6248	1,6368	1,6484	1,6596	1,6705	1,681
62,2	1,418	1,4409	1,4622	1,4821	1,5008	1,5185	1,5352	1,5512	1,5664	1,5809	1,5948	1,6082	1,6211	1,6335	1,6455	1,6571	1,6684	1,6793	1,6899
62,3	1,426	1,449	1,4703	1,4903	1,5091	1,5268	1,5436	1,5596	1,5748	1,5894	1,6034	1,6168	1,6298	1,6422	1,6543	1,666	1,6772	1,6882	1,6988
62,4	1,434	1,4571	1,4785	1,4986	1,5174	1,5352	1,5521	1,5681	1,5834	1,598	1,6121	1,6255	1,6385	1,651	1,6631	1,6748	1,6861	1,6971	1,7078
62,5	1,4421	1,4652	1,4867	1,5069	1,5258	1,5436	1,5605	1,5766	1,592	1,6067	1,6207	1,6343	1,6473	1,6598	1,672	1,6837	1,6951	1,7061	1,7168
62,6	1,4502	1,4734	1,495	1,5152	1,5342	1,5521	1,5691	1,5852	1,6006	1,6153	1,6295	1,643	1,6561	1,6687	1,6809	1,6926	1,704	1,7151	1,7258
62,7	1,4583	1,4816	1,5033	1,5235	1,5426	1,5606	1,5776	1,5938	1,6093	1,6241	1,6382	1,6518	1,665	1,6776	1,6898	1,7016	1,7131	1,7242	1,7349
62,8	1,4665	1,4899	1,5116	1,532	1,5511	1,5691	1,5862	1,6025	1,618	1,6328	1,6471	1,6607	1,6739	1,6866	1,6988	1,7107	1,7221	1,7333	1,7441
62,9	1,4747	1,4982	1,52	1,5404	1,5596	1,5777	1,5949	1,6112	1,6268	1,6416	1,6559	1,6696	1,6828	1,6955	1,7078	1,7197	1,7313	1,7424	1,7533
63	1,483	1,5066	1,5285	1,5489	1,5682	1,5863	1,6036	1,6199	1,6356	1,6505	1,6648	1,6786	1,6918	1,7046	1,7169	1,7289	1,7404	1,7516	1,7625
63,1	1,4913	1,515	1,5369	1,5575	1,5768	1,595	1,6123	1,6287	1,6444	1,6594	1,6737	1,6876	1,7009	1,7137	1,726	1,738	1,7496	1,7609	1,7718
63,2	1,4996	1,5234	1,5454	1,5661	1,5855	1,6037	1,6211	1,6376	1,6533	1,6683	1,6827	1,6966	1,7099	1,7228	1,7352	1,7472	1,7589	1,7702	1,7811
63,3	1,508	1,5319	1,554	1,5747	1,5942	1,6125	1,6299	1,6465	1,6622	1,6773	1,6918	1,7057	1,7191	1,732	1,7444	1,7565	1,7682	1,7795	1,7905
63,4	1,5165	1,5404	1,5626	1,5834	1,6029	1,6213	1,6388	1,6554	1,6712	1,6864	1,7009	1,7148	1,7283	1,7412	1,7537	1,7658	1,7775	1,7889	1,7999
63,5	1,525	1,549	1,5713	1,5921	1,6117	1,6302	1,6477	1,6644	1,6802	1,6954	1,71	1,724	1,7375	1,7505	1,763	1,7752	1,7869	1,7983	1,8094
63,6	1,5335	1,5576	1,58	1,6009	1,6205	1,6391	1,6567	1,6734	1,6893	1,7046	1,7192	1,7332	1,7468	1,7598	1,7724	1,7846	1,7964	1,8078	1,8189
63,7	1,5421	1,5662	1,5887	1,6097	1,6294	1,648	1,6657	1,6824	1,6984	1,7137	1,7284	1,7425	1,7561	1,7692	1,7818	1,794	1,8058	1,8173	1,8285
63,8	1,5507	1,575	1,5975	1,6186	1,6384	1,657	1,6747	1,6916	1,7076	1,723	1,7377	1,7518	1,7654	1,7786	1,7912	1,8035	1,8154	1,8269	1,8381
63,9	1,5594	1,5837	1,6063	1,6274	1,6473	1,6661	1,6838	1,7007	1,7168	1,7322	1,747	1,7612	1,7749	1,788	1,8007	1,813	1,825	1,8365	1,8477

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
60,5	1,5545	1,564	1,5732	1,5822	1,591	1,5995	1,6079	1,6161	1,6241	1,6319	1,6396	1,6471	1,6545	1,6618	1,6689	1,6758	1,6827	1,6894	1,6961
60,6	1,5628	1,5723	1,5815	1,5905	1,5994	1,6079	1,6163	1,6245	1,6326	1,6404	1,6481	1,6557	1,6631	1,6703	1,6775	1,6845	1,6913	1,6981	1,7047
60,7	1,5711	1,5806	1,5899	1,5989	1,6078	1,6164	1,6248	1,633	1,6411	1,649	1,6567	1,6643	1,6717	1,679	1,6861	1,6932	1,7001	1,7068	1,7135
60,8	1,5794	1,5889	1,5982	1,6073	1,6162	1,6248	1,6333	1,6416	1,6496	1,6575	1,6653	1,6729	1,6803	1,6877	1,6948	1,7019	1,7088	1,7156	1,7223
60,9	1,5877	1,5973	1,6067	1,6158	1,6247	1,6333	1,6418	1,6501	1,6582	1,6662	1,674	1,6816	1,689	1,6964	1,7036	1,7106	1,7176	1,7244	1,7311
61	1,5961	1,6058	1,6151	1,6243	1,6332	1,6419	1,6504	1,6587	1,6669	1,6748	1,6826	1,6903	1,6978	1,7051	1,7124	1,7195	1,7264	1,7333	1,74
61,1	1,6046	1,6142	1,6236	1,6328	1,6417	1,6505	1,659	1,6674	1,6755	1,6835	1,6914	1,699	1,7066	1,714	1,7212	1,7283	1,7353	1,7422	1,7489
61,2	1,613	1,6227	1,6322	1,6414	1,6504	1,6591	1,6677	1,6761	1,6843	1,6923	1,7001	1,7078	1,7154	1,7228	1,7301	1,7372	1,7442	1,7511	1,7579
61,3	1,6216	1,6313	1,6408	1,65	1,659	1,6678	1,6764	1,6848	1,693	1,7011	1,7089	1,7167	1,7243	1,7317	1,739	1,7461	1,7532	1,7601	1,7669
61,4	1,6301	1,6399	1,6494	1,6587	1,6677	1,6765	1,6851	1,6936	1,7018	1,7099	1,7178	1,7256	1,7332	1,7406	1,7479	1,7551	1,7622	1,7691	1,7759
61,5	1,6388	1,6485	1,6581	1,6674	1,6764	1,6853	1,6939	1,7024	1,7107	1,7188	1,7267	1,7345	1,7421	1,7496	1,7569	1,7641	1,7712	1,7782	1,785
61,6	1,6474	1,6572	1,6668	1,6761	1,6852	1,6941	1,7028	1,7113	1,7196	1,7277	1,7356	1,7435	1,7511	1,7586	1,766	1,7732	1,7803	1,7873	1,7942
61,7	1,6561	1,6659	1,6755	1,6849	1,694	1,7029	1,7116	1,7202	1,7285	1,7366	1,7446	1,7525	1,7601	1,7677	1,7751	1,7823	1,7894	1,7965	1,8033
61,8	1,6648	1,6747	1,6843	1,6937	1,7029	1,7118	1,7206	1,7291	1,7375	1,7456	1,7537	1,7615	1,7692	1,7768	1,7842	1,7915	1,7986	1,8057	1,8126
61,9	1,6736	1,6835	1,6932	1,7026	1,7118	1,7208	1,7295	1,7381	1,7465	1,7547	1,7627	1,7706	1,7784	1,7859	1,7934	1,8007	1,8079	1,8149	1,8218
62	1,6824	1,6924	1,7021	1,7115	1,7208	1,7297	1,7386	1,7471	1,7556	1,7638	1,7719	1,7798	1,7875	1,7951	1,8026	1,8099	1,8171	1,8242	1,8312
62,1	1,6913	1,7013	1,711	1,7205	1,7297	1,7388	1,7476	1,7562	1,7647	1,7729	1,781	1,789	1,7967	1,8044	1,8118	1,8192	1,8264	1,8335	1,8405
62,2	1,7002	1,7102	1,72	1,7295	1,7388	1,7478	1,7567	1,7653	1,7738	1,7821	1,7902	1,7982	1,806	1,8137	1,8212	1,8285	1,8358	1,8429	1,8499
62,3	1,7092	1,7192	1,729	1,7385	1,7479	1,757	1,7658	1,7745	1,783	1,7913	1,7995	1,8075	1,8153	1,823	1,8305	1,8379	1,8452	1,8524	1,8594
62,4	1,7181	1,7282	1,7381	1,7477	1,757	1,7661	1,775	1,7837	1,7923	1,8006	1,8088	1,8168	1,8247	1,8324	1,8399	1,8473	1,8546	1,8618	1,8689
62,5	1,7272	1,7373	1,7472	1,7568	1,7662	1,7753	1,7843	1,793	1,8016	1,8099	1,8181	1,8262	1,8341	1,8418	1,8494	1,8568	1,8642	1,8713	1,8784
62,6	1,7363	1,7464	1,7563	1,766	1,7754	1,7846	1,7935	1,8023	1,8109	1,8193	1,8275	1,8356	1,8435	1,8513	1,8589	1,8663	1,8737	1,8809	1,888
62,7	1,7454	1,7556	1,7655	1,7752	1,7846	1,7939	1,8029	1,8117	1,8203	1,8287	1,837	1,8451	1,853	1,8608	1,8684	1,8759	1,8833	1,8905	1,8976
62,8	1,7546	1,7648	1,7748	1,7845	1,794	1,8032	1,8122	1,8211	1,8297	1,8382	1,8464	1,8546	1,8625	1,8703	1,878	1,8855	1,8929	1,9002	1,9073
62,9	1,7638	1,7741	1,7841	1,7938	1,8033	1,8126	1,8217	1,8305	1,8392	1,8477	1,856	1,8641	1,8721	1,88	1,8876	1,8952	1,9026	1,9099	1,917
63	1,7731	1,7834	1,7934	1,8032	1,8127	1,822	1,8311	1,84	1,8487	1,8572	1,8656	1,8737	1,8818	1,8896	1,8973	1,9049	1,9123	1,9197	1,9268
63,1	1,7824	1,7927	1,8028	1,8126	1,8222	1,8315	1,8406	1,8496	1,8583	1,8668	1,8752	1,8834	1,8914	1,8993	1,907	1,9147	1,9221	1,9295	1,9367
63,2	1,7918	1,8021	1,8122	1,8221	1,8317	1,841	1,8502	1,8591	1,8679	1,8765	1,8849	1,8931	1,9012	1,9091	1,9168	1,9245	1,9319	1,9393	1,9465
63,3	1,8012	1,8116	1,8217	1,8316	1,8412	1,8506	1,8598	1,8688	1,8776	1,8862	1,8946	1,9028	1,9109	1,9189	1,9267	1,9343	1,9418	1,9492	1,9565
63,4	1,8106	1,8211	1,8312	1,8411	1,8508	1,8602	1,8695	1,8785	1,8873	1,8959	1,9044	1,9126	1,9208	1,9287	1,9365	1,9442	1,9517	1,9592	1,9664
63,5	1,8202	1,8306	1,8408	1,8508	1,8604	1,8699	1,8792	1,8882	1,897	1,9057	1,9142	1,9225	1,9306	1,9386	1,9465	1,9542	1,9617	1,9692	1,9765
63,6	1,8297	1,8402	1,8504	1,8604	1,8701	1,8796	1,8889	1,898	1,9068	1,9155	1,9241	1,9324	1,9405	1,9486	1,9564	1,9642	1,9718	1,9792	1,9865
63,7	1,8393	1,8498	1,8601	1,8701	1,8799	1,8894	1,8987	1,9078	1,9167	1,9254	1,934	1,9423	1,9505	1,9586	1,9665	1,9742	1,9818	1,9893	1,9967
63,8	1,849	1,8595	1,8698	1,8799	1,8897	1,8992	1,9086	1,9177	1,9266	1,9354	1,9439	1,9523	1,9605	1,9686	1,9765	1,9843	1,9919	1,9995	2,0068
63,9	1,8586	1,8693	1,8796	1,8897	1,8995	1,9091	1,9185	1,9276	1,9366	1,9453	1,954	1,9624	1,9706	1,9787	1,9867	1,9945	2,0021	2,0097	2,0171

Table of external index of viability and vitality
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e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
60,5	1,7026	1,709	1,7153	1,7215	1,7276	1,7336	1,7396	1,7454	1,7512	1,7569	1,7625	1,768	1,7735	1,7789	1,7842	1,7895	1,7947	1,7998	1,8049
60,6	1,7113	1,7177	1,7241	1,7303	1,7364	1,7424	1,7484	1,7543	1,7601	1,7658	1,7714	1,777	1,7825	1,7879	1,7932	1,7985	1,8037	1,8089	1,8139
60,7	1,7201	1,7265	1,7329	1,7391	1,7453	1,7513	1,7573	1,7632	1,769	1,7747	1,7804	1,786	1,7915	1,7969	1,8023	1,8075	1,8128	1,8179	1,823
60,8	1,7289	1,7353	1,7417	1,748	1,7542	1,7602	1,7662	1,7721	1,778	1,7837	1,7894	1,795	1,8005	1,806	1,8113	1,8166	1,8219	1,8271	1,8322
60,9	1,7377	1,7442	1,7506	1,7569	1,7631	1,7692	1,7752	1,7811	1,787	1,7928	1,7984	1,8041	1,8096	1,8151	1,8205	1,8258	1,8311	1,8363	1,8414
61	1,7466	1,7531	1,7595	1,7659	1,7721	1,7782	1,7842	1,7902	1,796	1,8018	1,8075	1,8132	1,8187	1,8242	1,8296	1,835	1,8402	1,8455	1,8506
61,1	1,7556	1,7621	1,7685	1,7749	1,7811	1,7872	1,7933	1,7993	1,8051	1,8109	1,8167	1,8223	1,8279	1,8334	1,8388	1,8442	1,8495	1,8547	1,8599
61,2	1,7645	1,7711	1,7776	1,7839	1,7902	1,7963	1,8024	1,8084	1,8143	1,8201	1,8259	1,8315	1,8371	1,8426	1,8481	1,8535	1,8588	1,864	1,8692
61,3	1,7736	1,7802	1,7866	1,793	1,7993	1,8055	1,8116	1,8176	1,8235	1,8293	1,8351	1,8408	1,8464	1,8519	1,8574	1,8628	1,8681	1,8734	1,8786
61,4	1,7826	1,7892	1,7957	1,8021	1,8084	1,8146	1,8207	1,8268	1,8327	1,8386	1,8443	1,8501	1,8557	1,8612	1,8667	1,8722	1,8775	1,8828	1,888
61,5	1,7918	1,7984	1,8049	1,8113	1,8176	1,8238	1,83	1,836	1,842	1,8479	1,8537	1,8594	1,865	1,8706	1,8761	1,8815	1,8869	1,8922	1,8975
61,6	1,8009	1,8076	1,8141	1,8205	1,8269	1,8331	1,8393	1,8453	1,8513	1,8572	1,863	1,8688	1,8744	1,88	1,8855	1,891	1,8964	1,9017	1,907
61,7	1,8101	1,8168	1,8234	1,8298	1,8362	1,8424	1,8486	1,8547	1,8607	1,8666	1,8724	1,8782	1,8839	1,8895	1,895	1,9005	1,9059	1,9112	1,9165
61,8	1,8194	1,8261	1,8326	1,8391	1,8455	1,8518	1,858	1,8641	1,8701	1,876	1,8819	1,8877	1,8934	1,899	1,9046	1,91	1,9155	1,9208	1,9261
61,9	1,8286	1,8354	1,842	1,8485	1,8549	1,8612	1,8674	1,8735	1,8796	1,8855	1,8914	1,8972	1,9029	1,9085	1,9141	1,9196	1,9251	1,9304	1,9357
62	1,838	1,8447	1,8514	1,8579	1,8643	1,8706	1,8769	1,883	1,889	1,895	1,9009	1,9067	1,9125	1,9181	1,9237	1,9293	1,9347	1,9401	1,9454
62,1	1,8474	1,8541	1,8608	1,8673	1,8738	1,8801	1,8864	1,8925	1,8986	1,9046	1,9105	1,9164	1,9221	1,9278	1,9334	1,9389	1,9444	1,9498	1,9552
62,2	1,8568	1,8636	1,8702	1,8768	1,8833	1,8896	1,8959	1,9021	1,9082	1,9142	1,9201	1,926	1,9318	1,9375	1,9431	1,9487	1,9542	1,9596	1,965
62,3	1,8663	1,8731	1,8798	1,8864	1,8928	1,8992	1,9055	1,9117	1,9178	1,9239	1,9298	1,9357	1,9415	1,9472	1,9529	1,9584	1,964	1,9694	1,9748
62,4	1,8758	1,8826	1,8893	1,8959	1,9024	1,9089	1,9152	1,9214	1,9275	1,9336	1,9396	1,9455	1,9513	1,957	1,9627	1,9683	1,9738	1,9792	1,9846
62,5	1,8854	1,8922	1,8989	1,9056	1,9121	1,9185	1,9249	1,9311	1,9373	1,9433	1,9493	1,9552	1,9611	1,9668	1,9725	1,9781	1,9837	1,9891	1,9946
62,6	1,895	1,9018	1,9086	1,9152	1,9218	1,9282	1,9346	1,9409	1,947	1,9531	1,9592	1,9651	1,9709	1,9767	1,9824	1,9881	1,9936	1,9991	2,0045
62,7	1,9046	1,9115	1,9183	1,925	1,9316	1,938	1,9444	1,9507	1,9569	1,963	1,969	1,975	1,9808	1,9866	1,9924	1,998	2,0036	2,0091	2,0146
62,8	1,9144	1,9213	1,928	1,9348	1,9413	1,9478	1,9542	1,9606	1,9668	1,9729	1,9789	1,9849	1,9908	1,9966	2,0024	2,008	2,0136	2,0192	2,0246
62,9	1,9241	1,931	1,9379	1,9446	1,9512	1,9577	1,9641	1,9704	1,9767	1,9828	1,9889	1,9949	2,0008	2,0066	2,0124	2,0181	2,0237	2,0293	2,0347
63	1,9339	1,9409	1,9477	1,9545	1,9611	1,9676	1,9741	1,9804	1,9867	1,9928	1,9989	2,0049	2,0109	2,0167	2,0225	2,0282	2,0338	2,0394	2,0449
63,1	1,9438	1,9507	1,9576	1,9644	1,971	1,9776	1,984	1,9904	1,9967	2,0029	2,009	2,015	2,021	2,0268	2,0326	2,0384	2,044	2,0496	2,0551
63,2	1,9537	1,9607	1,9675	1,9743	1,981	1,9876	1,9941	2,0005	2,0068	2,013	2,0191	2,0251	2,0311	2,037	2,0428	2,0486	2,0542	2,0598	2,0654
63,3	1,9636	1,9706	1,9775	1,9844	1,9911	1,9977	2,0042	2,0106	2,0169	2,0231	2,0293	2,0353	2,0413	2,0472	2,0531	2,0588	2,0645	2,0701	2,0757
63,4	1,9736	1,9807	1,9876	1,9944	2,0011	2,0078	2,0143	2,0207	2,0271	2,0333	2,0395	2,0456	2,0516	2,0575	2,0634	2,0691	2,0749	2,0805	2,0861
63,5	1,9837	1,9907	1,9977	2,0045	2,0113	2,0179	2,0245	2,0309	2,0373	2,0436	2,0497	2,0559	2,0619	2,0678	2,0737	2,0795	2,0852	2,0909	2,0965
63,6	1,9937	2,0008	2,0078	2,0147	2,0215	2,0281	2,0347	2,0412	2,0476	2,0538	2,0601	2,0662	2,0722	2,0782	2,0841	2,0899	2,0956	2,1013	2,1069
63,7	2,0039	2,011	2,018	2,0249	2,0317	2,0384	2,045	2,0515	2,0579	2,0642	2,0704	2,0766	2,0826	2,0886	2,0945	2,1004	2,1061	2,1118	2,1175
63,8	2,0141	2,0213	2,0283	2,0352	2,042	2,0487	2,0553	2,0618	2,0683	2,0746	2,0808	2,087	2,0931	2,0991	2,105	2,1109	2,1167	2,1224	2,128
63,9	2,0243	2,0315	2,0386	2,0455	2,0523	2,0591	2,0657	2,0722	2,0787	2,085	2,0913	2,0975	2,1036	2,1096	2,1156	2,1214	2,1273	2,133	2,1387

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
60,5	1,8099	1,8148	1,8198	1,8246	1,8294	1,8341	1,8388	1,8435	1,8481	1,8526	1,8571	1,8616	1,866	1,8704	1,8747	1,879	1,8832	1,8874	1,8916
60,6	1,819	1,824	1,8289	1,8337	1,8385	1,8433	1,848	1,8527	1,8573	1,8618	1,8664	1,8708	1,8753	1,8796	1,884	1,8883	1,8925	1,8968	1,901
60,7	1,8281	1,8331	1,838	1,8429	1,8477	1,8525	1,8572	1,8619	1,8665	1,8711	1,8756	1,8801	1,8846	1,889	1,8933	1,8976	1,9019	1,9061	1,9103
60,8	1,8373	1,8423	1,8472	1,8521	1,857	1,8617	1,8665	1,8712	1,8758	1,8804	1,885	1,8895	1,8939	1,8983	1,9027	1,907	1,9113	1,9156	1,9198
60,9	1,8465	1,8515	1,8565	1,8614	1,8662	1,871	1,8758	1,8805	1,8851	1,8897	1,8943	1,8988	1,9033	1,9077	1,9121	1,9165	1,9208	1,925	1,9292
61	1,8557	1,8608	1,8657	1,8707	1,8755	1,8804	1,8851	1,8899	1,8945	1,8991	1,9037	1,9082	1,9127	1,9172	1,9216	1,9259	1,9302	1,9345	1,9388
61,1	1,865	1,8701	1,8751	1,88	1,8849	1,8897	1,8945	1,8992	1,9039	1,9086	1,9132	1,9177	1,9222	1,9267	1,9311	1,9354	1,9398	1,9441	1,9483
61,2	1,8744	1,8794	1,8844	1,8894	1,8943	1,8992	1,904	1,9087	1,9134	1,9181	1,9227	1,9272	1,9317	1,9362	1,9406	1,945	1,9494	1,9537	1,9579
61,3	1,8837	1,8888	1,8939	1,8988	1,9038	1,9086	1,9134	1,9182	1,9229	1,9276	1,9322	1,9368	1,9413	1,9458	1,9502	1,9546	1,959	1,9633	1,9676
61,4	1,8932	1,8983	1,9033	1,9083	1,9132	1,9181	1,923	1,9277	1,9325	1,9371	1,9418	1,9464	1,9509	1,9554	1,9599	1,9643	1,9687	1,973	1,9773
61,5	1,9026	1,9078	1,9128	1,9178	1,9228	1,9277	1,9325	1,9373	1,9421	1,9468	1,9514	1,956	1,9606	1,9651	1,9695	1,974	1,9784	1,9827	1,987
61,6	1,9122	1,9173	1,9224	1,9274	1,9324	1,9373	1,9421	1,947	1,9517	1,9564	1,9611	1,9657	1,9703	1,9748	1,9793	1,9837	1,9881	1,9925	1,9968
61,7	1,9217	1,9269	1,932	1,937	1,942	1,9469	1,9518	1,9566	1,9614	1,9661	1,9708	1,9754	1,98	1,9846	1,9891	1,9935	1,9979	2,0023	2,0066
61,8	1,9313	1,9365	1,9416	1,9467	1,9517	1,9566	1,9615	1,9664	1,9711	1,9759	1,9806	1,9852	1,9898	1,9944	1,9989	2,0034	2,0078	2,0122	2,0165
61,9	1,941	1,9462	1,9513	1,9564	1,9614	1,9664	1,9713	1,9761	1,9809	1,9857	1,9904	1,9951	1,9997	2,0042	2,0088	2,0133	2,0177	2,0221	2,0265
62	1,9507	1,9559	1,961	1,9661	1,9712	1,9761	1,9811	1,9859	1,9908	1,9955	2,0003	2,0049	2,0096	2,0141	2,0187	2,0232	2,0277	2,0321	2,0364
62,1	1,9605	1,9657	1,9708	1,9759	1,981	1,986	1,9909	1,9958	2,0006	2,0054	2,0102	2,0148	2,0195	2,0241	2,0287	2,0332	2,0376	2,0421	2,0465
62,2	1,9702	1,9755	1,9807	1,9858	1,9908	1,9959	2,0008	2,0057	2,0106	2,0154	2,0201	2,0248	2,0295	2,0341	2,0387	2,0432	2,0477	2,0521	2,0565
62,3	1,9801	1,9853	1,9905	1,9957	2,0007	2,0058	2,0107	2,0157	2,0205	2,0254	2,0301	2,0349	2,0395	2,0442	2,0487	2,0533	2,0578	2,0622	2,0667
62,4	1,99	1,9953	2,0005	2,0056	2,0107	2,0158	2,0207	2,0257	2,0306	2,0354	2,0402	2,0449	2,0496	2,0543	2,0588	2,0634	2,0679	2,0724	2,0768
62,5	1,9999	2,0052	2,0104	2,0156	2,0207	2,0258	2,0308	2,0357	2,0406	2,0455	2,0503	2,055	2,0597	2,0644	2,069	2,0736	2,0781	2,0826	2,087
62,6	2,0099	2,0152	2,0205	2,0256	2,0308	2,0358	2,0409	2,0458	2,0508	2,0556	2,0604	2,0652	2,0699	2,0746	2,0792	2,0838	2,0884	2,0928	2,0973
62,7	2,0199	2,0253	2,0305	2,0357	2,0409	2,046	2,051	2,056	2,0609	2,0658	2,0706	2,0754	2,0802	2,0848	2,0895	2,0941	2,0986	2,1031	2,1076
62,8	2,03	2,0354	2,0406	2,0459	2,051	2,0561	2,0612	2,0662	2,0711	2,076	2,0809	2,0857	2,0904	2,0951	2,0998	2,1044	2,109	2,1135	2,118
62,9	2,0402	2,0455	2,0508	2,0561	2,0612	2,0663	2,0714	2,0764	2,0814	2,0863	2,0912	2,096	2,1007	2,1055	2,1101	2,1148	2,1194	2,1239	2,1284
63	2,0503	2,0557	2,061	2,0663	2,0715	2,0766	2,0817	2,0867	2,0917	2,0966	2,1015	2,1063	2,1111	2,1159	2,1206	2,1252	2,1298	2,1344	2,1389
63,1	2,0606	2,066	2,0713	2,0766	2,0818	2,0869	2,092	2,0971	2,1021	2,107	2,1119	2,1168	2,1216	2,1263	2,131	2,1357	2,1403	2,1449	2,1494
63,2	2,0708	2,0763	2,0816	2,0869	2,0921	2,0973	2,1024	2,1075	2,1125	2,1175	2,1224	2,1272	2,132	2,1368	2,1415	2,1462	2,1508	2,1554	2,16
63,3	2,0812	2,0866	2,092	2,0973	2,1025	2,1077	2,1129	2,1179	2,123	2,1279	2,1328	2,1377	2,1426	2,1473	2,1521	2,1568	2,1614	2,166	2,1706
63,4	2,0916	2,097	2,1024	2,1077	2,113	2,1182	2,1233	2,1284	2,1335	2,1385	2,1434	2,1483	2,1532	2,1579	2,1627	2,1674	2,1721	2,1767	2,1813
63,5	2,102	2,1075	2,1129	2,1182	2,1235	2,1287	2,1339	2,139	2,144	2,1491	2,154	2,1589	2,1638	2,1686	2,1734	2,1781	2,1828	2,1874	2,192
63,6	2,1125	2,118	2,1234	2,1287	2,134	2,1393	2,1445	2,1496	2,1547	2,1597	2,1647	2,1696	2,1745	2,1793	2,1841	2,1888	2,1935	2,1981	2,2027
63,7	2,123	2,1285	2,1339	2,1393	2,1447	2,1499	2,1551	2,1603	2,1653	2,1704	2,1754	2,1803	2,1852	2,19	2,1948	2,1996	2,2043	2,209	2,2136
63,8	2,1336	2,1391	2,1446	2,15	2,1553	2,1606	2,1658	2,1709	2,1761	2,1811	2,1861	2,1911	2,196	2,2008	2,2056	2,2104	2,2151	2,2198	2,2245
63,9	2,1442	2,1498	2,1553	2,1607	2,166	2,1713	2,1765	2,1817	2,1868	2,1919	2,1969	2,2019	2,2068	2,2117	2,2165	2,2213	2,2261	2,2308	2,2354

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
60,5	1,8958	1,8999	1,9039	1,9079	1,9119	1,9159	1,9198	1,9237	1,9276	1,9314	1,9352	1,939	1,9427	1,9464	1,9501	1,9537	1,9574	1,961	1,9646
60,6	1,9051	1,9092	1,9133	1,9173	1,9213	1,9253	1,9292	1,9332	1,937	1,9409	1,9447	1,9485	1,9522	1,9559	1,9596	1,9633	1,9669	1,9705	1,9741
60,7	1,9145	1,9186	1,9227	1,9268	1,9308	1,9348	1,9387	1,9426	1,9465	1,9504	1,9542	1,958	1,9617	1,9655	1,9692	1,9729	1,9765	1,9801	1,9837
60,8	1,924	1,9281	1,9322	1,9363	1,9403	1,9443	1,9482	1,9522	1,9561	1,9599	1,9638	1,9676	1,9713	1,9751	1,9788	1,9825	1,9862	1,9898	1,9934
60,9	1,9334	1,9376	1,9417	1,9458	1,9498	1,9538	1,9578	1,9617	1,9657	1,9695	1,9734	1,9772	1,981	1,9847	1,9885	1,9922	1,9958	1,9995	2,0031
61	1,943	1,9471	1,9513	1,9554	1,9594	1,9634	1,9674	1,9714	1,9753	1,9792	1,983	1,9869	1,9907	1,9944	1,9982	2,0019	2,0056	2,0092	2,0129
61,1	1,9525	1,9567	1,9608	1,965	1,969	1,9731	1,9771	1,981	1,985	1,9889	1,9927	1,9966	2,0004	2,0042	2,0079	2,0116	2,0154	2,019	2,0227
61,2	1,9622	1,9664	1,9705	1,9746	1,9787	1,9827	1,9868	1,9907	1,9947	1,9986	2,0025	2,0063	2,0102	2,014	2,0177	2,0215	2,0252	2,0289	2,0325
61,3	1,9718	1,976	1,9802	1,9843	1,9884	1,9925	1,9965	2,0005	2,0045	2,0084	2,0123	2,0161	2,02	2,0238	2,0276	2,0313	2,035	2,0387	2,0424
61,4	1,9815	1,9857	1,9899	1,9941	1,9982	2,0023	2,0063	2,0103	2,0143	2,0182	2,0221	2,026	2,0298	2,0337	2,0374	2,0412	2,0449	2,0487	2,0523
61,5	1,9913	1,9955	1,9997	2,0039	2,008	2,0121	2,0161	2,0202	2,0241	2,0281	2,032	2,0359	2,0398	2,0436	2,0474	2,0512	2,0549	2,0586	2,0623
61,6	2,0011	2,0053	2,0095	2,0137	2,0179	2,022	2,026	2,03	2,034	2,038	2,0419	2,0458	2,0497	2,0536	2,0574	2,0611	2,0649	2,0686	2,0723
61,7	2,0109	2,0152	2,0194	2,0236	2,0277	2,0319	2,0359	2,04	2,044	2,048	2,0519	2,0558	2,0597	2,0636	2,0674	2,0712	2,075	2,0787	2,0824
61,8	2,0208	2,0251	2,0293	2,0335	2,0377	2,0418	2,0459	2,05	2,054	2,058	2,062	2,0659	2,0698	2,0736	2,0775	2,0813	2,0851	2,0888	2,0925
61,9	2,0308	2,0351	2,0393	2,0435	2,0477	2,0518	2,0559	2,06	2,064	2,0681	2,072	2,076	2,0799	2,0838	2,0876	2,0914	2,0952	2,099	2,1027
62	2,0408	2,0451	2,0493	2,0536	2,0577	2,0619	2,066	2,0701	2,0741	2,0782	2,0822	2,0861	2,09	2,0939	2,0978	2,1016	2,1054	2,1092	2,1129
62,1	2,0508	2,0551	2,0594	2,0636	2,0678	2,072	2,0761	2,0802	2,0843	2,0883	2,0923	2,0963	2,1002	2,1041	2,108	2,1118	2,1156	2,1194	2,1232
62,2	2,0609	2,0652	2,0695	2,0738	2,078	2,0821	2,0863	2,0904	2,0945	2,0985	2,1025	2,1065	2,1105	2,1144	2,1183	2,1221	2,1259	2,1297	2,1335
62,3	2,071	2,0754	2,0797	2,0839	2,0882	2,0924	2,0965	2,1006	2,1047	2,1088	2,1128	2,1168	2,1207	2,1247	2,1286	2,1325	2,1363	2,1401	2,1439
62,4	2,0812	2,0856	2,0899	2,0942	2,0984	2,1026	2,1068	2,1109	2,115	2,1191	2,1231	2,1271	2,1311	2,135	2,139	2,1428	2,1467	2,1505	2,1543
62,5	2,0915	2,0958	2,1001	2,1044	2,1087	2,1129	2,1171	2,1212	2,1254	2,1294	2,1335	2,1375	2,1415	2,1455	2,1494	2,1532	2,1571	2,161	2,1647
62,6	2,1017	2,1061	2,1105	2,1148	2,119	2,1233	2,1275	2,1316	2,1357	2,1398	2,1439	2,1479	2,1519	2,1559	2,1598	2,1637	2,1676	2,1715	2,1753
62,7	2,1121	2,1165	2,1208	2,1251	2,1294	2,1337	2,1379	2,1421	2,1462	2,1503	2,1544	2,1584	2,1624	2,1664	2,1704	2,1743	2,1782	2,182	2,1858
62,8	2,1224	2,1269	2,1312	2,1356	2,1399	2,1441	2,1483	2,1525	2,1567	2,1608	2,1649	2,1689	2,173	2,1769	2,1809	2,1848	2,1887	2,1926	2,1965
62,9	2,1329	2,1373	2,1417	2,146	2,1503	2,1546	2,1589	2,1631	2,1672	2,1713	2,1754	2,1795	2,1836	2,1875	2,1915	2,1955	2,1994	2,2033	2,2071
63	2,1434	2,1478	2,1522	2,1566	2,1609	2,1652	2,1694	2,1736	2,1778	2,1819	2,1861	2,1902	2,1942	2,1982	2,2022	2,2062	2,2101	2,214	2,2178
63,1	2,1539	2,1583	2,1628	2,1671	2,1715	2,1758	2,18	2,1842	2,1884	2,1926	2,1967	2,2008	2,2049	2,2089	2,2129	2,2169	2,2208	2,2247	2,2286
63,2	2,1645	2,1689	2,1734	2,1777	2,1821	2,1864	2,1907	2,1949	2,1991	2,2033	2,2074	2,2116	2,2156	2,2197	2,2237	2,2277	2,2316	2,2355	2,2394
63,3	2,1751	2,1796	2,184	2,1884	2,1928	2,1971	2,2014	2,2057	2,2099	2,2141	2,2182	2,2224	2,2264	2,2305	2,2345	2,2385	2,2425	2,2464	2,2503
63,4	2,1858	2,1903	2,1948	2,1992	2,2035	2,2079	2,2122	2,2165	2,2207	2,2249	2,229	2,2332	2,2373	2,2413	2,2454	2,2494	2,2534	2,2573	2,2612
63,5	2,1965	2,201	2,2055	2,2099	2,2143	2,2187	2,223	2,2273	2,2315	2,2357	2,2399	2,2441	2,2482	2,2523	2,2563	2,2603	2,2643	2,2683	2,2722
63,6	2,2073	2,2118	2,2163	2,2208	2,2252	2,2295	2,2339	2,2382	2,2424	2,2466	2,2509	2,255	2,2591	2,2632	2,2673	2,2713	2,2753	2,2793	2,2832
63,7	2,2182	2,2227	2,2272	2,2317	2,2361	2,2404	2,2448	2,2491	2,2534	2,2576	2,2618	2,266	2,2702	2,2742	2,2783	2,2824	2,2864	2,2904	2,2943
63,8	2,2291	2,2336	2,2381	2,2426	2,247	2,2514	2,2558	2,2601	2,2644	2,2687	2,2729	2,2771	2,2812	2,2853	2,2894	2,2935	2,2975	2,3015	2,3055
63,9	2,24	2,2446	2,2491	2,2536	2,258	2,2624	2,2668	2,2712	2,2755	2,2797	2,284	2,2881	2,2923	2,2964	2,3006	2,3046	2,3087	2,3127	2,3167

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
60,5	1,9681	1,9716	1,9751	1,9786	1,982	1,9855	1,9889	1,9922	1,9956	1,9989	2,0022	2,0055	2,0088	2,012	2,0152	2,0185	2,0217	2,0248	2,028
60,6	1,9777	1,9812	1,9847	1,9882	1,9917	1,9951	1,9985	2,0019	2,0053	2,0086	2,0119	2,0152	2,0185	2,0217	2,025	2,0282	2,0314	2,0346	2,0377
60,7	1,9873	1,9909	1,9944	1,9979	2,0013	2,0048	2,0082	2,0116	2,015	2,0183	2,0217	2,025	2,0283	2,0315	2,0348	2,038	2,0412	2,0444	2,0476
60,8	1,997	2,0005	2,0041	2,0076	2,011	2,0145	2,0179	2,0214	2,0247	2,0281	2,0315	2,0348	2,0381	2,0413	2,0446	2,0478	2,051	2,0542	2,0574
60,9	2,0067	2,0103	2,0138	2,0173	2,0208	2,0243	2,0277	2,0312	2,0345	2,0379	2,0413	2,0446	2,0479	2,0512	2,0545	2,0577	2,0609	2,0641	2,0673
61	2,0165	2,02	2,0236	2,0271	2,0306	2,0341	2,0375	2,041	2,0444	2,0478	2,0511	2,0545	2,0578	2,0611	2,0644	2,0676	2,0709	2,0741	2,0773
61,1	2,0263	2,0299	2,0334	2,037	2,0405	2,044	2,0474	2,0509	2,0543	2,0577	2,0611	2,0644	2,0677	2,071	2,0743	2,0776	2,0808	2,0841	2,0873
61,2	2,0361	2,0397	2,0433	2,0469	2,0504	2,0539	2,0573	2,0608	2,0642	2,0676	2,071	2,0744	2,0777	2,081	2,0843	2,0876	2,0909	2,0941	2,0973
61,3	2,046	2,0496	2,0532	2,0568	2,0603	2,0638	2,0673	2,0708	2,0742	2,0776	2,081	2,0844	2,0877	2,0911	2,0944	2,0977	2,1009	2,1042	2,1074
61,4	2,056	2,0596	2,0632	2,0668	2,0703	2,0738	2,0773	2,0808	2,0843	2,0877	2,0911	2,0945	2,0978	2,1012	2,1045	2,1078	2,1111	2,1143	2,1175
61,5	2,066	2,0696	2,0732	2,0768	2,0803	2,0839	2,0874	2,0909	2,0943	2,0978	2,1012	2,1046	2,108	2,1113	2,1146	2,1179	2,1212	2,1245	2,1277
61,6	2,076	2,0796	2,0833	2,0869	2,0904	2,094	2,0975	2,101	2,1045	2,1079	2,1113	2,1148	2,1181	2,1215	2,1248	2,1281	2,1314	2,1347	2,138
61,7	2,0861	2,0897	2,0934	2,097	2,1006	2,1041	2,1076	2,1112	2,1146	2,1181	2,1215	2,125	2,1283	2,1317	2,1351	2,1384	2,1417	2,145	2,1482
61,8	2,0962	2,0999	2,1035	2,1072	2,1108	2,1143	2,1179	2,1214	2,1249	2,1283	2,1318	2,1352	2,1386	2,142	2,1454	2,1487	2,152	2,1553	2,1586
61,9	2,1064	2,1101	2,1137	2,1174	2,121	2,1246	2,1281	2,1317	2,1351	2,1386	2,1421	2,1455	2,1489	2,1523	2,1557	2,159	2,1624	2,1657	2,169
62	2,1166	2,1203	2,124	2,1277	2,1312	2,1349	2,1384	2,142	2,1455	2,149	2,1524	2,1559	2,1593	2,1627	2,1661	2,1695	2,1728	2,1761	2,1794
62,1	2,1269	2,1306	2,1343	2,138	2,1416	2,1452	2,1488	2,1523	2,1558	2,1593	2,1628	2,1663	2,1697	2,1731	2,1765	2,1799	2,1832	2,1866	2,1899
62,2	2,1373	2,141	2,1447	2,1483	2,152	2,1556	2,1592	2,1627	2,1663	2,1698	2,1733	2,1767	2,1802	2,1836	2,187	2,1904	2,1937	2,1971	2,2004
62,3	2,1476	2,1514	2,1551	2,1587	2,1624	2,166	2,1696	2,1732	2,1767	2,1803	2,1838	2,1872	2,1907	2,1941	2,1975	2,2009	2,2043	2,2076	2,211
62,4	2,1581	2,1618	2,1655	2,1692	2,1729	2,1765	2,1801	2,1837	2,1872	2,1908	2,1943	2,1978	2,2013	2,2047	2,2081	2,2115	2,2149	2,2183	2,2216
62,5	2,1685	2,1723	2,176	2,1797	2,1834	2,187	2,1906	2,1943	2,1978	2,2014	2,2049	2,2084	2,2119	2,2153	2,2188	2,2222	2,2256	2,2289	2,2323
62,6	2,1791	2,1828	2,1866	2,1903	2,194	2,1976	2,2012	2,2049	2,2084	2,212	2,2155	2,219	2,2225	2,226	2,2294	2,2329	2,2363	2,2396	2,243
62,7	2,1896	2,1934	2,1972	2,2009	2,2046	2,2083	2,2119	2,2155	2,2191	2,2227	2,2262	2,2298	2,2333	2,2367	2,2402	2,2436	2,247	2,2504	2,2538
62,8	2,2003	2,204	2,2078	2,2115	2,2153	2,2189	2,2226	2,2262	2,2298	2,2334	2,237	2,2405	2,244	2,2475	2,251	2,2544	2,2578	2,2612	2,2646
62,9	2,211	2,2148	2,2185	2,2223	2,226	2,2297	2,2333	2,237	2,2406	2,2442	2,2478	2,2513	2,2548	2,2583	2,2618	2,2653	2,2687	2,2721	2,2755
63	2,2217	2,2255	2,2293	2,233	2,2368	2,2405	2,2441	2,2478	2,2514	2,255	2,2586	2,2622	2,2657	2,2692	2,2727	2,2762	2,2796	2,283	2,2864
63,1	2,2325	2,2363	2,2401	2,2439	2,2476	2,2513	2,255	2,2587	2,2623	2,2659	2,2695	2,2731	2,2766	2,2802	2,2836	2,2871	2,2906	2,294	2,2974
63,2	2,2433	2,2471	2,2509	2,2547	2,2585	2,2622	2,2659	2,2696	2,2732	2,2769	2,2805	2,284	2,2876	2,2911	2,2946	2,2981	2,3016	2,3051	2,3085
63,3	2,2542	2,258	2,2619	2,2656	2,2694	2,2732	2,2769	2,2806	2,2842	2,2879	2,2915	2,2951	2,2986	2,3022	2,3057	2,3092	2,3127	2,3161	2,3196
63,4	2,2651	2,269	2,2728	2,2766	2,2804	2,2841	2,2879	2,2916	2,2953	2,2989	2,3025	2,3061	2,3097	2,3133	2,3168	2,3203	2,3238	2,3273	2,3307
63,5	2,2761	2,28	2,2838	2,2876	2,2914	2,2952	2,2989	2,3026	2,3063	2,31	2,3136	2,3173	2,3208	2,3244	2,328	2,3315	2,335	2,3384	2,3419
63,6	2,2871	2,291	2,2949	2,2987	2,3025	2,3063	2,3101	2,3138	2,3175	2,3211	2,3248	2,3284	2,332	2,3356	2,3392	2,3427	2,3462	2,3497	2,3532
63,7	2,2983	2,3022	2,306	2,3099	2,3137	2,3175	2,3212	2,325	2,3287	2,3323	2,336	2,3397	2,3433	2,3469	2,3504	2,354	2,3575	2,361	2,3645
63,8	2,3094	2,3133	2,3172	2,321	2,3249	2,3287	2,3324	2,3362	2,3399	2,3436	2,3473	2,3509	2,3546	2,3582	2,3617	2,3653	2,3688	2,3724	2,3758
63,9	2,3206	2,3245	2,3284	2,3323	2,3361	2,3399	2,3437	2,3475	2,3512	2,3549	2,3586	2,3623	2,3659	2,3695	2,3731	2,3767	2,3802	2,3837	2,3872

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
60,5	2,0311	2,0342	2,0373	2,0403	2,0434	2,0464	2,0494	2,0524	2,0554	2,0584	2,0614	2,0643	2,0672	2,0701	2,073	2,0758	2,0787	2,0815	2,0844
60,6	2,0409	2,044	2,0471	2,0502	2,0532	2,0563	2,0593	2,0623	2,0653	2,0683	2,0712	2,0742	2,0771	2,08	2,0829	2,0857	2,0886	2,0915	2,0943
60,7	2,0507	2,0538	2,0569	2,06	2,0631	2,0661	2,0692	2,0722	2,0752	2,0782	2,0811	2,0841	2,087	2,0899	2,0928	2,0957	2,0986	2,1014	2,1043
60,8	2,0606	2,0637	2,0668	2,0699	2,073	2,076	2,0791	2,0821	2,0851	2,0881	2,0911	2,0941	2,097	2,0999	2,1028	2,1057	2,1086	2,1115	2,1143
60,9	2,0705	2,0736	2,0768	2,0799	2,083	2,086	2,0891	2,0921	2,0951	2,0981	2,1011	2,1041	2,107	2,11	2,1129	2,1158	2,1187	2,1216	2,1244
61	2,0804	2,0836	2,0867	2,0898	2,093	2,096	2,0991	2,1022	2,1052	2,1082	2,1112	2,1141	2,1171	2,1201	2,123	2,1259	2,1288	2,1317	2,1345
61,1	2,0904	2,0936	2,0968	2,0999	2,103	2,1061	2,1092	2,1122	2,1153	2,1183	2,1213	2,1243	2,1272	2,1302	2,1331	2,136	2,1389	2,1418	2,1447
61,2	2,1005	2,1037	2,1068	2,11	2,1131	2,1162	2,1193	2,1223	2,1254	2,1284	2,1314	2,1344	2,1374	2,1404	2,1433	2,1463	2,1492	2,1521	2,155
61,3	2,1106	2,1138	2,117	2,1201	2,1233	2,1263	2,1294	2,1325	2,1356	2,1386	2,1416	2,1446	2,1476	2,1506	2,1536	2,1565	2,1594	2,1623	2,1652
61,4	2,1208	2,1239	2,1271	2,1303	2,1334	2,1366	2,1397	2,1427	2,1458	2,1489	2,1519	2,1549	2,1579	2,1609	2,1638	2,1668	2,1697	2,1726	2,1756
61,5	2,131	2,1342	2,1373	2,1405	2,1437	2,1468	2,1499	2,153	2,1561	2,1591	2,1622	2,1652	2,1682	2,1712	2,1742	2,1771	2,1801	2,183	2,1859
61,6	2,1412	2,1444	2,1476	2,1508	2,154	2,1571	2,1602	2,1633	2,1664	2,1695	2,1725	2,1755	2,1786	2,1816	2,1846	2,1875	2,1905	2,1934	2,1963
61,7	2,1515	2,1547	2,1579	2,1611	2,1643	2,1674	2,1706	2,1737	2,1768	2,1798	2,1829	2,1859	2,189	2,192	2,195	2,198	2,2009	2,2039	2,2068
61,8	2,1618	2,1651	2,1683	2,1715	2,1747	2,1778	2,181	2,1841	2,1872	2,1903	2,1934	2,1964	2,1994	2,2025	2,2055	2,2084	2,2114	2,2144	2,2173
61,9	2,1722	2,1755	2,1787	2,1819	2,1851	2,1883	2,1914	2,1945	2,1977	2,2008	2,2038	2,2069	2,21	2,213	2,216	2,219	2,222	2,2249	2,2279
62	2,1827	2,1859	2,1892	2,1924	2,1956	2,1988	2,2019	2,2051	2,2082	2,2113	2,2144	2,2175	2,2205	2,2235	2,2266	2,2296	2,2326	2,2355	2,2385
62,1	2,1932	2,1964	2,1997	2,2029	2,2061	2,2093	2,2125	2,2156	2,2188	2,2219	2,225	2,2281	2,2311	2,2342	2,2372	2,2402	2,2432	2,2462	2,2492
62,2	2,2037	2,207	2,2102	2,2135	2,2167	2,2199	2,2231	2,2262	2,2294	2,2325	2,2356	2,2387	2,2418	2,2448	2,2479	2,2509	2,2539	2,2569	2,2599
62,3	2,2143	2,2176	2,2208	2,2241	2,2273	2,2305	2,2337	2,2369	2,24	2,2432	2,2463	2,2494	2,2525	2,2555	2,2586	2,2616	2,2646	2,2677	2,2706
62,4	2,2249	2,2282	2,2315	2,2348	2,238	2,2412	2,2444	2,2476	2,2508	2,2539	2,257	2,2602	2,2632	2,2663	2,2694	2,2724	2,2754	2,2784	2,2814
62,5	2,2356	2,2389	2,2422	2,2455	2,2487	2,252	2,2552	2,2584	2,2615	2,2647	2,2678	2,2709	2,274	2,2771	2,2802	2,2833	2,2863	2,2893	2,2923
62,6	2,2464	2,2497	2,253	2,2562	2,2595	2,2627	2,266	2,2692	2,2724	2,2755	2,2787	2,2818	2,2849	2,288	2,2911	2,2942	2,2972	2,3002	2,3032
62,7	2,2571	2,2605	2,2638	2,2671	2,2703	2,2736	2,2768	2,28	2,2832	2,2864	2,2896	2,2927	2,2958	2,2989	2,302	2,3051	2,3081	2,3112	2,3142
62,8	2,268	2,2713	2,2747	2,2779	2,2812	2,2845	2,2877	2,2909	2,2942	2,2973	2,3005	2,3037	2,3068	2,3099	2,313	2,3161	2,3192	2,3222	2,3252
62,9	2,2789	2,2822	2,2855	2,2889	2,2922	2,2954	2,2987	2,3019	2,3051	2,3083	2,3115	2,3147	2,3178	2,3209	2,324	2,3271	2,3302	2,3333	2,3363
63	2,2898	2,2932	2,2965	2,2998	2,3031	2,3064	2,3097	2,3129	2,3162	2,3194	2,3225	2,3257	2,3289	2,332	2,3351	2,3382	2,3413	2,3444	2,3474
63,1	2,3008	2,3042	2,3076	2,3109	2,3142	2,3175	2,3208	2,324	2,3272	2,3305	2,3336	2,3368	2,34	2,3431	2,3463	2,3494	2,3525	2,3555	2,3586
63,2	2,3119	2,3152	2,3186	2,322	2,3253	2,3286	2,3319	2,3351	2,3384	2,3416	2,3448	2,348	2,3512	2,3543	2,3574	2,3606	2,3637	2,3668	2,3698
63,3	2,323	2,3264	2,3297	2,3331	2,3364	2,3397	2,343	2,3463	2,3496	2,3528	2,356	2,3592	2,3624	2,3656	2,3687	2,3718	2,3749	2,3781	2,3811
63,4	2,3341	2,3375	2,3409	2,3443	2,3476	2,3509	2,3542	2,3575	2,3608	2,3641	2,3673	2,3705	2,3737	2,3768	2,38	2,3831	2,3863	2,3894	2,3925
63,5	2,3453	2,3488	2,3521	2,3555	2,3589	2,3622	2,3655	2,3688	2,3721	2,3754	2,3786	2,3818	2,385	2,3882	2,3914	2,3945	2,3977	2,4008	2,4039
63,6	2,3566	2,36	2,3634	2,3668	2,3702	2,3735	2,3769	2,3802	2,3834	2,3867	2,3899	2,3932	2,3964	2,3996	2,4028	2,4059	2,4091	2,4122	2,4153
63,7	2,3679	2,3714	2,3748	2,3782	2,3815	2,3849	2,3882	2,3916	2,3948	2,3981	2,4014	2,4046	2,4078	2,4111	2,4142	2,4174	2,4205	2,4237	2,4268
63,8	2,3793	2,3827	2,3862	2,3896	2,393	2,3963	2,3997	2,403	2,4063	2,4096	2,4128	2,4161	2,4193	2,4226	2,4258	2,4289	2,4321	2,4352	2,4384
63,9	2,3907	2,3942	2,3976	2,401	2,4044	2,4078	2,4112	2,4145	2,4178	2,4211	2,4244	2,4276	2,4309	2,4341	2,4373	2,4405	2,4437	2,4469	2,45

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
60,5	2,0871	2,0899	2,0927	2,0955	2,0982	2,101	2,1037	2,1064
60,6	2,0971	2,0999	2,1027	2,1055	2,1082	2,111	2,1137	2,1164
60,7	2,1071	2,1099	2,1127	2,1155	2,1183	2,121	2,1238	2,1265
60,8	2,1171	2,12	2,1228	2,1256	2,1283	2,1311	2,1339	2,1366
60,9	2,1272	2,1301	2,1329	2,1357	2,1385	2,1412	2,144	2,1467
61	2,1374	2,1402	2,1431	2,1459	2,1486	2,1514	2,1542	2,1569
61,1	2,1476	2,1504	2,1532	2,1561	2,1589	2,1617	2,1644	2,1672
61,2	2,1578	2,1607	2,1635	2,1663	2,1692	2,1719	2,1747	2,1775
61,3	2,1681	2,1709	2,1738	2,1766	2,1795	2,1823	2,185	2,1878
61,4	2,1784	2,1813	2,1841	2,187	2,1898	2,1926	2,1954	2,1982
61,5	2,1888	2,1917	2,1946	2,1974	2,2002	2,2031	2,2059	2,2087
61,6	2,1992	2,2021	2,205	2,2079	2,2107	2,2135	2,2164	2,2192
61,7	2,2097	2,2126	2,2155	2,2184	2,2212	2,2241	2,2269	2,2297
61,8	2,2202	2,2232	2,226	2,2289	2,2318	2,2346	2,2375	2,2403
61,9	2,2308	2,2337	2,2366	2,2395	2,2424	2,2452	2,2481	2,2509
62	2,2414	2,2444	2,2473	2,2502	2,253	2,2559	2,2588	2,2616
62,1	2,2521	2,255	2,258	2,2609	2,2638	2,2666	2,2695	2,2723
62,2	2,2628	2,2658	2,2687	2,2716	2,2745	2,2774	2,2803	2,2831
62,3	2,2736	2,2766	2,2795	2,2824	2,2853	2,2882	2,2911	2,294
62,4	2,2844	2,2874	2,2903	2,2933	2,2962	2,2991	2,302	2,3049
62,5	2,2953	2,2983	2,3012	2,3042	2,3071	2,31	2,3129	2,3158
62,6	2,3062	2,3092	2,3122	2,3151	2,3181	2,321	2,3239	2,3268
62,7	2,3172	2,3202	2,3232	2,3261	2,3291	2,332	2,3349	2,3378
62,8	2,3283	2,3312	2,3342	2,3372	2,3401	2,3431	2,346	2,3489
62,9	2,3393	2,3423	2,3453	2,3483	2,3513	2,3542	2,3572	2,3601
63	2,3505	2,3535	2,3565	2,3595	2,3624	2,3654	2,3683	2,3713
63,1	2,3616	2,3647	2,3677	2,3707	2,3737	2,3766	2,3796	2,3825
63,2	2,3729	2,3759	2,3789	2,382	2,3849	2,3879	2,3909	2,3938
63,3	2,3842	2,3872	2,3903	2,3933	2,3963	2,3993	2,4023	2,4052
63,4	2,3955	2,3986	2,4016	2,4047	2,4077	2,4107	2,4137	2,4166
63,5	2,4069	2,41	2,4131	2,4161	2,4191	2,4221	2,4251	2,4281
63,6	2,4184	2,4215	2,4245	2,4276	2,4306	2,4336	2,4366	2,4396
63,7	2,4299	2,433	2,4361	2,4391	2,4422	2,4452	2,4482	2,4512
63,8	2,4415	2,4446	2,4477	2,4507	2,4538	2,4568	2,4598	2,4628
63,9	2,4531	2,4562	2,4593	2,4624	2,4654	2,4685	2,4715	2,4745

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
64	1,5681	1,5925	1,6152	1,6364	1,6563	1,6751	1,693	1,7099	1,7261	1,7415	1,7564	1,7706	1,7843	1,7975	1,8103	1,8226	1,8346	1,8462	1,8575
64,1	1,5768	1,6014	1,6241	1,6454	1,6654	1,6843	1,7022	1,7192	1,7354	1,7509	1,7658	1,7801	1,7938	1,8071	1,8199	1,8323	1,8443	1,8559	1,8672
64,2	1,5856	1,6102	1,6331	1,6545	1,6745	1,6935	1,7114	1,7285	1,7448	1,7603	1,7753	1,7896	1,8034	1,8167	1,8295	1,842	1,854	1,8657	1,877
64,3	1,5945	1,6192	1,6421	1,6636	1,6837	1,7027	1,7207	1,7379	1,7542	1,7698	1,7848	1,7992	1,813	1,8264	1,8393	1,8517	1,8638	1,8755	1,8869
64,4	1,6034	1,6282	1,6512	1,6727	1,6929	1,712	1,7301	1,7472	1,7636	1,7793	1,7943	1,8088	1,8227	1,8361	1,849	1,8615	1,8736	1,8854	1,8968
64,5	1,6123	1,6372	1,6603	1,6819	1,7022	1,7213	1,7394	1,7567	1,7731	1,7889	1,804	1,8184	1,8324	1,8458	1,8588	1,8714	1,8835	1,8953	1,9068
64,6	1,6213	1,6463	1,6695	1,6911	1,7115	1,7307	1,7489	1,7662	1,7827	1,7985	1,8136	1,8282	1,8421	1,8556	1,8687	1,8812	1,8935	1,9053	1,9168
64,7	1,6304	1,6554	1,6787	1,7004	1,7208	1,7401	1,7584	1,7757	1,7923	1,8081	1,8233	1,8379	1,8519	1,8655	1,8785	1,8912	1,9034	1,9153	1,9268
64,8	1,6395	1,6646	1,6879	1,7097	1,7302	1,7496	1,7679	1,7853	1,802	1,8178	1,8331	1,8477	1,8618	1,8754	1,8885	1,9012	1,9135	1,9254	1,9369
64,9	1,6486	1,6738	1,6972	1,7191	1,7397	1,7591	1,7775	1,795	1,8117	1,8276	1,8429	1,8576	1,8717	1,8853	1,8985	1,9112	1,9235	1,9355	1,9471
65	1,6578	1,6831	1,7066	1,7286	1,7492	1,7687	1,7871	1,8047	1,8214	1,8374	1,8527	1,8675	1,8817	1,8953	1,9085	1,9213	1,9337	1,9457	1,9573
65,1	1,667	1,6924	1,716	1,738	1,7588	1,7783	1,7968	1,8144	1,8312	1,8473	1,8627	1,8775	1,8917	1,9054	1,9187	1,9315	1,9439	1,9559	1,9676
65,2	1,6763	1,7018	1,7255	1,7476	1,7683	1,788	1,8066	1,8242	1,8411	1,8572	1,8726	1,8875	1,9017	1,9155	1,9288	1,9417	1,9541	1,9662	1,9779
65,3	1,6856	1,7112	1,735	1,7572	1,778	1,7977	1,8164	1,8341	1,851	1,8672	1,8827	1,8975	1,9119	1,9257	1,939	1,9519	1,9644	1,9765	1,9883
65,4	1,695	1,7207	1,7445	1,7668	1,7877	1,8075	1,8262	1,844	1,8609	1,8772	1,8927	1,9076	1,922	1,9359	1,9493	1,9622	1,9748	1,9869	1,9987
65,5	1,7044	1,7302	1,7541	1,7765	1,7975	1,8173	1,8361	1,8539	1,871	1,8872	1,9028	1,9178	1,9322	1,9462	1,9596	1,9726	1,9852	1,9974	2,0092
65,6	1,7139	1,7398	1,7638	1,7862	1,8073	1,8272	1,846	1,8639	1,881	1,8974	1,913	1,9281	1,9425	1,9565	1,97	1,983	1,9956	2,0079	2,0197
65,7	1,7234	1,7494	1,7735	1,796	1,8172	1,8371	1,856	1,874	1,8911	1,9075	1,9232	1,9383	1,9529	1,9669	1,9804	1,9935	2,0061	2,0184	2,0304
65,8	1,733	1,7591	1,7832	1,8058	1,8271	1,8471	1,8661	1,8841	1,9013	1,9178	1,9335	1,9487	1,9632	1,9773	1,9909	2,004	2,0167	2,029	2,041
65,9	1,7427	1,7688	1,793	1,8157	1,837	1,8571	1,8762	1,8943	1,9115	1,9281	1,9439	1,9591	1,9737	1,9878	2,0014	2,0146	2,0273	2,0397	2,0517
66	1,7523	1,7786	1,8029	1,8257	1,847	1,8672	1,8863	1,9045	1,9218	1,9384	1,9543	1,9695	1,9842	1,9983	2,012	2,0252	2,038	2,0504	2,0625
66,1	1,7621	1,7884	1,8128	1,8357	1,8571	1,8774	1,8965	1,9148	1,9322	1,9488	1,9647	1,98	1,9947	2,0089	2,0226	2,0359	2,0487	2,0612	2,0733
66,2	1,7719	1,7983	1,8228	1,8457	1,8672	1,8875	1,9068	1,9251	1,9425	1,9592	1,9752	1,9906	2,0053	2,0196	2,0333	2,0466	2,0595	2,072	2,0841
66,3	1,7817	1,8082	1,8328	1,8558	1,8774	1,8978	1,9171	1,9355	1,953	1,9697	1,9858	2,0012	2,016	2,0303	2,0441	2,0574	2,0704	2,0829	2,0951
66,4	1,7916	1,8182	1,8429	1,866	1,8877	1,9081	1,9275	1,9459	1,9635	1,9803	1,9964	2,0118	2,0267	2,041	2,0549	2,0683	2,0813	2,0938	2,106
66,5	1,8016	1,8283	1,853	1,8762	1,8979	1,9185	1,9379	1,9564	1,974	1,9909	2,007	2,0226	2,0375	2,0519	2,0658	2,0792	2,0922	2,1048	2,1171
66,6	1,8115	1,8383	1,8632	1,8865	1,9083	1,9289	1,9484	1,967	1,9846	2,0015	2,0177	2,0333	2,0483	2,0627	2,0767	2,0902	2,1032	2,1159	2,1282
66,7	1,8216	1,8485	1,8735	1,8968	1,9187	1,9394	1,9589	1,9775	1,9953	2,0123	2,0285	2,0441	2,0592	2,0737	2,0877	2,1012	2,1143	2,127	2,1393
66,8	1,8317	1,8587	1,8838	1,9072	1,9291	1,9499	1,9695	1,9882	2,006	2,023	2,0394	2,055	2,0701	2,0847	2,0987	2,1123	2,1254	2,1382	2,1506
66,9	1,8419	1,869	1,8941	1,9176	1,9397	1,9605	1,9802	1,9989	2,0168	2,0339	2,0503	2,066	2,0811	2,0957	2,1098	2,1234	2,1366	2,1494	2,1618
67	1,8521	1,8793	1,9045	1,9281	1,9502	1,9711	1,9909	2,0097	2,0276	2,0448	2,0612	2,077	2,0922	2,1068	2,121	2,1346	2,1479	2,1607	2,1732
67,1	1,8624	1,8897	1,915	1,9386	1,9609	1,9818	2,0017	2,0205	2,0385	2,0557	2,0722	2,0881	2,1033	2,118	2,1322	2,1459	2,1592	2,1721	2,1846
67,2	1,8727	1,9001	1,9255	1,9492	1,9715	1,9926	2,0125	2,0314	2,0495	2,0668	2,0833	2,0992	2,1145	2,1292	2,1435	2,1572	2,1705	2,1835	2,196
67,3	1,8831	1,9106	1,9361	1,9599	1,9823	2,0034	2,0234	2,0424	2,0605	2,0778	2,0944	2,1104	2,1257	2,1405	2,1548	2,1686	2,182	2,195	2,2075
67,4	1,8936	1,9211	1,9467	1,9706	1,9931	2,0142	2,0343	2,0534	2,0716	2,089	2,1056	2,1216	2,137	2,1518	2,1662	2,18	2,1935	2,2065	2,2191

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
64	1,8684	1,879	1,8894	1,8995	1,9094	1,919	1,9284	1,9376	1,9466	1,9554	1,964	1,9725	1,9807	1,9889	1,9968	2,0047	2,0124	2,0199	2,0274
64,1	1,8782	1,8889	1,8993	1,9094	1,9193	1,929	1,9384	1,9476	1,9566	1,9655	1,9741	1,9826	1,9909	1,9991	2,0071	2,0149	2,0226	2,0302	2,0377
64,2	1,888	1,8988	1,9092	1,9194	1,9293	1,939	1,9485	1,9577	1,9668	1,9756	1,9843	1,9928	2,0011	2,0093	2,0173	2,0252	2,033	2,0406	2,0481
64,3	1,8979	1,9087	1,9192	1,9294	1,9393	1,9491	1,9586	1,9678	1,9769	1,9858	1,9945	2,003	2,0114	2,0196	2,0277	2,0356	2,0433	2,051	2,0585
64,4	1,9079	1,9187	1,9292	1,9394	1,9494	1,9592	1,9687	1,978	1,9871	1,996	2,0048	2,0134	2,0217	2,03	2,0381	2,046	2,0538	2,0614	2,069
64,5	1,9179	1,9287	1,9393	1,9495	1,9596	1,9693	1,9789	1,9883	1,9974	2,0063	2,0151	2,0237	2,0321	2,0404	2,0485	2,0565	2,0643	2,0719	2,0795
64,6	1,9279	1,9388	1,9494	1,9597	1,9698	1,9796	1,9892	1,9985	2,0077	2,0167	2,0255	2,0341	2,0426	2,0508	2,059	2,067	2,0748	2,0825	2,0901
64,7	1,938	1,9489	1,9596	1,9699	1,98	1,9899	1,9995	2,0089	2,0181	2,0271	2,0359	2,0446	2,053	2,0614	2,0695	2,0775	2,0854	2,0931	2,1007
64,8	1,9482	1,9591	1,9698	1,9802	1,9903	2,0002	2,0098	2,0193	2,0285	2,0375	2,0464	2,0551	2,0636	2,0719	2,0801	2,0882	2,0961	2,1038	2,1114
64,9	1,9584	1,9694	1,9801	1,9905	2,0006	2,0106	2,0202	2,0297	2,039	2,048	2,0569	2,0656	2,0742	2,0825	2,0908	2,0988	2,1067	2,1145	2,1222
65	1,9686	1,9797	1,9904	2,0008	2,011	2,021	2,0307	2,0402	2,0495	2,0586	2,0675	2,0762	2,0848	2,0932	2,1014	2,1096	2,1175	2,1253	2,133
65,1	1,979	1,99	2,0008	2,0113	2,0215	2,0315	2,0412	2,0508	2,0601	2,0692	2,0782	2,0869	2,0955	2,1039	2,1122	2,1203	2,1283	2,1361	2,1438
65,2	1,9893	2,0004	2,0112	2,0217	2,032	2,042	2,0518	2,0614	2,0707	2,0799	2,0889	2,0977	2,1063	2,1147	2,123	2,1311	2,1392	2,147	2,1548
65,3	1,9997	2,0109	2,0217	2,0322	2,0426	2,0526	2,0624	2,072	2,0814	2,0906	2,0996	2,1084	2,1171	2,1256	2,1339	2,142	2,1501	2,158	2,1657
65,4	2,0102	2,0214	2,0322	2,0428	2,0532	2,0633	2,0731	2,0827	2,0921	2,1014	2,1104	2,1192	2,1279	2,1364	2,1448	2,153	2,1611	2,169	2,1767
65,5	2,0207	2,0319	2,0428	2,0535	2,0638	2,0739	2,0838	2,0935	2,103	2,1122	2,1213	2,1301	2,1388	2,1474	2,1558	2,164	2,1721	2,18	2,1878
65,6	2,0313	2,0425	2,0535	2,0642	2,0745	2,0847	2,0946	2,1043	2,1138	2,1231	2,1322	2,1411	2,1498	2,1584	2,1668	2,175	2,1831	2,1911	2,1989
65,7	2,0419	2,0532	2,0642	2,0749	2,0853	2,0955	2,1055	2,1152	2,1247	2,134	2,1432	2,1521	2,1608	2,1694	2,1779	2,1862	2,1943	2,2023	2,2101
65,8	2,0526	2,0639	2,0749	2,0857	2,0962	2,1064	2,1164	2,1261	2,1357	2,145	2,1542	2,1631	2,1719	2,1806	2,189	2,1973	2,2055	2,2135	2,2214
65,9	2,0634	2,0747	2,0858	2,0965	2,107	2,1173	2,1273	2,1371	2,1467	2,1561	2,1653	2,1743	2,1831	2,1917	2,2002	2,2086	2,2168	2,2248	2,2327
66	2,0742	2,0856	2,0966	2,1075	2,118	2,1283	2,1383	2,1482	2,1578	2,1672	2,1764	2,1854	2,1943	2,203	2,2115	2,2198	2,2281	2,2361	2,2441
66,1	2,085	2,0964	2,1076	2,1184	2,129	2,1393	2,1494	2,1593	2,1689	2,1783	2,1876	2,1967	2,2055	2,2143	2,2228	2,2312	2,2394	2,2475	2,2555
66,2	2,0959	2,1074	2,1186	2,1295	2,1401	2,1504	2,1605	2,1704	2,1801	2,1896	2,1989	2,2079	2,2168	2,2256	2,2342	2,2426	2,2508	2,259	2,267
66,3	2,1069	2,1184	2,1296	2,1405	2,1512	2,1616	2,1717	2,1817	2,1913	2,2009	2,2102	2,2193	2,2282	2,237	2,2456	2,254	2,2623	2,2705	2,2785
66,4	2,1179	2,1295	2,1407	2,1517	2,1623	2,1728	2,183	2,1929	2,2027	2,2122	2,2215	2,2307	2,2397	2,2485	2,2571	2,2656	2,2739	2,2821	2,2901
66,5	2,129	2,1406	2,1519	2,1629	2,1736	2,184	2,1943	2,2043	2,214	2,2236	2,233	2,2422	2,2511	2,26	2,2686	2,2771	2,2855	2,2937	2,3018
66,6	2,1401	2,1518	2,1631	2,1741	2,1849	2,1954	2,2056	2,2157	2,2254	2,2351	2,2445	2,2537	2,2627	2,2716	2,2803	2,2888	2,2972	2,3054	2,3135
66,7	2,1513	2,163	2,1744	2,1854	2,1962	2,2067	2,2171	2,2271	2,2369	2,2466	2,256	2,2653	2,2743	2,2832	2,2919	2,3005	2,3089	2,3172	2,3253
66,8	2,1626	2,1743	2,1857	2,1968	2,2076	2,2182	2,2285	2,2386	2,2485	2,2581	2,2676	2,2769	2,286	2,2949	2,3036	2,3122	2,3207	2,329	2,3371
66,9	2,1739	2,1856	2,1971	2,2082	2,2191	2,2297	2,2401	2,2502	2,2601	2,2698	2,2793	2,2886	2,2977	2,3067	2,3154	2,3241	2,3325	2,3409	2,349
67	2,1853	2,1971	2,2085	2,2197	2,2306	2,2413	2,2517	2,2618	2,2718	2,2815	2,291	2,3004	2,3095	2,3185	2,3273	2,3359	2,3444	2,3528	2,361
67,1	2,1967	2,2085	2,2201	2,2313	2,2422	2,2529	2,2633	2,2735	2,2835	2,2933	2,3028	2,3122	2,3214	2,3304	2,3392	2,3479	2,3564	2,3648	2,373
67,2	2,2082	2,2201	2,2316	2,2429	2,2539	2,2646	2,275	2,2853	2,2953	2,3051	2,3147	2,3241	2,3333	2,3423	2,3512	2,3599	2,3685	2,3769	2,3851
67,3	2,2198	2,2317	2,2433	2,2546	2,2656	2,2763	2,2868	2,2971	2,3071	2,317	2,3266	2,336	2,3453	2,3543	2,3632	2,3719	2,3805	2,389	2,3973
67,4	2,2314	2,2433	2,255	2,2663	2,2773	2,2881	2,2987	2,309	2,319	2,3289	2,3386	2,348	2,3573	2,3664	2,3753	2,3841	2,3927	2,4012	2,4095

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
64	2,0347	2,0418	2,0489	2,0559	2,0627	2,0695	2,0761	2,0827	2,0892	2,0955	2,1018	2,108	2,1142	2,1202	2,1262	2,1321	2,1379	2,1436	2,1493
64,1	2,045	2,0522	2,0593	2,0663	2,0732	2,0799	2,0866	2,0932	2,0997	2,1061	2,1124	2,1186	2,1248	2,1308	2,1368	2,1427	2,1486	2,1543	2,16
64,2	2,0554	2,0626	2,0698	2,0768	2,0837	2,0905	2,0972	2,1038	2,1103	2,1167	2,123	2,1293	2,1354	2,1415	2,1475	2,1535	2,1593	2,1651	2,1708
64,3	2,0659	2,0731	2,0803	2,0873	2,0942	2,101	2,1078	2,1144	2,1209	2,1274	2,1337	2,14	2,1462	2,1523	2,1583	2,1642	2,1701	2,1759	2,1817
64,4	2,0764	2,0837	2,0908	2,0979	2,1048	2,1117	2,1184	2,125	2,1316	2,1381	2,1444	2,1507	2,1569	2,163	2,1691	2,1751	2,181	2,1868	2,1926
64,5	2,0869	2,0942	2,1014	2,1085	2,1155	2,1223	2,1291	2,1358	2,1423	2,1488	2,1552	2,1615	2,1678	2,1739	2,18	2,1859	2,1919	2,1977	2,2035
64,6	2,0975	2,1049	2,1121	2,1192	2,1262	2,1331	2,1398	2,1466	2,1531	2,1596	2,1661	2,1724	2,1786	2,1848	2,1909	2,1969	2,2028	2,2087	2,2145
64,7	2,1082	2,1156	2,1228	2,1299	2,1369	2,1439	2,1506	2,1574	2,164	2,1705	2,177	2,1833	2,1896	2,1958	2,2019	2,2079	2,2138	2,2197	2,2255
64,8	2,1189	2,1263	2,1336	2,1407	2,1478	2,1547	2,1615	2,1683	2,1749	2,1814	2,1879	2,1943	2,2006	2,2067	2,2129	2,2189	2,2249	2,2308	2,2366
64,9	2,1297	2,1371	2,1444	2,1516	2,1586	2,1656	2,1724	2,1792	2,1859	2,1924	2,1989	2,2053	2,2116	2,2178	2,224	2,23	2,236	2,2419	2,2478
65	2,1405	2,148	2,1553	2,1625	2,1696	2,1765	2,1834	2,1902	2,1969	2,2034	2,2099	2,2164	2,2227	2,2289	2,2351	2,2412	2,2472	2,2531	2,259
65,1	2,1514	2,1589	2,1662	2,1734	2,1805	2,1875	2,1944	2,2012	2,2079	2,2145	2,221	2,2275	2,2338	2,2401	2,2463	2,2524	2,2584	2,2644	2,2703
65,2	2,1624	2,1698	2,1772	2,1844	2,1916	2,1986	2,2055	2,2123	2,2191	2,2257	2,2322	2,2387	2,2451	2,2513	2,2575	2,2637	2,2697	2,2757	2,2816
65,3	2,1733	2,1809	2,1882	2,1955	2,2027	2,2097	2,2167	2,2235	2,2302	2,2369	2,2435	2,2499	2,2563	2,2626	2,2688	2,275	2,2811	2,2871	2,293
65,4	2,1844	2,1919	2,1993	2,2066	2,2138	2,2209	2,2278	2,2347	2,2415	2,2481	2,2547	2,2612	2,2676	2,274	2,2802	2,2864	2,2925	2,2985	2,3044
65,5	2,1955	2,2031	2,2105	2,2178	2,225	2,2321	2,2391	2,246	2,2528	2,2595	2,2661	2,2726	2,279	2,2854	2,2916	2,2978	2,3039	2,31	2,3159
65,6	2,2066	2,2142	2,2217	2,229	2,2363	2,2434	2,2504	2,2573	2,2641	2,2708	2,2775	2,284	2,2905	2,2968	2,3031	2,3093	2,3154	2,3215	2,3275
65,7	2,2179	2,2255	2,233	2,2403	2,2476	2,2547	2,2618	2,2687	2,2755	2,2823	2,2889	2,2955	2,302	2,3083	2,3146	2,3209	2,327	2,3331	2,3391
65,8	2,2292	2,2368	2,2443	2,2517	2,2589	2,2661	2,2732	2,2801	2,287	2,2937	2,3004	2,307	2,3135	2,3199	2,3263	2,3325	2,3387	2,3448	2,3508
65,9	2,2405	2,2481	2,2557	2,2631	2,2704	2,2776	2,2847	2,2916	2,2985	2,3053	2,312	2,3186	2,3251	2,3316	2,3379	2,3442	2,3503	2,3565	2,3625
66	2,2519	2,2596	2,2671	2,2746	2,2819	2,2891	2,2962	2,3032	2,3101	2,3169	2,3236	2,3302	2,3368	2,3432	2,3496	2,3559	2,3621	2,3683	2,3743
66,1	2,2633	2,271	2,2786	2,2861	2,2934	2,3007	2,3078	2,3148	2,3217	2,3286	2,3353	2,3419	2,3485	2,355	2,3614	2,3677	2,3739	2,3801	2,3862
66,2	2,2748	2,2826	2,2902	2,2977	2,305	2,3123	2,3194	2,3265	2,3334	2,3403	2,3471	2,3537	2,3603	2,3668	2,3732	2,3796	2,3858	2,392	2,3981
66,3	2,2864	2,2942	2,3018	2,3093	2,3167	2,324	2,3311	2,3382	2,3452	2,3521	2,3589	2,3655	2,3721	2,3787	2,3851	2,3915	2,3977	2,4039	2,41
66,4	2,298	2,3058	2,3135	2,321	2,3284	2,3357	2,3429	2,35	2,357	2,3639	2,3707	2,3774	2,3841	2,3906	2,3971	2,4034	2,4097	2,4159	2,4221
66,5	2,3097	2,3175	2,3252	2,3328	2,3402	2,3475	2,3548	2,3619	2,3689	2,3758	2,3827	2,3894	2,396	2,4026	2,4091	2,4155	2,4218	2,428	2,4342
66,6	2,3215	2,3293	2,337	2,3446	2,3521	2,3594	2,3667	2,3738	2,3808	2,3878	2,3946	2,4014	2,4081	2,4146	2,4211	2,4276	2,4339	2,4402	2,4464
66,7	2,3333	2,3411	2,3489	2,3565	2,364	2,3713	2,3786	2,3858	2,3929	2,3998	2,4067	2,4135	2,4202	2,4268	2,4333	2,4397	2,4461	2,4524	2,4586
66,8	2,3451	2,353	2,3608	2,3684	2,3759	2,3833	2,3906	2,3978	2,4049	2,4119	2,4188	2,4256	2,4323	2,439	2,4455	2,4519	2,4583	2,4646	2,4708
66,9	2,3571	2,365	2,3727	2,3804	2,388	2,3954	2,4027	2,4099	2,4171	2,4241	2,431	2,4378	2,4445	2,4512	2,4577	2,4642	2,4706	2,4769	2,4832
67	2,3691	2,377	2,3848	2,3925	2,4	2,4075	2,4149	2,4221	2,4292	2,4363	2,4432	2,45	2,4568	2,4635	2,4701	2,4766	2,483	2,4893	2,4956
67,1	2,3811	2,3891	2,3969	2,4046	2,4122	2,4197	2,4271	2,4343	2,4415	2,4486	2,4555	2,4624	2,4692	2,4759	2,4825	2,489	2,4954	2,5018	2,5081
67,2	2,3932	2,4012	2,4091	2,4168	2,4244	2,4319	2,4393	2,4466	2,4538	2,4609	2,4679	2,4748	2,4816	2,4883	2,4949	2,5014	2,5079	2,5143	2,5206
67,3	2,4054	2,4134	2,4213	2,4291	2,4367	2,4443	2,4517	2,459	2,4662	2,4733	2,4803	2,4872	2,4941	2,5008	2,5074	2,514	2,5205	2,5269	2,5332
67,4	2,4176	2,4257	2,4336	2,4414	2,4491	2,4566	2,4641	2,4714	2,4786	2,4858	2,4928	2,4997	2,5066	2,5134	2,52	2,5266	2,5331	2,5395	2,5459

Table of external index of viability and vitality
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e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
64	2,1549	2,1605	2,166	2,1714	2,1768	2,1821	2,1873	2,1925	2,1977	2,2028	2,2078	2,2128	2,2177	2,2226	2,2275	2,2322	2,237	2,2417	2,2464
64,1	2,1657	2,1712	2,1768	2,1822	2,1876	2,1929	2,1982	2,2034	2,2086	2,2137	2,2187	2,2237	2,2287	2,2336	2,2384	2,2432	2,248	2,2527	2,2574
64,2	2,1765	2,1821	2,1876	2,1931	2,1985	2,2038	2,2091	2,2143	2,2195	2,2246	2,2297	2,2347	2,2397	2,2446	2,2495	2,2543	2,2591	2,2638	2,2685
64,3	2,1873	2,1929	2,1985	2,204	2,2094	2,2147	2,22	2,2253	2,2305	2,2356	2,2407	2,2457	2,2507	2,2557	2,2606	2,2654	2,2702	2,275	2,2797
64,4	2,1982	2,2039	2,2094	2,2149	2,2204	2,2257	2,2311	2,2363	2,2415	2,2467	2,2518	2,2568	2,2618	2,2668	2,2717	2,2766	2,2814	2,2861	2,2909
64,5	2,2092	2,2148	2,2204	2,2259	2,2314	2,2368	2,2421	2,2474	2,2526	2,2578	2,2629	2,268	2,273	2,278	2,2829	2,2878	2,2926	2,2974	2,3021
64,6	2,2202	2,2259	2,2315	2,237	2,2425	2,2479	2,2532	2,2585	2,2638	2,269	2,2741	2,2792	2,2842	2,2892	2,2941	2,299	2,3039	2,3087	2,3134
64,7	2,2313	2,237	2,2426	2,2481	2,2536	2,2591	2,2644	2,2697	2,275	2,2802	2,2854	2,2904	2,2955	2,3005	2,3054	2,3104	2,3152	2,3201	2,3248
64,8	2,2424	2,2481	2,2537	2,2593	2,2648	2,2703	2,2756	2,281	2,2862	2,2915	2,2966	2,3018	2,3068	2,3119	2,3168	2,3217	2,3266	2,3315	2,3362
64,9	2,2536	2,2593	2,2649	2,2705	2,2761	2,2815	2,2869	2,2923	2,2976	2,3028	2,308	2,3131	2,3182	2,3232	2,3282	2,3332	2,3381	2,3429	2,3477
65	2,2648	2,2706	2,2762	2,2818	2,2874	2,2929	2,2983	2,3036	2,309	2,3142	2,3194	2,3246	2,3297	2,3347	2,3397	2,3447	2,3496	2,3544	2,3593
65,1	2,2761	2,2819	2,2876	2,2932	2,2987	2,3042	2,3097	2,3151	2,3204	2,3257	2,3309	2,3361	2,3412	2,3462	2,3513	2,3562	2,3611	2,366	2,3708
65,2	2,2875	2,2932	2,2989	2,3046	2,3101	2,3157	2,3211	2,3265	2,3319	2,3372	2,3424	2,3476	2,3527	2,3578	2,3628	2,3678	2,3728	2,3777	2,3825
65,3	2,2989	2,3047	2,3104	2,316	2,3216	2,3272	2,3327	2,3381	2,3434	2,3487	2,354	2,3592	2,3643	2,3694	2,3745	2,3795	2,3845	2,3894	2,3942
65,4	2,3103	2,3161	2,3219	2,3275	2,3332	2,3387	2,3442	2,3496	2,355	2,3604	2,3656	2,3709	2,376	2,3811	2,3862	2,3912	2,3962	2,4011	2,406
65,5	2,3218	2,3277	2,3334	2,3391	2,3448	2,3503	2,3558	2,3613	2,3667	2,372	2,3773	2,3826	2,3877	2,3929	2,398	2,403	2,408	2,4129	2,4178
65,6	2,3334	2,3393	2,3451	2,3508	2,3564	2,362	2,3675	2,373	2,3784	2,3838	2,3891	2,3943	2,3996	2,4047	2,4098	2,4148	2,4199	2,4248	2,4297
65,7	2,3451	2,3509	2,3567	2,3624	2,3681	2,3737	2,3793	2,3848	2,3902	2,3956	2,4009	2,4062	2,4114	2,4165	2,4217	2,4267	2,4318	2,4368	2,4417
65,8	2,3567	2,3626	2,3684	2,3742	2,3799	2,3855	2,3911	2,3966	2,4021	2,4074	2,4128	2,4181	2,4233	2,4285	2,4336	2,4387	2,4438	2,4487	2,4537
65,9	2,3685	2,3744	2,3802	2,386	2,3917	2,3974	2,403	2,4085	2,4139	2,4194	2,4247	2,43	2,4353	2,4405	2,4456	2,4507	2,4558	2,4608	2,4658
66	2,3803	2,3862	2,3921	2,3979	2,4036	2,4093	2,4149	2,4204	2,4259	2,4313	2,4367	2,442	2,4473	2,4525	2,4577	2,4628	2,4679	2,4729	2,4779
66,1	2,3922	2,3981	2,404	2,4098	2,4156	2,4212	2,4269	2,4324	2,4379	2,4434	2,4488	2,4541	2,4594	2,4646	2,4698	2,475	2,48	2,4851	2,4901
66,2	2,4041	2,4101	2,416	2,4218	2,4276	2,4333	2,4389	2,4445	2,45	2,4555	2,4609	2,4663	2,4715	2,4768	2,482	2,4871	2,4923	2,4973	2,5023
66,3	2,4161	2,4221	2,428	2,4339	2,4396	2,4454	2,451	2,4566	2,4622	2,4676	2,4731	2,4785	2,4838	2,489	2,4942	2,4994	2,5045	2,5096	2,5146
66,4	2,4282	2,4342	2,4401	2,446	2,4518	2,4575	2,4632	2,4688	2,4744	2,4799	2,4853	2,4907	2,496	2,5013	2,5066	2,5117	2,5169	2,522	2,527
66,5	2,4403	2,4463	2,4523	2,4581	2,464	2,4697	2,4754	2,481	2,4866	2,4921	2,4976	2,503	2,5084	2,5137	2,5189	2,5241	2,5293	2,5344	2,5394
66,6	2,4524	2,4585	2,4645	2,4704	2,4762	2,482	2,4877	2,4934	2,499	2,5045	2,51	2,5154	2,5208	2,5261	2,5314	2,5366	2,5417	2,5469	2,5519
66,7	2,4647	2,4708	2,4767	2,4827	2,4885	2,4943	2,5001	2,5057	2,5114	2,5169	2,5224	2,5278	2,5332	2,5386	2,5439	2,5491	2,5543	2,5594	2,5645
66,8	2,477	2,4831	2,4891	2,495	2,5009	2,5067	2,5125	2,5182	2,5238	2,5294	2,5349	2,5404	2,5458	2,5511	2,5564	2,5617	2,5669	2,572	2,5771
66,9	2,4894	2,4955	2,5015	2,5075	2,5134	2,5192	2,525	2,5307	2,5363	2,5419	2,5475	2,5529	2,5584	2,5637	2,5691	2,5743	2,5795	2,5847	2,5898
67	2,5018	2,5079	2,514	2,52	2,5259	2,5317	2,5375	2,5432	2,5489	2,5545	2,5601	2,5656	2,571	2,5764	2,5818	2,587	2,5923	2,5975	2,6026
67,1	2,5143	2,5204	2,5265	2,5325	2,5385	2,5443	2,5501	2,5559	2,5616	2,5672	2,5728	2,5783	2,5837	2,5891	2,5945	2,5998	2,6051	2,6103	2,6154
67,2	2,5268	2,533	2,5391	2,5451	2,5511	2,557	2,5628	2,5686	2,5743	2,5799	2,5855	2,5911	2,5965	2,602	2,6073	2,6127	2,6179	2,6231	2,6283
67,3	2,5395	2,5457	2,5518	2,5578	2,5638	2,5697	2,5756	2,5813	2,5871	2,5927	2,5983	2,6039	2,6094	2,6148	2,6202	2,6256	2,6308	2,6361	2,6413
67,4	2,5522	2,5584	2,5645	2,5706	2,5766	2,5825	2,5884	2,5941	2,5999	2,6056	2,6112	2,6168	2,6223	2,6278	2,6332	2,6385	2,6438	2,6491	2,6543

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
64	2,251	2,2556	2,2601	2,2646	2,2691	2,2735	2,2779	2,2823	2,2866	2,2909	2,2951	2,2993	2,3035	2,3076	2,3117	2,3158	2,3199	2,3239	2,3279
64,1	2,2621	2,2667	2,2712	2,2757	2,2802	2,2846	2,289	2,2934	2,2978	2,302	2,3063	2,3105	2,3147	2,3189	2,323	2,3271	2,3312	2,3352	2,3392
64,2	2,2732	2,2778	2,2824	2,2869	2,2914	2,2958	2,3002	2,3046	2,309	2,3133	2,3176	2,3218	2,326	2,3302	2,3343	2,3384	2,3425	2,3466	2,3506
64,3	2,2843	2,289	2,2935	2,2981	2,3026	2,3071	2,3115	2,3159	2,3202	2,3246	2,3289	2,3331	2,3373	2,3415	2,3457	2,3498	2,3539	2,3579	2,362
64,4	2,2955	2,3002	2,3048	2,3094	2,3139	2,3183	2,3228	2,3272	2,3316	2,3359	2,3402	2,3445	2,3487	2,3529	2,3571	2,3612	2,3653	2,3694	2,3734
64,5	2,3068	2,3115	2,3161	2,3207	2,3252	2,3297	2,3342	2,3386	2,343	2,3473	2,3516	2,3559	2,3602	2,3644	2,3685	2,3727	2,3768	2,3809	2,385
64,6	2,3182	2,3228	2,3274	2,332	2,3366	2,3411	2,3456	2,35	2,3544	2,3588	2,3631	2,3674	2,3717	2,3759	2,3801	2,3842	2,3884	2,3925	2,3966
64,7	2,3295	2,3342	2,3389	2,3435	2,3481	2,3526	2,3571	2,3615	2,3659	2,3703	2,3746	2,3789	2,3832	2,3875	2,3917	2,3959	2,4	2,4041	2,4082
64,8	2,341	2,3457	2,3503	2,355	2,3595	2,3641	2,3686	2,373	2,3775	2,3819	2,3862	2,3906	2,3948	2,3991	2,4033	2,4075	2,4117	2,4158	2,4199
64,9	2,3525	2,3572	2,3619	2,3665	2,3711	2,3757	2,3802	2,3846	2,3891	2,3935	2,3979	2,4022	2,4065	2,4108	2,415	2,4192	2,4234	2,4275	2,4316
65	2,364	2,3688	2,3735	2,3781	2,3827	2,3873	2,3918	2,3963	2,4008	2,4052	2,4096	2,4139	2,4182	2,4225	2,4268	2,431	2,4352	2,4393	2,4434
65,1	2,3756	2,3804	2,3851	2,3898	2,3944	2,399	2,4035	2,408	2,4125	2,4169	2,4213	2,4257	2,43	2,4343	2,4386	2,4428	2,447	2,4512	2,4553
65,2	2,3873	2,3921	2,3968	2,4015	2,4061	2,4107	2,4153	2,4198	2,4243	2,4287	2,4332	2,4375	2,4419	2,4462	2,4504	2,4547	2,4589	2,4631	2,4672
65,3	2,3991	2,4038	2,4086	2,4133	2,4179	2,4225	2,4271	2,4316	2,4361	2,4406	2,445	2,4494	2,4538	2,4581	2,4624	2,4666	2,4709	2,4751	2,4792
65,4	2,4108	2,4156	2,4204	2,4251	2,4298	2,4344	2,439	2,4435	2,448	2,4525	2,457	2,4614	2,4657	2,4701	2,4744	2,4787	2,4829	2,4871	2,4913
65,5	2,4227	2,4275	2,4323	2,437	2,4417	2,4463	2,4509	2,4555	2,46	2,4645	2,4689	2,4734	2,4778	2,4821	2,4864	2,4907	2,495	2,4992	2,5034
65,6	2,4346	2,4394	2,4442	2,4489	2,4536	2,4583	2,4629	2,4675	2,472	2,4765	2,481	2,4854	2,4898	2,4942	2,4985	2,5028	2,5071	2,5113	2,5156
65,7	2,4466	2,4514	2,4562	2,4609	2,4657	2,4703	2,475	2,4796	2,4841	2,4886	2,4931	2,4976	2,502	2,5064	2,5107	2,515	2,5193	2,5235	2,5278
65,8	2,4586	2,4634	2,4682	2,473	2,4778	2,4824	2,4871	2,4917	2,4963	2,5008	2,5053	2,5098	2,5142	2,5186	2,5229	2,5273	2,5316	2,5358	2,5401
65,9	2,4707	2,4755	2,4804	2,4852	2,4899	2,4946	2,4993	2,5039	2,5085	2,513	2,5175	2,522	2,5265	2,5309	2,5353	2,5396	2,5439	2,5482	2,5524
66	2,4828	2,4877	2,4925	2,4973	2,5021	2,5068	2,5115	2,5161	2,5207	2,5253	2,5298	2,5343	2,5388	2,5432	2,5476	2,552	2,5563	2,5606	2,5648
66,1	2,495	2,4999	2,5048	2,5096	2,5144	2,5191	2,5238	2,5285	2,5331	2,5377	2,5422	2,5467	2,5512	2,5556	2,56	2,5644	2,5687	2,573	2,5773
66,2	2,5073	2,5122	2,5171	2,5219	2,5267	2,5314	2,5362	2,5408	2,5455	2,5501	2,5546	2,5592	2,5636	2,5681	2,5725	2,5769	2,5812	2,5855	2,5898
66,3	2,5196	2,5245	2,5294	2,5343	2,5391	2,5439	2,5486	2,5533	2,5579	2,5625	2,5671	2,5716	2,5761	2,5806	2,585	2,5894	2,5938	2,5981	2,6024
66,4	2,532	2,537	2,5419	2,5467	2,5515	2,5563	2,5611	2,5658	2,5704	2,5751	2,5797	2,5842	2,5887	2,5932	2,5976	2,6021	2,6064	2,6108	2,6151
66,5	2,5445	2,5494	2,5544	2,5592	2,5641	2,5689	2,5736	2,5783	2,583	2,5877	2,5923	2,5968	2,6014	2,6058	2,6103	2,6147	2,6191	2,6235	2,6278
66,6	2,557	2,5619	2,5669	2,5718	2,5767	2,5815	2,5862	2,591	2,5957	2,6003	2,6049	2,6095	2,6141	2,6186	2,6231	2,6275	2,6319	2,6362	2,6406
66,7	2,5696	2,5746	2,5795	2,5844	2,5893	2,5941	2,5989	2,6037	2,6084	2,613	2,6177	2,6223	2,6268	2,6313	2,6358	2,6403	2,6447	2,6491	2,6534
66,8	2,5822	2,5872	2,5922	2,5971	2,602	2,6069	2,6117	2,6164	2,6212	2,6258	2,6305	2,6351	2,6397	2,6442	2,6487	2,6532	2,6576	2,662	2,6664
66,9	2,5949	2,6	2,6049	2,6099	2,6148	2,6196	2,6245	2,6292	2,634	2,6387	2,6433	2,648	2,6525	2,6571	2,6616	2,6661	2,6706	2,675	2,6793
67	2,6077	2,6127	2,6178	2,6227	2,6276	2,6325	2,6373	2,6421	2,6469	2,6516	2,6563	2,6609	2,6655	2,6701	2,6746	2,6791	2,6836	2,688	2,6924
67,1	2,6205	2,6256	2,6306	2,6356	2,6405	2,6454	2,6503	2,6551	2,6598	2,6646	2,6693	2,6739	2,6786	2,6831	2,6877	2,6922	2,6967	2,7011	2,7055
67,2	2,6334	2,6385	2,6436	2,6486	2,6535	2,6584	2,6633	2,6681	2,6729	2,6776	2,6823	2,687	2,6917	2,6962	2,7008	2,7053	2,7098	2,7143	2,7187
67,3	2,6464	2,6515	2,6566	2,6616	2,6665	2,6715	2,6763	2,6812	2,686	2,6908	2,6955	2,7002	2,7048	2,7094	2,714	2,7185	2,7231	2,7275	2,732
67,4	2,6594	2,6646	2,6696	2,6747	2,6796	2,6846	2,6895	2,6943	2,6992	2,7039	2,7087	2,7134	2,718	2,7227	2,7273	2,7318	2,7363	2,7408	2,7453

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
64	2,3319	2,3358	2,3397	2,3436	2,3474	2,3512	2,3551	2,3588	2,3626	2,3663	2,37	2,3737	2,3773	2,3809	2,3845	2,3881	2,3917	2,3952	2,3987
64,1	2,3432	2,3471	2,351	2,3549	2,3588	2,3626	2,3664	2,3702	2,374	2,3777	2,3814	2,3851	2,3888	2,3924	2,396	2,3996	2,4032	2,4067	2,4103
64,2	2,3545	2,3585	2,3624	2,3663	2,3702	2,3741	2,3779	2,3817	2,3855	2,3892	2,3929	2,3966	2,4003	2,4039	2,4076	2,4112	2,4147	2,4183	2,4218
64,3	2,366	2,3699	2,3739	2,3778	2,3817	2,3855	2,3894	2,3932	2,397	2,4007	2,4045	2,4082	2,4119	2,4155	2,4191	2,4228	2,4264	2,4299	2,4335
64,4	2,3775	2,3814	2,3854	2,3893	2,3932	2,3971	2,4009	2,4048	2,4086	2,4123	2,4161	2,4198	2,4235	2,4272	2,4308	2,4344	2,438	2,4416	2,4452
64,5	2,389	2,393	2,397	2,4009	2,4048	2,4087	2,4126	2,4164	2,4202	2,424	2,4277	2,4315	2,4352	2,4388	2,4425	2,4461	2,4498	2,4534	2,4569
64,6	2,4006	2,4046	2,4086	2,4125	2,4165	2,4203	2,4242	2,4281	2,4319	2,4357	2,4394	2,4432	2,4469	2,4506	2,4543	2,4579	2,4616	2,4651	2,4687
64,7	2,4122	2,4163	2,4203	2,4242	2,4282	2,4321	2,436	2,4398	2,4436	2,4475	2,4512	2,455	2,4587	2,4624	2,4661	2,4698	2,4734	2,477	2,4806
64,8	2,4239	2,428	2,432	2,436	2,4399	2,4438	2,4477	2,4516	2,4555	2,4593	2,4631	2,4668	2,4706	2,4743	2,478	2,4816	2,4853	2,4889	2,4925
64,9	2,4357	2,4398	2,4438	2,4478	2,4517	2,4557	2,4596	2,4635	2,4673	2,4711	2,4749	2,4787	2,4825	2,4862	2,4899	2,4936	2,4973	2,5009	2,5045
65	2,4475	2,4516	2,4556	2,4596	2,4636	2,4676	2,4715	2,4754	2,4792	2,4831	2,4869	2,4907	2,4944	2,4982	2,5019	2,5056	2,5093	2,5129	2,5166
65,1	2,4594	2,4635	2,4675	2,4716	2,4755	2,4795	2,4834	2,4873	2,4912	2,4951	2,4989	2,5027	2,5065	2,5102	2,514	2,5177	2,5214	2,525	2,5287
65,2	2,4714	2,4754	2,4795	2,4835	2,4875	2,4915	2,4955	2,4994	2,5033	2,5071	2,511	2,5148	2,5186	2,5224	2,5261	2,5298	2,5335	2,5372	2,5408
65,3	2,4834	2,4875	2,4915	2,4956	2,4996	2,5036	2,5075	2,5115	2,5154	2,5192	2,5231	2,5269	2,5307	2,5345	2,5383	2,542	2,5457	2,5494	2,553
65,4	2,4954	2,4995	2,5036	2,5077	2,5117	2,5157	2,5197	2,5236	2,5275	2,5314	2,5353	2,5391	2,5429	2,5467	2,5505	2,5542	2,5579	2,5616	2,5653
65,5	2,5075	2,5117	2,5158	2,5198	2,5239	2,5279	2,5319	2,5358	2,5398	2,5437	2,5475	2,5514	2,5552	2,559	2,5628	2,5666	2,5703	2,574	2,5777
65,6	2,5197	2,5239	2,528	2,532	2,5361	2,5401	2,5441	2,5481	2,552	2,556	2,5599	2,5637	2,5676	2,5713	2,5752	2,5789	2,5827	2,5864	2,5901
65,7	2,5319	2,5361	2,5402	2,5443	2,5484	2,5524	2,5564	2,5604	2,5644	2,5683	2,5722	2,5761	2,5799	2,5838	2,5876	2,5913	2,5951	2,5988	2,6025
65,8	2,5442	2,5484	2,5526	2,5567	2,5607	2,5648	2,5688	2,5728	2,5768	2,5807	2,5846	2,5885	2,5924	2,5962	2,6	2,6038	2,6076	2,6114	2,6151
65,9	2,5566	2,5608	2,565	2,5691	2,5732	2,5772	2,5813	2,5853	2,5892	2,5932	2,5971	2,601	2,6049	2,6088	2,6126	2,6164	2,6202	2,6239	2,6277
66	2,5691	2,5732	2,5774	2,5815	2,5856	2,5897	2,5938	2,5978	2,6018	2,6058	2,6097	2,6136	2,6175	2,6214	2,6252	2,629	2,6328	2,6366	2,6403
66,1	2,5815	2,5857	2,5899	2,5941	2,5982	2,6023	2,6063	2,6104	2,6144	2,6184	2,6223	2,6262	2,6301	2,634	2,6379	2,6417	2,6455	2,6493	2,653
66,2	2,5941	2,5983	2,6025	2,6067	2,6108	2,6149	2,619	2,623	2,627	2,631	2,635	2,6389	2,6428	2,6467	2,6506	2,6544	2,6582	2,6621	2,6658
66,3	2,6067	2,6109	2,6151	2,6193	2,6235	2,6276	2,6317	2,6357	2,6397	2,6437	2,6477	2,6517	2,6556	2,6595	2,6634	2,6672	2,6711	2,6749	2,6786
66,4	2,6194	2,6236	2,6278	2,632	2,6362	2,6403	2,6444	2,6485	2,6525	2,6566	2,6605	2,6645	2,6685	2,6724	2,6762	2,6801	2,6839	2,6878	2,6916
66,5	2,6321	2,6364	2,6406	2,6448	2,649	2,6531	2,6572	2,6613	2,6654	2,6694	2,6734	2,6774	2,6813	2,6853	2,6892	2,693	2,6969	2,7007	2,7045
66,6	2,6449	2,6492	2,6534	2,6577	2,6618	2,666	2,6701	2,6742	2,6783	2,6823	2,6863	2,6903	2,6943	2,6982	2,7022	2,7061	2,7099	2,7138	2,7176
66,7	2,6578	2,6621	2,6663	2,6706	2,6747	2,6789	2,6831	2,6872	2,6913	2,6953	2,6994	2,7033	2,7073	2,7113	2,7152	2,7191	2,723	2,7268	2,7307
66,8	2,6707	2,675	2,6793	2,6835	2,6877	2,6919	2,6961	2,7002	2,7043	2,7084	2,7124	2,7164	2,7204	2,7244	2,7283	2,7322	2,7361	2,74	2,7439
66,9	2,6837	2,688	2,6923	2,6966	2,7008	2,705	2,7092	2,7133	2,7174	2,7215	2,7256	2,7296	2,7336	2,7376	2,7415	2,7454	2,7493	2,7532	2,7571
67	2,6968	2,7011	2,7054	2,7097	2,7139	2,7181	2,7223	2,7265	2,7306	2,7347	2,7388	2,7428	2,7468	2,7508	2,7548	2,7587	2,7626	2,7665	2,7704
67,1	2,7099	2,7143	2,7186	2,7228	2,7271	2,7313	2,7355	2,7397	2,7438	2,7479	2,752	2,7561	2,7601	2,7641	2,7681	2,772	2,776	2,7799	2,7838
67,2	2,7231	2,7275	2,7318	2,7361	2,7404	2,7446	2,7488	2,753	2,7572	2,7613	2,7653	2,7694	2,7735	2,7775	2,7815	2,7854	2,7894	2,7933	2,7972
67,3	2,7364	2,7407	2,7451	2,7494	2,7537	2,7579	2,7622	2,7664	2,7705	2,7746	2,7788	2,7829	2,7869	2,7909	2,7949	2,7989	2,8029	2,8068	2,8107
67,4	2,7497	2,7541	2,7585	2,7628	2,7671	2,7713	2,7756	2,7798	2,7839	2,7881	2,7922	2,7963	2,8004	2,8044	2,8084	2,8124	2,8164	2,8203	2,8243

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
64	2,4022	2,4057	2,4091	2,4125	2,416	2,4194	2,4227	2,4261	2,4294	2,4327	2,436	2,4393	2,4425	2,4457	2,449	2,4522	2,4553	2,4585	2,4617
64,1	2,4137	2,4172	2,4207	2,4241	2,4275	2,4309	2,4343	2,4377	2,441	2,4443	2,4476	2,4509	2,4542	2,4574	2,4606	2,4639	2,467	2,4702	2,4734
64,2	2,4253	2,4288	2,4323	2,4357	2,4392	2,4426	2,446	2,4493	2,4527	2,456	2,4593	2,4626	2,4659	2,4691	2,4724	2,4756	2,4788	2,482	2,4852
64,3	2,437	2,4405	2,444	2,4474	2,4509	2,4543	2,4577	2,4611	2,4644	2,4678	2,4711	2,4744	2,4777	2,4809	2,4842	2,4874	2,4906	2,4938	2,497
64,4	2,4487	2,4522	2,4557	2,4592	2,4626	2,4661	2,4695	2,4728	2,4762	2,4796	2,4829	2,4862	2,4895	2,4928	2,496	2,4993	2,5025	2,5057	2,5089
64,5	2,4605	2,464	2,4675	2,471	2,4744	2,4779	2,4813	2,4847	2,4881	2,4914	2,4948	2,4981	2,5014	2,5047	2,508	2,5112	2,5145	2,5177	2,5209
64,6	2,4723	2,4758	2,4793	2,4828	2,4863	2,4898	2,4932	2,4966	2,5	2,5033	2,5067	2,51	2,5134	2,5167	2,5199	2,5232	2,5265	2,5297	2,5329
64,7	2,4842	2,4877	2,4912	2,4947	2,4982	2,5017	2,5051	2,5085	2,512	2,5153	2,5187	2,522	2,5254	2,5287	2,532	2,5352	2,5385	2,5417	2,545
64,8	2,4961	2,4997	2,5032	2,5067	2,5102	2,5137	2,5171	2,5206	2,524	2,5274	2,5307	2,5341	2,5375	2,5408	2,544	2,5473	2,5506	2,5539	2,5571
64,9	2,5081	2,5117	2,5152	2,5187	2,5222	2,5257	2,5292	2,5326	2,5361	2,5395	2,5429	2,5462	2,5496	2,5529	2,5562	2,5595	2,5628	2,566	2,5693
65	2,5202	2,5237	2,5273	2,5308	2,5343	2,5378	2,5413	2,5448	2,5482	2,5516	2,555	2,5584	2,5618	2,5651	2,5684	2,5717	2,575	2,5783	2,5815
65,1	2,5323	2,5359	2,5394	2,543	2,5465	2,55	2,5535	2,557	2,5604	2,5638	2,5673	2,5706	2,574	2,5774	2,5807	2,584	2,5873	2,5906	2,5938
65,2	2,5445	2,548	2,5516	2,5552	2,5587	2,5622	2,5657	2,5692	2,5727	2,5761	2,5795	2,5829	2,5863	2,5897	2,593	2,5963	2,5997	2,6029	2,6062
65,3	2,5567	2,5603	2,5639	2,5674	2,571	2,5745	2,578	2,5815	2,585	2,5885	2,5919	2,5953	2,5987	2,6021	2,6054	2,6087	2,6121	2,6154	2,6186
65,4	2,569	2,5726	2,5762	2,5798	2,5833	2,5869	2,5904	2,5939	2,5974	2,6009	2,6043	2,6077	2,6111	2,6145	2,6179	2,6212	2,6245	2,6278	2,6311
65,5	2,5813	2,585	2,5886	2,5922	2,5958	2,5993	2,6028	2,6063	2,6098	2,6133	2,6167	2,6202	2,6236	2,627	2,6304	2,6337	2,637	2,6404	2,6437
65,6	2,5937	2,5974	2,601	2,6046	2,6082	2,6118	2,6153	2,6188	2,6223	2,6258	2,6293	2,6327	2,6361	2,6395	2,6429	2,6463	2,6497	2,653	2,6563
65,7	2,6062	2,6099	2,6135	2,6171	2,6207	2,6243	2,6279	2,6314	2,6349	2,6384	2,6419	2,6453	2,6488	2,6522	2,6556	2,6589	2,6623	2,6657	2,669
65,8	2,6188	2,6224	2,6261	2,6297	2,6333	2,6369	2,6405	2,644	2,6475	2,6511	2,6545	2,658	2,6614	2,6649	2,6683	2,6717	2,675	2,6784	2,6817
65,9	2,6314	2,635	2,6387	2,6423	2,646	2,6496	2,6531	2,6567	2,6602	2,6638	2,6673	2,6707	2,6742	2,6776	2,681	2,6844	2,6878	2,6912	2,6945
66	2,644	2,6477	2,6514	2,6551	2,6587	2,6623	2,6659	2,6694	2,673	2,6765	2,68	2,6835	2,687	2,6904	2,6939	2,6973	2,7006	2,704	2,7074
66,1	2,6568	2,6605	2,6642	2,6678	2,6714	2,6751	2,6787	2,6823	2,6858	2,6894	2,6929	2,6964	2,6998	2,7033	2,7067	2,7102	2,7136	2,7169	2,7203
66,2	2,6695	2,6733	2,677	2,6806	2,6843	2,6879	2,6916	2,6951	2,6987	2,7022	2,7058	2,7093	2,7128	2,7162	2,7197	2,7231	2,7266	2,7299	2,7333
66,3	2,6824	2,6861	2,6898	2,6935	2,6972	2,7009	2,7045	2,7081	2,7117	2,7152	2,7188	2,7223	2,7258	2,7292	2,7327	2,7361	2,7396	2,743	2,7464
66,4	2,6953	2,6991	2,7028	2,7065	2,7102	2,7138	2,7175	2,7211	2,7247	2,7282	2,7318	2,7353	2,7388	2,7423	2,7458	2,7493	2,7527	2,7561	2,7595
66,5	2,7083	2,7121	2,7158	2,7195	2,7232	2,7269	2,7305	2,7341	2,7377	2,7413	2,7449	2,7484	2,7519	2,7555	2,7589	2,7624	2,7659	2,7693	2,7727
66,6	2,7213	2,7251	2,7289	2,7326	2,7363	2,74	2,7436	2,7473	2,7509	2,7545	2,7581	2,7616	2,7652	2,7687	2,7722	2,7756	2,7791	2,7825	2,7859
66,7	2,7345	2,7383	2,742	2,7457	2,7495	2,7531	2,7568	2,7605	2,7641	2,7677	2,7713	2,7749	2,7784	2,7819	2,7854	2,7889	2,7924	2,7958	2,7993
66,8	2,7477	2,7514	2,7552	2,759	2,7627	2,7664	2,7701	2,7737	2,7774	2,781	2,7846	2,7882	2,7917	2,7952	2,7988	2,8023	2,8058	2,8092	2,8127
66,9	2,7609	2,7647	2,7685	2,7722	2,776	2,7797	2,7834	2,7871	2,7907	2,7943	2,7979	2,8015	2,8051	2,8087	2,8122	2,8157	2,8192	2,8227	2,8261
67	2,7742	2,778	2,7818	2,7856	2,7894	2,7931	2,7968	2,8005	2,8041	2,8078	2,8114	2,815	2,8186	2,8221	2,8257	2,8292	2,8327	2,8362	2,8396
67,1	2,7876	2,7914	2,7952	2,799	2,8028	2,8065	2,8103	2,8139	2,8176	2,8213	2,8249	2,8285	2,8321	2,8357	2,8392	2,8427	2,8463	2,8498	2,8532
67,2	2,801	2,8049	2,8087	2,8125	2,8163	2,82	2,8238	2,8275	2,8312	2,8348	2,8385	2,8421	2,8457	2,8493	2,8528	2,8564	2,8599	2,8634	2,8669
67,3	2,8146	2,8184	2,8223	2,8261	2,8299	2,8336	2,8373	2,8411	2,8448	2,8485	2,8521	2,8557	2,8594	2,8629	2,8665	2,8701	2,8736	2,8771	2,8806
67,4	2,8282	2,832	2,8359	2,8397	2,8435	2,8473	2,851	2,8548	2,8584	2,8621	2,8658	2,8695	2,8731	2,8767	2,8803	2,8839	2,8874	2,8909	2,8945

Table of external index of viability and vitality
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e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
64	2,4648	2,4679	2,471	2,4741	2,4771	2,4802	2,4832	2,4863
64,1	2,4765	2,4796	2,4828	2,4859	2,4889	2,492	2,495	2,4981
64,2	2,4883	2,4915	2,4946	2,4977	2,5008	2,5038	2,5069	2,5099
64,3	2,5002	2,5033	2,5064	2,5095	2,5127	2,5157	2,5188	2,5219
64,4	2,5121	2,5152	2,5184	2,5215	2,5246	2,5277	2,5308	2,5338
64,5	2,524	2,5272	2,5304	2,5335	2,5366	2,5397	2,5428	2,5459
64,6	2,5361	2,5392	2,5424	2,5456	2,5487	2,5518	2,5549	2,558
64,7	2,5481	2,5513	2,5545	2,5577	2,5608	2,5639	2,567	2,5701
64,8	2,5603	2,5635	2,5667	2,5698	2,573	2,5761	2,5792	2,5823
64,9	2,5725	2,5757	2,5789	2,5821	2,5852	2,5884	2,5915	2,5946
65	2,5847	2,588	2,5912	2,5943	2,5975	2,6007	2,6038	2,6069
65,1	2,5971	2,6003	2,6035	2,6067	2,6099	2,613	2,6162	2,6193
65,2	2,6094	2,6127	2,6159	2,6191	2,6223	2,6255	2,6286	2,6318
65,3	2,6219	2,6252	2,6284	2,6316	2,6348	2,638	2,6411	2,6443
65,4	2,6344	2,6377	2,6409	2,6441	2,6473	2,6505	2,6537	2,6569
65,5	2,647	2,6502	2,6535	2,6567	2,6599	2,6631	2,6663	2,6695
65,6	2,6596	2,6629	2,6661	2,6694	2,6726	2,6758	2,679	2,6822
65,7	2,6723	2,6756	2,6788	2,6821	2,6853	2,6886	2,6918	2,695
65,8	2,685	2,6883	2,6916	2,6949	2,6981	2,7013	2,7046	2,7078
65,9	2,6978	2,7012	2,7044	2,7077	2,711	2,7142	2,7175	2,7207
66	2,7107	2,714	2,7173	2,7206	2,7239	2,7271	2,7304	2,7336
66,1	2,7236	2,727	2,7303	2,7336	2,7369	2,7401	2,7434	2,7466
66,2	2,7367	2,74	2,7433	2,7466	2,7499	2,7532	2,7564	2,7597
66,3	2,7497	2,7531	2,7564	2,7597	2,7631	2,7663	2,7696	2,7729
66,4	2,7629	2,7662	2,7696	2,7729	2,7762	2,7795	2,7828	2,786
66,5	2,7761	2,7795	2,7828	2,7862	2,7895	2,7928	2,7961	2,7993
66,6	2,7894	2,7927	2,7961	2,7994	2,8028	2,8061	2,8094	2,8127
66,7	2,8027	2,8061	2,8095	2,8128	2,8162	2,8195	2,8228	2,8261
66,8	2,8161	2,8195	2,8229	2,8262	2,8296	2,8329	2,8363	2,8396
66,9	2,8295	2,833	2,8364	2,8397	2,8431	2,8465	2,8498	2,8531
67	2,8431	2,8465	2,8499	2,8533	2,8567	2,8601	2,8634	2,8667
67,1	2,8567	2,8602	2,8636	2,867	2,8704	2,8737	2,8771	2,8804
67,2	2,8704	2,8738	2,8772	2,8807	2,8841	2,8874	2,8908	2,8941
67,3	2,8841	2,8876	2,891	2,8945	2,8979	2,9012	2,9046	2,908
67,4	2,8979	2,9014	2,9049	2,9083	2,9117	2,9151	2,9185	2,9219

Table of external index of viability and vitality
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e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
67,5	1,9041	1,9317	1,9574	1,9814	2,0039	2,0252	2,0453	2,0645	2,0827	2,1001	2,1169	2,1329	2,1484	2,1633	2,1776	2,1916	2,205	2,2181	2,2308
67,6	1,9146	1,9424	1,9682	1,9922	2,0148	2,0362	2,0564	2,0756	2,0939	2,1114	2,1282	2,1443	2,1598	2,1747	2,1892	2,2031	2,2166	2,2297	2,2424
67,7	1,9252	1,9531	1,979	2,0031	2,0258	2,0472	2,0675	2,0868	2,1051	2,1227	2,1395	2,1557	2,1713	2,1863	2,2007	2,2147	2,2283	2,2415	2,2542
67,8	1,9359	1,9639	1,9898	2,0141	2,0368	2,0583	2,0787	2,098	2,1165	2,1341	2,151	2,1672	2,1828	2,1979	2,2124	2,2264	2,24	2,2532	2,266
67,9	1,9467	1,9747	2,0007	2,0251	2,0479	2,0695	2,0899	2,1093	2,1278	2,1455	2,1625	2,1787	2,1944	2,2095	2,2241	2,2382	2,2518	2,2651	2,2779
68	1,9574	1,9856	2,0117	2,0362	2,0591	2,0807	2,1012	2,1207	2,1392	2,157	2,174	2,1903	2,2061	2,2212	2,2359	2,25	2,2637	2,277	2,2899
68,1	1,9683	1,9966	2,0228	2,0473	2,0703	2,092	2,1126	2,1321	2,1507	2,1686	2,1856	2,202	2,2178	2,233	2,2477	2,2619	2,2756	2,289	2,3019
68,2	1,9792	2,0076	2,0339	2,0585	2,0816	2,1034	2,124	2,1436	2,1623	2,1802	2,1973	2,2137	2,2296	2,2448	2,2596	2,2738	2,2876	2,301	2,314
68,3	1,9902	2,0187	2,0451	2,0697	2,0929	2,1148	2,1355	2,1552	2,1739	2,1919	2,2091	2,2255	2,2414	2,2568	2,2715	2,2858	2,2997	2,3131	2,3261
68,4	2,0012	2,0298	2,0563	2,0811	2,1043	2,1262	2,147	2,1668	2,1856	2,2036	2,2208	2,2374	2,2534	2,2687	2,2836	2,2979	2,3118	2,3253	2,3383
68,5	2,0123	2,041	2,0676	2,0925	2,1158	2,1378	2,1587	2,1785	2,1974	2,2154	2,2327	2,2494	2,2653	2,2807	2,2956	2,31	2,324	2,3375	2,3506
68,6	2,0235	2,0522	2,079	2,1039	2,1273	2,1494	2,1703	2,1902	2,2092	2,2273	2,2447	2,2613	2,2774	2,2929	2,3078	2,3222	2,3362	2,3498	2,3629
68,7	2,0347	2,0636	2,0904	2,1154	2,1389	2,1611	2,1821	2,202	2,221	2,2392	2,2566	2,2734	2,2895	2,305	2,32	2,3345	2,3485	2,3621	2,3753
68,8	2,046	2,075	2,1019	2,127	2,1506	2,1728	2,1939	2,2139	2,233	2,2512	2,2687	2,2855	2,3017	2,3173	2,3323	2,3468	2,3609	2,3746	2,3878
68,9	2,0573	2,0864	2,1134	2,1386	2,1623	2,1846	2,2057	2,2258	2,245	2,2633	2,2808	2,2977	2,3139	2,3295	2,3446	2,3592	2,3734	2,3871	2,4004
69	2,0687	2,0979	2,125	2,1503	2,174	2,1964	2,2177	2,2378	2,2571	2,2754	2,293	2,31	2,3262	2,3419	2,3571	2,3717	2,3859	2,3996	2,413
69,1	2,0802	2,1095	2,1367	2,162	2,1859	2,2084	2,2297	2,2499	2,2692	2,2877	2,3053	2,3223	2,3386	2,3543	2,3695	2,3842	2,3985	2,4123	2,4257
69,2	2,0918	2,1211	2,1484	2,1739	2,1978	2,2204	2,2417	2,262	2,2814	2,2999	2,3176	2,3347	2,3511	2,3668	2,3821	2,3968	2,4111	2,425	2,4384
69,3	2,1034	2,1328	2,1602	2,1858	2,2098	2,2324	2,2539	2,2742	2,2937	2,3123	2,33	2,3471	2,3636	2,3794	2,3947	2,4095	2,4238	2,4377	2,4512
69,4	2,115	2,1446	2,1721	2,1977	2,2218	2,2445	2,2661	2,2865	2,306	2,3247	2,3425	2,3597	2,3761	2,392	2,4074	2,4223	2,4366	2,4506	2,4641
69,5	2,1268	2,1565	2,184	2,2098	2,2339	2,2567	2,2783	2,2989	2,3184	2,3371	2,355	2,3723	2,3888	2,4048	2,4202	2,4351	2,4495	2,4635	2,4771
69,6	2,1385	2,1684	2,196	2,2219	2,2461	2,269	2,2907	2,3113	2,3309	2,3497	2,3676	2,3849	2,4015	2,4175	2,433	2,448	2,4624	2,4765	2,4901
69,7	2,1504	2,1803	2,2081	2,234	2,2584	2,2813	2,3031	2,3237	2,3434	2,3623	2,3803	2,3976	2,4143	2,4304	2,4459	2,4609	2,4754	2,4895	2,5032
69,8	2,1623	2,1924	2,2202	2,2462	2,2707	2,2937	2,3155	2,3363	2,3561	2,375	2,3931	2,4104	2,4272	2,4433	2,4589	2,4739	2,4885	2,5026	2,5163
69,9	2,1743	2,2045	2,2324	2,2585	2,283	2,3062	2,3281	2,3489	2,3687	2,3877	2,4059	2,4233	2,4401	2,4563	2,4719	2,487	2,5016	2,5158	2,5296
70	2,1864	2,2166	2,2447	2,2709	2,2955	2,3187	2,3407	2,3616	2,3815	2,4005	2,4188	2,4363	2,4531	2,4693	2,485	2,5002	2,5149	2,5291	2,5429
70,1	2,1985	2,2289	2,257	2,2833	2,308	2,3313	2,3534	2,3743	2,3943	2,4134	2,4317	2,4493	2,4662	2,4825	2,4982	2,5134	2,5282	2,5424	2,5563
70,2	2,2107	2,2412	2,2694	2,2958	2,3206	2,344	2,3661	2,3872	2,4072	2,4264	2,4448	2,4624	2,4793	2,4957	2,5115	2,5267	2,5415	2,5558	2,5698
70,3	2,223	2,2536	2,2819	2,3084	2,3333	2,3567	2,379	2,4001	2,4202	2,4394	2,4578	2,4755	2,4926	2,509	2,5248	2,5401	2,5549	2,5693	2,5833
70,4	2,2354	2,266	2,2945	2,3211	2,346	2,3696	2,3919	2,413	2,4332	2,4525	2,471	2,4888	2,5059	2,5223	2,5382	2,5536	2,5684	2,5829	2,5969
70,5	2,2478	2,2786	2,3071	2,3338	2,3588	2,3825	2,4048	2,4261	2,4463	2,4657	2,4843	2,5021	2,5192	2,5357	2,5517	2,5671	2,5821	2,5965	2,6106
70,6	2,2603	2,2911	2,3198	2,3466	2,3717	2,3954	2,4179	2,4392	2,4595	2,479	2,4976	2,5155	2,5327	2,5492	2,5652	2,5807	2,5957	2,6102	2,6243
70,7	2,2728	2,3038	2,3326	2,3594	2,3847	2,4085	2,431	2,4524	2,4728	2,4923	2,511	2,5289	2,5462	2,5628	2,5789	2,5944	2,6094	2,624	2,6382
70,8	2,2854	2,3165	2,3454	2,3724	2,3977	2,4216	2,4442	2,4657	2,4861	2,5057	2,5245	2,5425	2,5598	2,5765	2,5926	2,6082	2,6233	2,6379	2,6521
70,9	2,2981	2,3293	2,3583	2,3854	2,4108	2,4347	2,4574	2,479	2,4996	2,5192	2,538	2,5561	2,5735	2,5902	2,6064	2,622	2,6372	2,6518	2,6661

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
67,5	2,2431	2,2551	2,2667	2,2781	2,2892	2,3	2,3106	2,3209	2,331	2,3409	2,3506	2,3601	2,3694	2,3785	2,3875	2,3963	2,4049	2,4134	2,4217
67,6	2,2548	2,2668	2,2786	2,29	2,3011	2,312	2,3225	2,3329	2,3431	2,353	2,3627	2,3722	2,3816	2,3907	2,3997	2,4085	2,4172	2,4257	2,4341
67,7	2,2666	2,2787	2,2904	2,3019	2,313	2,3239	2,3346	2,345	2,3552	2,3651	2,3749	2,3844	2,3938	2,403	2,412	2,4209	2,4296	2,4381	2,4465
67,8	2,2785	2,2906	2,3024	2,3139	2,3251	2,336	2,3467	2,3571	2,3673	2,3773	2,3871	2,3967	2,4061	2,4153	2,4244	2,4332	2,442	2,4505	2,459
67,9	2,2904	2,3026	2,3144	2,3259	2,3372	2,3481	2,3589	2,3693	2,3796	2,3896	2,3994	2,409	2,4185	2,4277	2,4368	2,4457	2,4545	2,4631	2,4715
68	2,3024	2,3146	2,3264	2,338	2,3493	2,3603	2,3711	2,3816	2,3919	2,4019	2,4118	2,4214	2,4309	2,4402	2,4493	2,4582	2,467	2,4757	2,4841
68,1	2,3145	2,3267	2,3386	2,3502	2,3615	2,3726	2,3833	2,3939	2,4042	2,4143	2,4242	2,4339	2,4434	2,4527	2,4618	2,4708	2,4796	2,4883	2,4968
68,2	2,3266	2,3388	2,3508	2,3625	2,3738	2,3849	2,3957	2,4063	2,4166	2,4268	2,4367	2,4464	2,4559	2,4653	2,4745	2,4835	2,4923	2,501	2,5095
68,3	2,3388	2,3511	2,3631	2,3748	2,3861	2,3973	2,4081	2,4188	2,4291	2,4393	2,4493	2,459	2,4686	2,4779	2,4872	2,4962	2,505	2,5138	2,5224
68,4	2,351	2,3634	2,3754	2,3871	2,3986	2,4097	2,4206	2,4313	2,4417	2,4519	2,4619	2,4717	2,4813	2,4907	2,4999	2,509	2,5179	2,5266	2,5352
68,5	2,3633	2,3757	2,3878	2,3996	2,411	2,4222	2,4332	2,4439	2,4543	2,4646	2,4746	2,4844	2,494	2,5035	2,5127	2,5218	2,5308	2,5395	2,5481
68,6	2,3757	2,3882	2,4003	2,4121	2,4236	2,4348	2,4458	2,4565	2,467	2,4773	2,4873	2,4972	2,5068	2,5163	2,5256	2,5348	2,5437	2,5525	2,5612
68,7	2,3882	2,4007	2,4128	2,4246	2,4362	2,4475	2,4585	2,4692	2,4798	2,4901	2,5002	2,5101	2,5198	2,5292	2,5386	2,5477	2,5567	2,5656	2,5743
68,8	2,4007	2,4132	2,4254	2,4373	2,4489	2,4602	2,4712	2,482	2,4926	2,5029	2,5131	2,523	2,5327	2,5422	2,5516	2,5608	2,5698	2,5787	2,5874
68,9	2,4133	2,4259	2,4381	2,45	2,4616	2,473	2,4841	2,4949	2,5055	2,5159	2,526	2,536	2,5457	2,5553	2,5647	2,5739	2,583	2,5919	2,6006
69	2,4259	2,4385	2,4508	2,4628	2,4744	2,4858	2,497	2,5078	2,5185	2,5289	2,5391	2,5491	2,5589	2,5685	2,5779	2,5871	2,5962	2,6051	2,6139
69,1	2,4387	2,4513	2,4636	2,4756	2,4873	2,4988	2,5099	2,5208	2,5315	2,542	2,5522	2,5622	2,572	2,5817	2,5911	2,6004	2,6095	2,6184	2,6272
69,2	2,4514	2,4641	2,4765	2,4886	2,5003	2,5118	2,523	2,5339	2,5446	2,5551	2,5654	2,5754	2,5853	2,5949	2,6044	2,6137	2,6229	2,6319	2,6407
69,3	2,4643	2,477	2,4894	2,5015	2,5133	2,5248	2,5361	2,5471	2,5578	2,5683	2,5786	2,5887	2,5986	2,6083	2,6178	2,6271	2,6363	2,6453	2,6542
69,4	2,4772	2,49	2,5025	2,5146	2,5264	2,538	2,5492	2,5603	2,5711	2,5816	2,5919	2,602	2,612	2,6217	2,6313	2,6406	2,6498	2,6589	2,6678
69,5	2,4902	2,5031	2,5156	2,5277	2,5396	2,5512	2,5625	2,5736	2,5844	2,595	2,6053	2,6155	2,6254	2,6352	2,6448	2,6542	2,6634	2,6725	2,6814
69,6	2,5033	2,5162	2,5287	2,5409	2,5528	2,5645	2,5758	2,5869	2,5978	2,6084	2,6188	2,629	2,639	2,6488	2,6584	2,6678	2,6771	2,6862	2,6951
69,7	2,5164	2,5294	2,5419	2,5542	2,5662	2,5778	2,5892	2,6003	2,6112	2,6219	2,6323	2,6425	2,6526	2,6624	2,6721	2,6815	2,6908	2,7	2,7089
69,8	2,5297	2,5426	2,5553	2,5675	2,5795	2,5912	2,6027	2,6139	2,6248	2,6355	2,6459	2,6562	2,6663	2,6761	2,6858	2,6953	2,7047	2,7138	2,7228
69,9	2,5429	2,556	2,5686	2,581	2,593	2,6047	2,6162	2,6274	2,6384	2,6491	2,6596	2,6699	2,68	2,6899	2,6996	2,7092	2,7185	2,7277	2,7368
70	2,5563	2,5694	2,5821	2,5945	2,6065	2,6183	2,6298	2,6411	2,6521	2,6628	2,6734	2,6837	2,6938	2,7038	2,7135	2,7231	2,7325	2,7417	2,7508
70,1	2,5697	2,5829	2,5956	2,608	2,6201	2,6319	2,6435	2,6548	2,6658	2,6766	2,6872	2,6976	2,7078	2,7177	2,7275	2,7371	2,7465	2,7558	2,7649
70,2	2,5832	2,5964	2,6092	2,6217	2,6338	2,6457	2,6573	2,6686	2,6797	2,6905	2,7011	2,7115	2,7217	2,7317	2,7415	2,7512	2,7606	2,7699	2,7791
70,3	2,5968	2,61	2,6228	2,6354	2,6476	2,6595	2,6711	2,6825	2,6936	2,7045	2,7151	2,7256	2,7358	2,7458	2,7557	2,7653	2,7748	2,7841	2,7933
70,4	2,6105	2,6237	2,6366	2,6492	2,6614	2,6734	2,685	2,6964	2,7076	2,7185	2,7292	2,7397	2,7499	2,76	2,7699	2,7796	2,7891	2,7985	2,8076
70,5	2,6242	2,6375	2,6504	2,663	2,6753	2,6873	2,699	2,7105	2,7216	2,7326	2,7433	2,7538	2,7641	2,7742	2,7841	2,7939	2,8035	2,8128	2,8221
70,6	2,638	2,6513	2,6643	2,677	2,6893	2,7013	2,7131	2,7246	2,7358	2,7468	2,7575	2,7681	2,7784	2,7886	2,7985	2,8083	2,8179	2,8273	2,8365
70,7	2,6519	2,6653	2,6783	2,691	2,7034	2,7154	2,7272	2,7387	2,75	2,761	2,7718	2,7824	2,7928	2,803	2,813	2,8227	2,8324	2,8418	2,8511
70,8	2,6659	2,6793	2,6924	2,7051	2,7175	2,7296	2,7414	2,753	2,7643	2,7754	2,7862	2,7968	2,8073	2,8174	2,8275	2,8373	2,847	2,8564	2,8658
70,9	2,6799	2,6934	2,7065	2,7193	2,7317	2,7439	2,7558	2,7673	2,7787	2,7898	2,8007	2,8113	2,8218	2,832	2,8421	2,8519	2,8616	2,8711	2,8805

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
67,5	2,43	2,438	2,446	2,4538	2,4615	2,4691	2,4765	2,4839	2,4911	2,4983	2,5054	2,5123	2,5192	2,526	2,5327	2,5393	2,5458	2,5522	2,5586
67,6	2,4423	2,4504	2,4584	2,4662	2,474	2,4816	2,4891	2,4964	2,5037	2,5109	2,518	2,525	2,5319	2,5387	2,5454	2,552	2,5585	2,565	2,5714
67,7	2,4548	2,4629	2,4709	2,4787	2,4865	2,4941	2,5017	2,509	2,5164	2,5236	2,5307	2,5377	2,5446	2,5514	2,5582	2,5648	2,5714	2,5779	2,5843
67,8	2,4673	2,4754	2,4834	2,4913	2,4991	2,5068	2,5143	2,5217	2,5291	2,5363	2,5434	2,5505	2,5574	2,5642	2,571	2,5777	2,5843	2,5908	2,5972
67,9	2,4798	2,488	2,496	2,504	2,5118	2,5195	2,527	2,5345	2,5418	2,5491	2,5562	2,5633	2,5702	2,5771	2,5839	2,5906	2,5972	2,6037	2,6102
68	2,4925	2,5007	2,5087	2,5167	2,5245	2,5322	2,5398	2,5473	2,5547	2,5619	2,5691	2,5762	2,5832	2,5901	2,5969	2,6036	2,6102	2,6168	2,6233
68,1	2,5052	2,5134	2,5215	2,5295	2,5373	2,5451	2,5527	2,5602	2,5676	2,5749	2,5821	2,5892	2,5962	2,6031	2,6099	2,6167	2,6233	2,6299	2,6364
68,2	2,5179	2,5262	2,5343	2,5423	2,5502	2,558	2,5656	2,5731	2,5806	2,5879	2,5951	2,6022	2,6093	2,6162	2,6231	2,6298	2,6365	2,6431	2,6496
68,3	2,5308	2,5391	2,5472	2,5552	2,5631	2,5709	2,5786	2,5862	2,5936	2,6009	2,6082	2,6153	2,6224	2,6294	2,6362	2,643	2,6497	2,6563	2,6629
68,4	2,5437	2,552	2,5602	2,5682	2,5761	2,5839	2,5916	2,5992	2,6067	2,6141	2,6214	2,6285	2,6356	2,6426	2,6495	2,6563	2,663	2,6697	2,6762
68,5	2,5566	2,565	2,5732	2,5813	2,5892	2,597	2,6048	2,6124	2,6199	2,6273	2,6346	2,6418	2,6489	2,6559	2,6628	2,6697	2,6764	2,683	2,6897
68,6	2,5697	2,578	2,5863	2,5944	2,6024	2,6102	2,618	2,6256	2,6331	2,6406	2,6479	2,6551	2,6622	2,6693	2,6762	2,6831	2,6898	2,6965	2,7031
68,7	2,5828	2,5912	2,5994	2,6076	2,6156	2,6235	2,6312	2,6389	2,6465	2,6539	2,6613	2,6685	2,6756	2,6827	2,6897	2,6966	2,7033	2,7101	2,7167
68,8	2,596	2,6044	2,6127	2,6208	2,6289	2,6368	2,6446	2,6523	2,6598	2,6673	2,6747	2,682	2,6891	2,6962	2,7032	2,7101	2,7169	2,7236	2,7303
68,9	2,6092	2,6177	2,626	2,6342	2,6423	2,6502	2,658	2,6657	2,6733	2,6808	2,6882	2,6955	2,7027	2,7098	2,7168	2,7237	2,7306	2,7373	2,744
69	2,6225	2,631	2,6394	2,6476	2,6557	2,6636	2,6715	2,6792	2,6869	2,6944	2,7018	2,7091	2,7163	2,7235	2,7305	2,7375	2,7443	2,7511	2,7578
69,1	2,6359	2,6444	2,6528	2,661	2,6692	2,6772	2,6851	2,6928	2,7005	2,708	2,7154	2,7228	2,73	2,7372	2,7443	2,7512	2,7581	2,7649	2,7716
69,2	2,6494	2,6579	2,6663	2,6746	2,6827	2,6908	2,6987	2,7065	2,7142	2,7217	2,7292	2,7366	2,7438	2,751	2,7581	2,7651	2,772	2,7788	2,7855
69,3	2,6629	2,6715	2,6799	2,6882	2,6964	2,7045	2,7124	2,7202	2,7279	2,7355	2,743	2,7504	2,7577	2,7649	2,772	2,779	2,7859	2,7928	2,7995
69,4	2,6765	2,6851	2,6936	2,7019	2,7101	2,7182	2,7261	2,734	2,7417	2,7493	2,7569	2,7643	2,7716	2,7788	2,7859	2,793	2,7999	2,8068	2,8136
69,5	2,6902	2,6988	2,7073	2,7157	2,7239	2,732	2,74	2,7479	2,7556	2,7633	2,7708	2,7782	2,7856	2,7928	2,8	2,8071	2,814	2,8209	2,8278
69,6	2,704	2,7126	2,7211	2,7295	2,7378	2,7459	2,7539	2,7618	2,7696	2,7773	2,7848	2,7923	2,7997	2,8069	2,8141	2,8212	2,8282	2,8351	2,842
69,7	2,7178	2,7265	2,735	2,7434	2,7517	2,7599	2,7679	2,7758	2,7836	2,7913	2,7989	2,8064	2,8138	2,8211	2,8283	2,8354	2,8425	2,8494	2,8563
69,8	2,7317	2,7404	2,749	2,7574	2,7657	2,7739	2,782	2,7899	2,7978	2,8055	2,8131	2,8206	2,8281	2,8354	2,8426	2,8497	2,8568	2,8637	2,8706
69,9	2,7457	2,7544	2,763	2,7715	2,7798	2,788	2,7961	2,8041	2,812	2,8197	2,8274	2,8349	2,8424	2,8497	2,857	2,8641	2,8712	2,8782	2,8851
70	2,7597	2,7685	2,7771	2,7856	2,794	2,8022	2,8103	2,8184	2,8262	2,834	2,8417	2,8493	2,8567	2,8641	2,8714	2,8786	2,8857	2,8927	2,8996
70,1	2,7738	2,7826	2,7913	2,7999	2,8082	2,8165	2,8247	2,8327	2,8406	2,8484	2,8561	2,8637	2,8712	2,8786	2,8859	2,8931	2,9002	2,9072	2,9142
70,2	2,7881	2,7969	2,8056	2,8142	2,8226	2,8309	2,839	2,8471	2,855	2,8629	2,8706	2,8782	2,8857	2,8932	2,9005	2,9077	2,9149	2,9219	2,9289
70,3	2,8023	2,8112	2,8199	2,8285	2,837	2,8453	2,8535	2,8616	2,8696	2,8774	2,8851	2,8928	2,9003	2,9078	2,9152	2,9224	2,9296	2,9366	2,9436
70,4	2,8167	2,8256	2,8343	2,843	2,8514	2,8598	2,868	2,8761	2,8841	2,892	2,8998	2,9075	2,915	2,9225	2,9299	2,9372	2,9444	2,9515	2,9585
70,5	2,8311	2,8401	2,8488	2,8575	2,866	2,8744	2,8826	2,8908	2,8988	2,9067	2,9145	2,9222	2,9298	2,9373	2,9447	2,952	2,9592	2,9664	2,9734
70,6	2,8456	2,8546	2,8634	2,8721	2,8806	2,889	2,8973	2,9055	2,9136	2,9215	2,9293	2,937	2,9447	2,9522	2,9596	2,9669	2,9742	2,9813	2,9884
70,7	2,8603	2,8693	2,8781	2,8868	2,8954	2,9038	2,9121	2,9203	2,9284	2,9363	2,9442	2,9519	2,9596	2,9672	2,9746	2,9819	2,9892	2,9964	3,0035
70,8	2,8749	2,884	2,8928	2,9016	2,9102	2,9186	2,927	2,9352	2,9433	2,9513	2,9592	2,9669	2,9746	2,9822	2,9897	2,9971	3,0043	3,0115	3,0186
70,9	2,8897	2,8988	2,9076	2,9164	2,925	2,9335	2,9419	2,9502	2,9583	2,9663	2,9742	2,982	2,9897	2,9973	3,0048	3,0122	3,0195	3,0268	3,0339

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
67,5	2,5649	2,5711	2,5773	2,5834	2,5894	2,5954	2,6012	2,607	2,6128	2,6185	2,6242	2,6297	2,6353	2,6408	2,6462	2,6516	2,6569	2,6622	2,6674
67,6	2,5777	2,584	2,5901	2,5962	2,6023	2,6082	2,6142	2,62	2,6258	2,6315	2,6372	2,6428	2,6483	2,6538	2,6593	2,6647	2,67	2,6753	2,6806
67,7	2,5906	2,5969	2,6031	2,6092	2,6152	2,6212	2,6272	2,633	2,6388	2,6446	2,6503	2,6559	2,6615	2,667	2,6724	2,6778	2,6832	2,6885	2,6938
67,8	2,6036	2,6098	2,6161	2,6222	2,6283	2,6343	2,6403	2,6461	2,6519	2,6577	2,6634	2,6691	2,6746	2,6802	2,6856	2,6911	2,6964	2,7018	2,7071
67,9	2,6166	2,6229	2,6291	2,6353	2,6414	2,6474	2,6534	2,6593	2,6651	2,6709	2,6766	2,6823	2,6879	2,6934	2,6989	2,7044	2,7098	2,7151	2,7204
68	2,6297	2,636	2,6423	2,6485	2,6546	2,6606	2,6666	2,6725	2,6784	2,6842	2,6899	2,6956	2,7012	2,7068	2,7123	2,7178	2,7232	2,7286	2,7338
68,1	2,6428	2,6492	2,6555	2,6617	2,6678	2,6739	2,6799	2,6858	2,6917	2,6975	2,7033	2,709	2,7146	2,7202	2,7257	2,7312	2,7366	2,742	2,7473
68,2	2,6561	2,6624	2,6687	2,675	2,6811	2,6872	2,6932	2,6992	2,7051	2,7109	2,7167	2,7224	2,7281	2,7337	2,7392	2,7447	2,7502	2,7556	2,7609
68,3	2,6694	2,6757	2,6821	2,6883	2,6945	2,7006	2,7066	2,7126	2,7185	2,7244	2,7302	2,7359	2,7416	2,7472	2,7528	2,7583	2,7638	2,7692	2,7746
68,4	2,6827	2,6891	2,6955	2,7017	2,7079	2,7141	2,7201	2,7261	2,7321	2,7379	2,7438	2,7495	2,7552	2,7609	2,7665	2,772	2,7775	2,7829	2,7883
68,5	2,6961	2,7026	2,7089	2,7152	2,7215	2,7276	2,7337	2,7397	2,7457	2,7516	2,7574	2,7632	2,7689	2,7746	2,7801	2,7857	2,7912	2,7967	2,8021
68,6	2,7097	2,7161	2,7225	2,7288	2,735	2,7412	2,7473	2,7533	2,7593	2,7652	2,7711	2,7769	2,7826	2,7883	2,7939	2,7995	2,805	2,8105	2,8159
68,7	2,7232	2,7297	2,7361	2,7424	2,7487	2,7549	2,761	2,7671	2,7731	2,779	2,7849	2,7907	2,7965	2,8021	2,8078	2,8134	2,8189	2,8244	2,8299
68,8	2,7369	2,7434	2,7498	2,7562	2,7624	2,7687	2,7748	2,7809	2,7869	2,7929	2,7987	2,8046	2,8104	2,8161	2,8217	2,8273	2,8329	2,8384	2,8439
68,9	2,7506	2,7571	2,7636	2,77	2,7762	2,7825	2,7887	2,7947	2,8008	2,8067	2,8127	2,8185	2,8243	2,83	2,8357	2,8414	2,8469	2,8525	2,8579
69	2,7644	2,7709	2,7774	2,7838	2,7901	2,7964	2,8026	2,8087	2,8147	2,8207	2,8267	2,8325	2,8384	2,8441	2,8498	2,8555	2,861	2,8666	2,8721
69,1	2,7783	2,7848	2,7913	2,7977	2,8041	2,8103	2,8166	2,8227	2,8288	2,8348	2,8407	2,8466	2,8525	2,8582	2,864	2,8696	2,8752	2,8808	2,8863
69,2	2,7922	2,7988	2,8053	2,8117	2,8181	2,8244	2,8306	2,8368	2,8429	2,8489	2,8549	2,8608	2,8666	2,8724	2,8782	2,8839	2,8895	2,8951	2,9006
69,3	2,8062	2,8128	2,8194	2,8258	2,8322	2,8385	2,8448	2,8509	2,8571	2,8631	2,8691	2,875	2,8809	2,8867	2,8925	2,8982	2,9038	2,9094	2,915
69,4	2,8203	2,8269	2,8335	2,84	2,8464	2,8527	2,859	2,8652	2,8713	2,8774	2,8834	2,8893	2,8952	2,9011	2,9068	2,9126	2,9182	2,9239	2,9294
69,5	2,8345	2,8411	2,8477	2,8542	2,8606	2,867	2,8733	2,8795	2,8857	2,8917	2,8978	2,9037	2,9097	2,9155	2,9213	2,9271	2,9327	2,9384	2,944
69,6	2,8487	2,8554	2,862	2,8685	2,875	2,8813	2,8876	2,8939	2,9001	2,9062	2,9122	2,9182	2,9242	2,93	2,9358	2,9416	2,9473	2,953	2,9586
69,7	2,863	2,8697	2,8763	2,8829	2,8893	2,8957	2,9021	2,9084	2,9145	2,9207	2,9268	2,9328	2,9387	2,9446	2,9504	2,9562	2,9619	2,9676	2,9732
69,8	2,8774	2,8841	2,8908	2,8974	2,9038	2,9103	2,9166	2,9229	2,9291	2,9353	2,9414	2,9474	2,9534	2,9593	2,9651	2,9709	2,9767	2,9823	2,988
69,9	2,8919	2,8986	2,9053	2,9119	2,9184	2,9248	2,9312	2,9375	2,9438	2,9499	2,956	2,9621	2,9681	2,974	2,9799	2,9857	2,9915	2,9972	3,0029
70	2,9064	2,9132	2,9199	2,9265	2,933	2,9395	2,9459	2,9522	2,9585	2,9647	2,9708	2,9769	2,9829	2,9888	2,9947	3,0006	3,0064	3,0121	3,0177
70,1	2,921	2,9279	2,9345	2,9412	2,9477	2,9542	2,9607	2,967	2,9733	2,9795	2,9856	2,9917	2,9978	3,0038	3,0097	3,0155	3,0213	3,0271	3,0327
70,2	2,9358	2,9426	2,9493	2,9559	2,9625	2,9691	2,9755	2,9819	2,9882	2,9944	3,0006	3,0067	3,0127	3,0187	3,0247	3,0305	3,0363	3,0421	3,0479
70,3	2,9505	2,9574	2,9641	2,9708	2,9774	2,9839	2,9904	2,9968	3,0031	3,0094	3,0156	3,0217	3,0278	3,0338	3,0398	3,0457	3,0515	3,0573	3,063
70,4	2,9654	2,9723	2,979	2,9857	2,9924	2,9989	3,0054	3,0118	3,0181	3,0244	3,0306	3,0368	3,0429	3,0489	3,0549	3,0608	3,0667	3,0725	3,0783
70,5	2,9803	2,9872	2,994	3,0007	3,0074	3,014	3,0205	3,0269	3,0333	3,0396	3,0458	3,052	3,0581	3,0642	3,0701	3,0761	3,082	3,0878	3,0936
70,6	2,9954	3,0023	3,0091	3,0159	3,0225	3,0291	3,0356	3,0421	3,0485	3,0548	3,0611	3,0672	3,0734	3,0795	3,0855	3,0914	3,0973	3,1032	3,109
70,7	3,0105	3,0174	3,0243	3,031	3,0377	3,0443	3,0509	3,0574	3,0638	3,0701	3,0764	3,0826	3,0888	3,0949	3,1009	3,1069	3,1128	3,1186	3,1245
70,8	3,0257	3,0326	3,0395	3,0463	3,053	3,0597	3,0662	3,0727	3,0792	3,0855	3,0918	3,0981	3,1042	3,1103	3,1164	3,1224	3,1283	3,1342	3,1401
70,9	3,041	3,0479	3,0548	3,0616	3,0684	3,075	3,0816	3,0882	3,0946	3,101	3,1073	3,1136	3,1198	3,1259	3,132	3,138	3,1439	3,1499	3,1557

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
67,5	2,6726	2,6777	2,6828	2,6878	2,6928	2,6978	2,7027	2,7076	2,7124	2,7172	2,7219	2,7267	2,7313	2,736	2,7406	2,7451	2,7497	2,7542	2,7587
67,6	2,6857	2,6909	2,696	2,701	2,706	2,711	2,716	2,7209	2,7257	2,7305	2,7353	2,74	2,7447	2,7494	2,754	2,7586	2,7631	2,7676	2,7721
67,7	2,699	2,7041	2,7093	2,7143	2,7194	2,7244	2,7293	2,7342	2,7391	2,7439	2,7487	2,7534	2,7581	2,7628	2,7675	2,772	2,7766	2,7812	2,7856
67,8	2,7123	2,7175	2,7226	2,7277	2,7327	2,7377	2,7427	2,7476	2,7525	2,7574	2,7622	2,7669	2,7716	2,7763	2,781	2,7856	2,7902	2,7947	2,7992
67,9	2,7257	2,7309	2,736	2,7411	2,7462	2,7512	2,7562	2,7611	2,766	2,7709	2,7757	2,7805	2,7852	2,7899	2,7946	2,7992	2,8038	2,8084	2,8129
68	2,7391	2,7443	2,7495	2,7546	2,7597	2,7647	2,7697	2,7747	2,7796	2,7845	2,7893	2,7941	2,7988	2,8036	2,8083	2,8129	2,8175	2,8221	2,8267
68,1	2,7526	2,7579	2,763	2,7682	2,7733	2,7783	2,7834	2,7883	2,7933	2,7982	2,803	2,8078	2,8126	2,8173	2,822	2,8267	2,8313	2,8359	2,8404
68,2	2,7662	2,7715	2,7767	2,7818	2,7869	2,792	2,797	2,802	2,807	2,8119	2,8167	2,8216	2,8264	2,8311	2,8358	2,8405	2,8451	2,8497	2,8543
68,3	2,7799	2,7852	2,7904	2,7956	2,8007	2,8058	2,8108	2,8158	2,8208	2,8257	2,8306	2,8354	2,8402	2,845	2,8497	2,8544	2,8591	2,8637	2,8683
68,4	2,7936	2,7989	2,8041	2,8093	2,8145	2,8196	2,8247	2,8297	2,8346	2,8396	2,8445	2,8493	2,8541	2,8589	2,8637	2,8684	2,873	2,8777	2,8823
68,5	2,8074	2,8127	2,818	2,8232	2,8284	2,8335	2,8385	2,8436	2,8486	2,8535	2,8584	2,8633	2,8681	2,873	2,8777	2,8824	2,8871	2,8918	2,8964
68,6	2,8213	2,8266	2,8319	2,8371	2,8423	2,8474	2,8525	2,8576	2,8626	2,8676	2,8725	2,8774	2,8822	2,887	2,8918	2,8966	2,9013	2,9059	2,9105
68,7	2,8352	2,8406	2,8459	2,8511	2,8563	2,8615	2,8666	2,8716	2,8767	2,8816	2,8866	2,8915	2,8964	2,9012	2,906	2,9108	2,9155	2,9201	2,9248
68,8	2,8493	2,8546	2,8599	2,8652	2,8704	2,8756	2,8807	2,8858	2,8908	2,8958	2,9008	2,9057	2,9106	2,9155	2,9203	2,925	2,9297	2,9345	2,9391
68,9	2,8634	2,8687	2,8741	2,8793	2,8846	2,8897	2,8949	2,9	2,905	2,9101	2,9151	2,92	2,9249	2,9297	2,9346	2,9394	2,9441	2,9488	2,9535
69	2,8775	2,8829	2,8883	2,8936	2,8988	2,904	2,9092	2,9143	2,9194	2,9244	2,9294	2,9344	2,9393	2,9441	2,949	2,9538	2,9585	2,9633	2,968
69,1	2,8918	2,8972	2,9025	2,9078	2,9131	2,9183	2,9235	2,9287	2,9337	2,9388	2,9438	2,9488	2,9537	2,9586	2,9635	2,9683	2,973	2,9778	2,9825
69,2	2,9061	2,9115	2,9169	2,9222	2,9275	2,9328	2,9379	2,9431	2,9482	2,9533	2,9583	2,9633	2,9682	2,9731	2,978	2,9829	2,9877	2,9924	2,9971
69,3	2,9205	2,9259	2,9313	2,9367	2,942	2,9472	2,9524	2,9576	2,9627	2,9678	2,9729	2,9779	2,9828	2,9878	2,9926	2,9975	3,0023	3,0071	3,0118
69,4	2,9349	2,9404	2,9458	2,9512	2,9565	2,9618	2,967	2,9722	2,9774	2,9824	2,9875	2,9925	2,9975	3,0024	3,0074	3,0122	3,0171	3,0218	3,0266
69,5	2,9495	2,955	2,9604	2,9658	2,9711	2,9764	2,9816	2,9869	2,992	2,9972	3,0022	3,0073	3,0123	3,0172	3,0221	3,027	3,0319	3,0367	3,0414
69,6	2,9641	2,9696	2,9751	2,9805	2,9858	2,9911	2,9964	3,0016	3,0068	3,0119	3,017	3,0221	3,0271	3,0321	3,037	3,0419	3,0468	3,0516	3,0564
69,7	2,9788	2,9843	2,9898	2,9952	3,0006	3,0059	3,0112	3,0165	3,0216	3,0268	3,0319	3,037	3,042	3,047	3,0519	3,0569	3,0617	3,0666	3,0714
69,8	2,9936	2,9991	3,0046	3,0101	3,0154	3,0208	3,0261	3,0313	3,0366	3,0417	3,0469	3,052	3,057	3,062	3,067	3,0719	3,0768	3,0816	3,0865
69,9	3,0085	3,014	3,0195	3,025	3,0304	3,0357	3,0411	3,0463	3,0516	3,0568	3,0619	3,067	3,0721	3,0771	3,0821	3,087	3,0919	3,0968	3,1016
70	3,0234	3,029	3,0345	3,04	3,0454	3,0508	3,0561	3,0614	3,0666	3,0718	3,077	3,0821	3,0872	3,0923	3,0973	3,1022	3,1072	3,112	3,1169
70,1	3,0384	3,044	3,0495	3,055	3,0605	3,0659	3,0712	3,0765	3,0818	3,087	3,0922	3,0973	3,1025	3,1075	3,1125	3,1175	3,1225	3,1274	3,1322
70,2	3,0535	3,0591	3,0647	3,0702	3,0756	3,0811	3,0864	3,0918	3,0971	3,1023	3,1075	3,1126	3,1178	3,1228	3,1279	3,1329	3,1378	3,1427	3,1476
70,3	3,0687	3,0743	3,0799	3,0854	3,0909	3,0963	3,1017	3,1071	3,1124	3,1176	3,1228	3,128	3,1332	3,1383	3,1433	3,1483	3,1533	3,1582	3,1631
70,4	3,0839	3,0896	3,0952	3,1007	3,1063	3,1117	3,1171	3,1225	3,1278	3,1331	3,1383	3,1435	3,1486	3,1537	3,1588	3,1638	3,1688	3,1738	3,1787
70,5	3,0993	3,105	3,1106	3,1162	3,1217	3,1271	3,1326	3,1379	3,1433	3,1486	3,1538	3,159	3,1642	3,1693	3,1744	3,1794	3,1845	3,1894	3,1944
70,6	3,1147	3,1204	3,126	3,1316	3,1372	3,1426	3,1481	3,1535	3,1588	3,1642	3,1694	3,1747	3,1798	3,185	3,1901	3,1951	3,2002	3,2051	3,2101
70,7	3,1302	3,1359	3,1416	3,1472	3,1528	3,1583	3,1637	3,1691	3,1745	3,1798	3,1851	3,1904	3,1956	3,2007	3,2059	3,2109	3,216	3,221	3,2259
70,8	3,1458	3,1516	3,1572	3,1629	3,1684	3,174	3,1794	3,1849	3,1903	3,1956	3,2009	3,2061	3,2114	3,2166	3,2217	3,2268	3,2319	3,2369	3,2419
70,9	3,1615	3,1672	3,1729	3,1786	3,1842	3,1897	3,1952	3,2007	3,2061	3,2114	3,2168	3,222	3,2273	3,2325	3,2376	3,2427	3,2478	3,2528	3,2579

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
67,5	2,7631	2,7675	2,7719	2,7762	2,7805	2,7848	2,7891	2,7933	2,7975	2,8016	2,8058	2,8099	2,814	2,818	2,8221	2,8261	2,83	2,834	2,8379
67,6	2,7766	2,781	2,7854	2,7897	2,7941	2,7984	2,8026	2,8068	2,8111	2,8152	2,8194	2,8235	2,8276	2,8317	2,8357	2,8397	2,8437	2,8477	2,8516
67,7	2,7901	2,7946	2,7989	2,8033	2,8077	2,8119	2,8163	2,8205	2,8247	2,8289	2,833	2,8372	2,8413	2,8454	2,8494	2,8535	2,8575	2,8615	2,8654
67,8	2,8037	2,8082	2,8126	2,817	2,8213	2,8256	2,8299	2,8342	2,8384	2,8426	2,8468	2,851	2,8551	2,8592	2,8633	2,8673	2,8713	2,8753	2,8793
67,9	2,8174	2,8219	2,8263	2,8307	2,8351	2,8394	2,8437	2,848	2,8522	2,8564	2,8606	2,8648	2,8689	2,873	2,8771	2,8812	2,8852	2,8892	2,8932
68	2,8312	2,8356	2,8401	2,8445	2,8489	2,8532	2,8575	2,8618	2,8661	2,8703	2,8745	2,8787	2,8829	2,887	2,891	2,8951	2,8992	2,9032	2,9072
68,1	2,845	2,8495	2,8539	2,8583	2,8627	2,8671	2,8714	2,8758	2,88	2,8843	2,8885	2,8927	2,8968	2,901	2,9051	2,9092	2,9132	2,9172	2,9213
68,2	2,8589	2,8634	2,8678	2,8723	2,8767	2,8811	2,8854	2,8897	2,894	2,8983	2,9025	2,9067	2,9109	2,915	2,9192	2,9233	2,9273	2,9314	2,9354
68,3	2,8728	2,8774	2,8818	2,8863	2,8907	2,8951	2,8995	2,9038	2,9081	2,9124	2,9166	2,9208	2,925	2,9292	2,9333	2,9374	2,9415	2,9456	2,9496
68,4	2,8869	2,8914	2,8959	2,9004	2,9048	2,9092	2,9136	2,9179	2,9222	2,9265	2,9308	2,935	2,9392	2,9434	2,9476	2,9517	2,9558	2,9599	2,9639
68,5	2,901	2,9055	2,91	2,9145	2,919	2,9234	2,9278	2,9321	2,9365	2,9408	2,945	2,9493	2,9535	2,9577	2,9619	2,966	2,9701	2,9742	2,9782
68,6	2,9151	2,9197	2,9242	2,9287	2,9332	2,9377	2,9421	2,9464	2,9508	2,9551	2,9594	2,9637	2,9679	2,9721	2,9762	2,9804	2,9845	2,9886	2,9927
68,7	2,9294	2,934	2,9385	2,9431	2,9475	2,952	2,9564	2,9608	2,9651	2,9695	2,9738	2,978	2,9823	2,9865	2,9907	2,9949	2,999	3,0031	3,0072
68,8	2,9437	2,9483	2,9529	2,9574	2,9619	2,9664	2,9708	2,9752	2,9796	2,984	2,9883	2,9926	2,9968	3,0011	3,0052	3,0094	3,0136	3,0177	3,0218
68,9	2,9581	2,9627	2,9673	2,9719	2,9764	2,9809	2,9853	2,9897	2,9941	2,9985	3,0028	3,0071	3,0114	3,0156	3,0199	3,0241	3,0282	3,0323	3,0364
69	2,9726	2,9772	2,9818	2,9864	2,9909	2,9954	2,9999	3,0043	3,0087	3,0131	3,0174	3,0218	3,026	3,0303	3,0345	3,0387	3,0429	3,0471	3,0512
69,1	2,9872	2,9918	2,9964	3,001	3,0055	3,0101	3,0145	3,019	3,0234	3,0278	3,0321	3,0365	3,0408	3,045	3,0493	3,0535	3,0577	3,0619	3,066
69,2	3,0018	3,0065	3,0111	3,0157	3,0202	3,0248	3,0293	3,0337	3,0381	3,0426	3,0469	3,0513	3,0556	3,0599	3,0641	3,0684	3,0726	3,0767	3,0809
69,3	3,0165	3,0212	3,0258	3,0304	3,035	3,0395	3,0441	3,0485	3,053	3,0574	3,0618	3,0662	3,0705	3,0748	3,079	3,0833	3,0875	3,0917	3,0959
69,4	3,0313	3,036	3,0407	3,0453	3,0499	3,0544	3,059	3,0634	3,0679	3,0723	3,0767	3,0811	3,0854	3,0898	3,094	3,0983	3,1025	3,1067	3,1109
69,5	3,0462	3,0509	3,0556	3,0602	3,0648	3,0694	3,0739	3,0784	3,0829	3,0873	3,0917	3,0961	3,1005	3,1048	3,1091	3,1134	3,1176	3,1219	3,1261
69,6	3,0611	3,0658	3,0705	3,0752	3,0798	3,0844	3,089	3,0934	3,098	3,1024	3,1069	3,1112	3,1156	3,12	3,1243	3,1286	3,1328	3,1371	3,1413
69,7	3,0762	3,0809	3,0856	3,0902	3,0949	3,0995	3,1041	3,1086	3,1131	3,1176	3,122	3,1265	3,1308	3,1352	3,1395	3,1438	3,1481	3,1523	3,1565
69,8	3,0912	3,096	3,1007	3,1054	3,11	3,1146	3,1192	3,1238	3,1283	3,1328	3,1373	3,1417	3,1461	3,1505	3,1548	3,1592	3,1634	3,1677	3,1719
69,9	3,1064	3,1112	3,1159	3,1206	3,1253	3,1299	3,1345	3,1391	3,1436	3,1481	3,1526	3,157	3,1615	3,1659	3,1702	3,1745	3,1788	3,1831	3,1874
70	3,1217	3,1265	3,1312	3,1359	3,1406	3,1453	3,1499	3,1545	3,159	3,1636	3,168	3,1725	3,1769	3,1813	3,1857	3,19	3,1944	3,1987	3,2029
70,1	3,137	3,1418	3,1466	3,1513	3,156	3,1607	3,1653	3,1699	3,1745	3,179	3,1835	3,188	3,1924	3,1969	3,2013	3,2056	3,2099	3,2143	3,2185
70,2	3,1525	3,1573	3,1621	3,1668	3,1715	3,1762	3,1808	3,1855	3,19	3,1946	3,1991	3,2036	3,2081	3,2125	3,2169	3,2213	3,2256	3,2299	3,2342
70,3	3,168	3,1728	3,1776	3,1824	3,1871	3,1918	3,1965	3,2011	3,2057	3,2102	3,2148	3,2193	3,2238	3,2282	3,2326	3,237	3,2414	3,2457	3,25
70,4	3,1836	3,1884	3,1932	3,198	3,2028	3,2075	3,2121	3,2168	3,2214	3,226	3,2305	3,2351	3,2395	3,244	3,2484	3,2528	3,2572	3,2616	3,2659
70,5	3,1993	3,2041	3,2089	3,2137	3,2185	3,2232	3,2279	3,2326	3,2372	3,2418	3,2464	3,2509	3,2554	3,2599	3,2643	3,2687	3,2731	3,2775	3,2818
70,6	3,215	3,2199	3,2247	3,2296	3,2343	3,2391	3,2438	3,2484	3,2531	3,2577	3,2623	3,2668	3,2714	3,2758	3,2803	3,2847	3,2892	3,2935	3,2979
70,7	3,2309	3,2358	3,2406	3,2455	3,2502	3,255	3,2597	3,2644	3,2691	3,2737	3,2783	3,2829	3,2874	3,2919	3,2964	3,3008	3,3052	3,3096	3,314
70,8	3,2468	3,2517	3,2566	3,2614	3,2662	3,271	3,2757	3,2804	3,2851	3,2898	3,2944	3,299	3,3035	3,308	3,3125	3,317	3,3214	3,3258	3,3302
70,9	3,2628	3,2678	3,2726	3,2775	3,2823	3,2871	3,2919	3,2966	3,3013	3,3059	3,3105	3,3151	3,3197	3,3243	3,3287	3,3332	3,3377	3,3421	3,3465

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
67,5	2,8418	2,8457	2,8496	2,8534	2,8572	2,861	2,8648	2,8685	2,8722	2,8759	2,8796	2,8833	2,8869	2,8905	2,8941	2,8977	2,9013	2,9048	2,9083
67,6	2,8555	2,8594	2,8633	2,8671	2,871	2,8748	2,8785	2,8823	2,886	2,8898	2,8935	2,8971	2,9008	2,9044	2,908	2,9116	2,9152	2,9187	2,9223
67,7	2,8693	2,8732	2,8771	2,881	2,8848	2,8886	2,8924	2,8962	2,9	2,9037	2,9074	2,911	2,9147	2,9184	2,922	2,9256	2,9292	2,9327	2,9363
67,8	2,8832	2,8871	2,891	2,8949	2,8987	2,9026	2,9063	2,9102	2,9139	2,9176	2,9213	2,9251	2,9287	2,9324	2,936	2,9396	2,9432	2,9468	2,9504
67,9	2,8971	2,9011	2,905	2,9089	2,9127	2,9166	2,9204	2,9242	2,9279	2,9317	2,9354	2,9391	2,9428	2,9465	2,9501	2,9537	2,9574	2,9609	2,9645
68	2,9112	2,9151	2,919	2,9229	2,9268	2,9306	2,9345	2,9383	2,9421	2,9458	2,9496	2,9533	2,957	2,9606	2,9643	2,968	2,9716	2,9751	2,9787
68,1	2,9252	2,9292	2,9331	2,937	2,9409	2,9448	2,9486	2,9524	2,9562	2,96	2,9638	2,9675	2,9712	2,9749	2,9786	2,9822	2,9858	2,9894	2,993
68,2	2,9394	2,9434	2,9473	2,9512	2,9551	2,959	2,9628	2,9667	2,9705	2,9743	2,978	2,9818	2,9855	2,9892	2,9929	2,9966	3,0002	3,0038	3,0074
68,3	2,9536	2,9576	2,9615	2,9655	2,9694	2,9733	2,9772	2,981	2,9848	2,9886	2,9924	2,9962	2,9999	3,0036	3,0073	3,011	3,0146	3,0182	3,0219
68,4	2,9679	2,9719	2,9759	2,9798	2,9837	2,9877	2,9915	2,9954	2,9992	3,003	3,0068	3,0106	3,0143	3,0181	3,0218	3,0254	3,0291	3,0328	3,0364
68,5	2,9823	2,9863	2,9903	2,9943	2,9982	3,0021	3,006	3,0099	3,0137	3,0175	3,0213	3,0251	3,0289	3,0326	3,0363	3,04	3,0437	3,0473	3,051
68,6	2,9967	3,0008	3,0048	3,0087	3,0127	3,0166	3,0205	3,0244	3,0283	3,0321	3,0359	3,0397	3,0435	3,0472	3,0509	3,0546	3,0583	3,062	3,0656
68,7	3,0113	3,0153	3,0193	3,0233	3,0273	3,0312	3,0351	3,039	3,0429	3,0467	3,0506	3,0544	3,0581	3,0619	3,0656	3,0694	3,0731	3,0767	3,0804
68,8	3,0259	3,0299	3,0339	3,0379	3,0419	3,0459	3,0498	3,0537	3,0576	3,0615	3,0653	3,0691	3,0729	3,0767	3,0804	3,0841	3,0879	3,0915	3,0952
68,9	3,0406	3,0446	3,0487	3,0527	3,0567	3,0606	3,0646	3,0685	3,0724	3,0762	3,0801	3,0839	3,0877	3,0915	3,0953	3,099	3,1027	3,1065	3,1101
69	3,0553	3,0594	3,0634	3,0675	3,0715	3,0754	3,0794	3,0833	3,0872	3,0911	3,095	3,0988	3,1026	3,1064	3,1102	3,114	3,1177	3,1214	3,1251
69,1	3,0701	3,0742	3,0783	3,0823	3,0863	3,0903	3,0943	3,0982	3,1021	3,1061	3,1099	3,1138	3,1176	3,1214	3,1252	3,129	3,1328	3,1365	3,1402
69,2	3,085	3,0891	3,0932	3,0973	3,1013	3,1053	3,1093	3,1132	3,1172	3,1211	3,125	3,1288	3,1327	3,1365	3,1403	3,1441	3,1479	3,1516	3,1553
69,3	3,1	3,1041	3,1082	3,1123	3,1163	3,1203	3,1243	3,1283	3,1323	3,1362	3,1401	3,144	3,1478	3,1517	3,1555	3,1593	3,1631	3,1668	3,1705
69,4	3,1151	3,1192	3,1233	3,1274	3,1314	3,1355	3,1395	3,1435	3,1474	3,1514	3,1553	3,1592	3,1631	3,1669	3,1707	3,1745	3,1783	3,1821	3,1858
69,5	3,1302	3,1344	3,1385	3,1426	3,1467	3,1507	3,1547	3,1587	3,1627	3,1666	3,1706	3,1745	3,1784	3,1822	3,1861	3,1899	3,1937	3,1974	3,2012
69,6	3,1454	3,1496	3,1537	3,1578	3,1619	3,166	3,17	3,174	3,178	3,182	3,1859	3,1898	3,1937	3,1976	3,2015	3,2053	3,2091	3,2129	3,2167
69,7	3,1608	3,1649	3,1691	3,1732	3,1773	3,1813	3,1854	3,1894	3,1934	3,1974	3,2014	3,2053	3,2092	3,2131	3,2169	3,2208	3,2246	3,2284	3,2322
69,8	3,1761	3,1803	3,1845	3,1886	3,1927	3,1968	3,2009	3,2049	3,2089	3,2129	3,2169	3,2208	3,2247	3,2286	3,2325	3,2364	3,2402	3,244	3,2478
69,9	3,1916	3,1958	3,2	3,2041	3,2083	3,2123	3,2164	3,2204	3,2245	3,2285	3,2325	3,2364	3,2404	3,2443	3,2482	3,252	3,2559	3,2597	3,2635
70	3,2072	3,2114	3,2155	3,2197	3,2238	3,228	3,232	3,2361	3,2402	3,2442	3,2482	3,2521	3,2561	3,26	3,2639	3,2678	3,2717	3,2755	3,2793
70,1	3,2228	3,227	3,2312	3,2354	3,2395	3,2436	3,2478	3,2518	3,2559	3,2599	3,2639	3,2679	3,2719	3,2758	3,2797	3,2836	3,2875	3,2914	3,2952
70,2	3,2385	3,2427	3,2469	3,2511	3,2553	3,2594	3,2636	3,2676	3,2717	3,2758	3,2798	3,2838	3,2877	3,2917	3,2956	3,2996	3,3034	3,3073	3,3112
70,3	3,2543	3,2586	3,2628	3,267	3,2712	3,2753	3,2794	3,2836	3,2876	3,2917	3,2957	3,2997	3,3037	3,3077	3,3116	3,3155	3,3195	3,3233	3,3272
70,4	3,2702	3,2744	3,2787	3,2829	3,2871	3,2913	3,2954	3,2995	3,3036	3,3077	3,3117	3,3158	3,3198	3,3237	3,3277	3,3316	3,3355	3,3394	3,3433
70,5	3,2861	3,2904	3,2947	3,2989	3,3031	3,3073	3,3115	3,3156	3,3197	3,3238	3,3278	3,3319	3,3359	3,3399	3,3438	3,3478	3,3517	3,3556	3,3595
70,6	3,3022	3,3065	3,3108	3,315	3,3192	3,3234	3,3276	3,3317	3,3359	3,34	3,344	3,3481	3,3521	3,3561	3,3601	3,3641	3,368	3,3719	3,3758
70,7	3,3183	3,3226	3,3269	3,3312	3,3354	3,3396	3,3438	3,348	3,3521	3,3562	3,3603	3,3644	3,3684	3,3724	3,3764	3,3804	3,3844	3,3883	3,3922
70,8	3,3346	3,3389	3,3432	3,3475	3,3517	3,3559	3,3601	3,3643	3,3684	3,3726	3,3767	3,3807	3,3848	3,3888	3,3929	3,3968	3,4008	3,4048	3,4087
70,9	3,3509	3,3552	3,3595	3,3638	3,3681	3,3723	3,3765	3,3807	3,3849	3,389	3,3931	3,3972	3,4013	3,4053	3,4093	3,4134	3,4173	3,4213	3,4252

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
67,5	2,9118	2,9153	2,9188	2,9222	2,9256	2,9291	2,9325	2,9358
67,6	2,9258	2,9293	2,9327	2,9362	2,9396	2,9431	2,9465	2,9498
67,7	2,9398	2,9433	2,9468	2,9503	2,9537	2,9571	2,9605	2,964
67,8	2,9539	2,9574	2,9609	2,9644	2,9678	2,9713	2,9747	2,9781
67,9	2,9681	2,9716	2,9751	2,9786	2,9821	2,9855	2,9889	2,9924
68	2,9823	2,9858	2,9894	2,9929	2,9963	2,9998	3,0033	3,0067
68,1	2,9966	3,0002	3,0037	3,0072	3,0107	3,0142	3,0177	3,0211
68,2	3,011	3,0146	3,0181	3,0216	3,0252	3,0286	3,0321	3,0355
68,3	3,0255	3,029	3,0326	3,0361	3,0396	3,0432	3,0466	3,0501
68,4	3,04	3,0436	3,0472	3,0507	3,0542	3,0577	3,0612	3,0647
68,5	3,0546	3,0582	3,0618	3,0653	3,0689	3,0724	3,0759	3,0794
68,6	3,0693	3,0729	3,0765	3,0801	3,0836	3,0872	3,0907	3,0942
68,7	3,0841	3,0877	3,0913	3,0949	3,0984	3,102	3,1055	3,109
68,8	3,0989	3,1025	3,1061	3,1097	3,1133	3,1169	3,1204	3,1239
68,9	3,1138	3,1174	3,1211	3,1247	3,1283	3,1319	3,1354	3,1389
69	3,1288	3,1324	3,1361	3,1397	3,1433	3,1469	3,1505	3,154
69,1	3,1439	3,1475	3,1512	3,1548	3,1584	3,162	3,1656	3,1692
69,2	3,159	3,1627	3,1664	3,17	3,1736	3,1772	3,1808	3,1844
69,3	3,1743	3,1779	3,1816	3,1853	3,1889	3,1925	3,1961	3,1997
69,4	3,1895	3,1933	3,197	3,2006	3,2043	3,2079	3,2115	3,2151
69,5	3,205	3,2087	3,2123	3,216	3,2197	3,2234	3,227	3,2306
69,6	3,2204	3,2241	3,2278	3,2316	3,2352	3,2389	3,2425	3,2461
69,7	3,236	3,2397	3,2434	3,2472	3,2508	3,2545	3,2582	3,2618
69,8	3,2516	3,2554	3,2591	3,2628	3,2665	3,2702	3,2738	3,2775
69,9	3,2673	3,2711	3,2748	3,2786	3,2823	3,286	3,2896	3,2933
70	3,2831	3,2869	3,2907	3,2944	3,2981	3,3018	3,3055	3,3092
70,1	3,299	3,3028	3,3066	3,3103	3,314	3,3178	3,3215	3,3251
70,2	3,315	3,3188	3,3226	3,3263	3,3301	3,3338	3,3375	3,3412
70,3	3,331	3,3348	3,3386	3,3424	3,3462	3,3499	3,3536	3,3573
70,4	3,3472	3,351	3,3548	3,3586	3,3624	3,3661	3,3699	3,3736
70,5	3,3634	3,3672	3,371	3,3748	3,3787	3,3824	3,3862	3,3899
70,6	3,3797	3,3836	3,3874	3,3912	3,395	3,3988	3,4025	3,4063
70,7	3,3961	3,4	3,4038	3,4076	3,4114	3,4152	3,419	3,4227
70,8	3,4126	3,4164	3,4203	3,4241	3,428	3,4318	3,4356	3,4393
70,9	3,4292	3,433	3,4369	3,4408	3,4446	3,4484	3,4522	3,456

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
71	2,3109	2,3422	2,3713	2,3985	2,424	2,448	2,4708	2,4924	2,513	2,5328	2,5516	2,5698	2,5872	2,604	2,6202	2,6359	2,6511	2,6659	2,6801
71,1	2,3237	2,3552	2,3844	2,4116	2,4372	2,4613	2,4842	2,5059	2,5266	2,5464	2,5653	2,5835	2,601	2,6179	2,6342	2,6499	2,6652	2,68	2,6943
71,2	2,3367	2,3682	2,3975	2,4248	2,4505	2,4748	2,4977	2,5195	2,5402	2,5601	2,5791	2,5974	2,6149	2,6319	2,6482	2,664	2,6793	2,6941	2,7085
71,3	2,3496	2,3813	2,4107	2,4382	2,4639	2,4882	2,5112	2,5331	2,554	2,5739	2,593	2,6113	2,6289	2,6459	2,6623	2,6782	2,6935	2,7084	2,7228
71,4	2,3627	2,3945	2,424	2,4516	2,4774	2,5018	2,5249	2,5468	2,5678	2,5877	2,6069	2,6253	2,643	2,66	2,6765	2,6924	2,7078	2,7227	2,7372
71,5	2,3759	2,4077	2,4374	2,465	2,491	2,5154	2,5386	2,5606	2,5816	2,6017	2,6209	2,6394	2,6571	2,6742	2,6907	2,7067	2,7222	2,7371	2,7517
71,6	2,3891	2,4211	2,4508	2,4786	2,5046	2,5292	2,5524	2,5745	2,5956	2,6157	2,635	2,6535	2,6713	2,6885	2,7051	2,7211	2,7366	2,7517	2,7663
71,7	2,4024	2,4345	2,4643	2,4922	2,5183	2,5429	2,5663	2,5885	2,6096	2,6298	2,6492	2,6677	2,6856	2,7029	2,7195	2,7356	2,7512	2,7662	2,7809
71,8	2,4157	2,448	2,4779	2,5059	2,5321	2,5568	2,5803	2,6025	2,6237	2,644	2,6634	2,6821	2,7	2,7173	2,734	2,7501	2,7658	2,7809	2,7956
71,9	2,4292	2,4615	2,4916	2,5196	2,546	2,5708	2,5943	2,6166	2,6379	2,6583	2,6778	2,6965	2,7145	2,7318	2,7486	2,7648	2,7805	2,7956	2,8104
72	2,4427	2,4752	2,5053	2,5335	2,5599	2,5848	2,6084	2,6308	2,6522	2,6726	2,6922	2,711	2,729	2,7464	2,7633	2,7795	2,7952	2,8105	2,8253
72,1	2,4563	2,4889	2,5192	2,5474	2,5739	2,599	2,6226	2,6451	2,6666	2,6871	2,7067	2,7255	2,7436	2,7611	2,778	2,7943	2,8101	2,8254	2,8403
72,2	2,47	2,5027	2,5331	2,5614	2,588	2,6132	2,6369	2,6595	2,681	2,7016	2,7213	2,7402	2,7584	2,7759	2,7928	2,8092	2,825	2,8404	2,8553
72,3	2,4838	2,5166	2,5471	2,5755	2,6022	2,6274	2,6513	2,6739	2,6955	2,7162	2,7359	2,7549	2,7732	2,7908	2,8077	2,8242	2,8401	2,8555	2,8704
72,4	2,4976	2,5306	2,5611	2,5897	2,6165	2,6418	2,6657	2,6885	2,7101	2,7308	2,7507	2,7697	2,7881	2,8057	2,8228	2,8392	2,8552	2,8707	2,8857
72,5	2,5115	2,5446	2,5753	2,604	2,6309	2,6562	2,6803	2,7031	2,7248	2,7456	2,7655	2,7846	2,803	2,8207	2,8378	2,8544	2,8704	2,8859	2,901
72,6	2,5256	2,5587	2,5896	2,6183	2,6453	2,6708	2,6949	2,7178	2,7396	2,7604	2,7804	2,7996	2,8181	2,8358	2,853	2,8696	2,8857	2,9013	2,9164
72,7	2,5396	2,573	2,6039	2,6328	2,6598	2,6854	2,7096	2,7326	2,7544	2,7754	2,7954	2,8147	2,8332	2,851	2,8683	2,885	2,9011	2,9167	2,9319
72,8	2,5538	2,5873	2,6183	2,6473	2,6744	2,7001	2,7243	2,7474	2,7694	2,7904	2,8105	2,8299	2,8484	2,8663	2,8836	2,9004	2,9165	2,9322	2,9475
72,9	2,5681	2,6016	2,6328	2,6618	2,6891	2,7149	2,7392	2,7624	2,7844	2,8055	2,8257	2,8451	2,8638	2,8817	2,8991	2,9159	2,9321	2,9478	2,9631
73	2,5824	2,6161	2,6474	2,6765	2,7039	2,7297	2,7542	2,7774	2,7996	2,8207	2,841	2,8604	2,8791	2,8972	2,9146	2,9315	2,9477	2,9635	2,9789
73,1	2,5968	2,6306	2,662	2,6913	2,7188	2,7447	2,7692	2,7925	2,8148	2,836	2,8564	2,8759	2,8947	2,9128	2,9302	2,9471	2,9635	2,9793	2,9947
73,2	2,6114	2,6453	2,6768	2,7062	2,7337	2,7597	2,7844	2,8078	2,8301	2,8514	2,8718	2,8914	2,9102	2,9284	2,9459	2,9629	2,9793	2,9952	3,0107
73,3	2,6259	2,66	2,6916	2,7211	2,7488	2,7749	2,7996	2,8231	2,8455	2,8668	2,8873	2,907	2,9259	2,9442	2,9617	2,9787	2,9952	3,0112	3,0267
73,4	2,6406	2,6748	2,7065	2,7361	2,7639	2,7901	2,8149	2,8385	2,8609	2,8824	2,903	2,9227	2,9417	2,96	2,9777	2,9947	3,0113	3,0273	3,0428
73,5	2,6554	2,6897	2,7216	2,7513	2,7791	2,8054	2,8303	2,854	2,8765	2,8981	2,9187	2,9385	2,9575	2,9759	2,9936	3,0108	3,0273	3,0434	3,059
73,6	2,6703	2,7047	2,7366	2,7664	2,7944	2,8208	2,8458	2,8696	2,8922	2,9138	2,9345	2,9544	2,9735	2,9919	3,0097	3,0269	3,0435	3,0597	3,0754
73,7	2,6852	2,7198	2,7518	2,7818	2,8098	2,8363	2,8614	2,8852	2,9079	2,9296	2,9504	2,9703	2,9896	3,008	3,0259	3,0431	3,0599	3,0761	3,0917
73,8	2,7003	2,7349	2,7671	2,7971	2,8254	2,8519	2,8771	2,901	2,9238	2,9455	2,9664	2,9864	3,0057	3,0242	3,0422	3,0595	3,0762	3,0925	3,1083
73,9	2,7154	2,7502	2,7825	2,8126	2,8409	2,8676	2,8929	2,9168	2,9397	2,9616	2,9825	3,0026	3,0219	3,0405	3,0585	3,0759	3,0927	3,109	3,1249
74	2,7306	2,7655	2,798	2,8282	2,8566	2,8834	2,9087	2,9328	2,9558	2,9777	2,9987	3,0189	3,0383	3,0569	3,075	3,0924	3,1093	3,1257	3,1415
74,1	2,7459	2,781	2,8135	2,8439	2,8724	2,8992	2,9247	2,9488	2,9719	2,9939	3,015	3,0352	3,0547	3,0734	3,0915	3,109	3,126	3,1424	3,1584
74,2	2,7613	2,7965	2,8292	2,8596	2,8882	2,9152	2,9407	2,965	2,9881	3,0102	3,0314	3,0517	3,0712	3,09	3,1082	3,1258	3,1428	3,1593	3,1753
74,3	2,7768	2,8122	2,8449	2,8755	2,9042	2,9313	2,9569	2,9812	3,0044	3,0266	3,0478	3,0682	3,0878	3,1067	3,125	3,1426	3,1597	3,1762	3,1923
74,4	2,7924	2,8279	2,8607	2,8915	2,9203	2,9474	2,9731	2,9976	3,0209	3,0431	3,0644	3,0849	3,1045	3,1235	3,1418	3,1595	3,1766	3,1932	3,2093

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
71	2,694	2,7076	2,7207	2,7335	2,746	2,7582	2,7701	2,7818	2,7932	2,8043	2,8152	2,8259	2,8364	2,8467	2,8567	2,8666	2,8764	2,8859	2,8953
71,1	2,7082	2,7218	2,735	2,7478	2,7604	2,7726	2,7846	2,7963	2,8077	2,8189	2,8298	2,8406	2,8511	2,8614	2,8715	2,8814	2,8912	2,9008	2,9102
71,2	2,7225	2,7361	2,7494	2,7623	2,7748	2,7871	2,7991	2,8108	2,8223	2,8335	2,8445	2,8553	2,8659	2,8762	2,8863	2,8963	2,9061	2,9157	2,9252
71,3	2,7369	2,7505	2,7638	2,7768	2,7894	2,8017	2,8137	2,8255	2,837	2,8483	2,8593	2,8701	2,8807	2,8911	2,9013	2,9113	2,9211	2,9307	2,9402
71,4	2,7513	2,765	2,7783	2,7914	2,804	2,8164	2,8285	2,8402	2,8518	2,8631	2,8742	2,885	2,8956	2,9061	2,9163	2,9263	2,9362	2,9459	2,9554
71,5	2,7658	2,7796	2,793	2,806	2,8187	2,8311	2,8432	2,8551	2,8667	2,878	2,8891	2,9	2,9107	2,9211	2,9314	2,9414	2,9513	2,9611	2,9706
71,6	2,7804	2,7942	2,8077	2,8207	2,8335	2,846	2,8581	2,87	2,8816	2,893	2,9041	2,9151	2,9257	2,9363	2,9465	2,9567	2,9666	2,9763	2,9859
71,7	2,7951	2,8089	2,8224	2,8356	2,8484	2,8609	2,8731	2,885	2,8966	2,9081	2,9193	2,9302	2,9409	2,9515	2,9618	2,9719	2,9819	2,9917	3,0013
71,8	2,8099	2,8238	2,8373	2,8505	2,8633	2,8759	2,8881	2,9001	2,9118	2,9232	2,9345	2,9454	2,9562	2,9668	2,9771	2,9873	2,9973	3,0071	3,0168
71,9	2,8247	2,8387	2,8523	2,8654	2,8784	2,8909	2,9032	2,9152	2,927	2,9385	2,9497	2,9608	2,9716	2,9822	2,9926	3,0028	3,0128	3,0227	3,0323
72	2,8396	2,8537	2,8673	2,8805	2,8935	2,9061	2,9184	2,9305	2,9423	2,9538	2,9651	2,9762	2,987	2,9976	3,0081	3,0183	3,0284	3,0383	3,048
72,1	2,8547	2,8687	2,8824	2,8957	2,9087	2,9214	2,9337	2,9458	2,9576	2,9692	2,9806	2,9917	3,0026	3,0132	3,0237	3,034	3,0441	3,054	3,0637
72,2	2,8698	2,8839	2,8976	2,9109	2,924	2,9367	2,9491	2,9612	2,9731	2,9847	2,9961	3,0072	3,0182	3,0289	3,0394	3,0497	3,0598	3,0698	3,0796
72,3	2,885	2,8991	2,9129	2,9263	2,9394	2,9521	2,9646	2,9768	2,9887	3,0003	3,0117	3,0229	3,0339	3,0446	3,0552	3,0655	3,0757	3,0857	3,0955
72,4	2,9002	2,9145	2,9283	2,9417	2,9548	2,9676	2,9801	2,9924	3,0043	3,016	3,0275	3,0387	3,0497	3,0605	3,071	3,0814	3,0916	3,1016	3,1115
72,5	2,9156	2,9299	2,9437	2,9572	2,9704	2,9832	2,9958	3,008	3,02	3,0318	3,0433	3,0545	3,0656	3,0764	3,087	3,0974	3,1077	3,1177	3,1276
72,6	2,9311	2,9453	2,9592	2,9728	2,986	2,9989	3,0115	3,0238	3,0358	3,0476	3,0592	3,0705	3,0815	3,0924	3,103	3,1135	3,1238	3,1339	3,1438
72,7	2,9466	2,9609	2,9749	2,9885	3,0018	3,0147	3,0273	3,0397	3,0517	3,0636	3,0752	3,0865	3,0976	3,1085	3,1192	3,1297	3,14	3,1501	3,1601
72,8	2,9622	2,9766	2,9906	3,0043	3,0176	3,0305	3,0433	3,0556	3,0678	3,0796	3,0912	3,1026	3,1138	3,1247	3,1354	3,146	3,1563	3,1665	3,1765
72,9	2,978	2,9924	3,0064	3,0201	3,0335	3,0465	3,0592	3,0717	3,0838	3,0958	3,1074	3,1188	3,13	3,141	3,1517	3,1623	3,1727	3,1829	3,1929
73	2,9938	3,0083	3,0224	3,0361	3,0495	3,0626	3,0753	3,0878	3,1	3,112	3,1236	3,1351	3,1463	3,1574	3,1682	3,1788	3,1892	3,1994	3,2095
73,1	3,0097	3,0242	3,0383	3,0522	3,0656	3,0787	3,0915	3,1041	3,1163	3,1283	3,14	3,1515	3,1628	3,1738	3,1847	3,1953	3,2058	3,2161	3,2261
73,2	3,0257	3,0402	3,0545	3,0683	3,0818	3,0949	3,1078	3,1204	3,1327	3,1447	3,1565	3,168	3,1793	3,1904	3,2013	3,212	3,2224	3,2328	3,2429
73,3	3,0417	3,0564	3,0706	3,0845	3,0981	3,1113	3,1242	3,1368	3,1491	3,1612	3,173	3,1846	3,196	3,2071	3,218	3,2287	3,2392	3,2496	3,2598
73,4	3,0579	3,0726	3,0869	3,1009	3,1144	3,1277	3,1406	3,1533	3,1657	3,1778	3,1897	3,2013	3,2127	3,2238	3,2348	3,2456	3,2561	3,2665	3,2767
73,5	3,0742	3,0889	3,1033	3,1173	3,1309	3,1442	3,1572	3,1699	3,1823	3,1945	3,2064	3,218	3,2295	3,2407	3,2517	3,2625	3,2731	3,2835	3,2937
73,6	3,0906	3,1054	3,1197	3,1338	3,1475	3,1609	3,1739	3,1866	3,1991	3,2113	3,2232	3,2349	3,2464	3,2577	3,2687	3,2795	3,2901	3,3006	3,3109
73,7	3,107	3,1219	3,1363	3,1504	3,1641	3,1776	3,1906	3,2034	3,2159	3,2282	3,2402	3,2519	3,2634	3,2747	3,2858	3,2967	3,3073	3,3178	3,3281
73,8	3,1236	3,1385	3,153	3,1671	3,1809	3,1943	3,2075	3,2203	3,2329	3,2452	3,2572	3,269	3,2805	3,2918	3,303	3,3139	3,3246	3,3351	3,3455
73,9	3,1402	3,1552	3,1698	3,184	3,1978	3,2113	3,2244	3,2373	3,2499	3,2622	3,2743	3,2862	3,2977	3,3091	3,3202	3,3312	3,342	3,3525	3,3629
74	3,157	3,172	3,1866	3,2008	3,2147	3,2283	3,2415	3,2544	3,2671	3,2794	3,2916	3,3034	3,3151	3,3265	3,3376	3,3486	3,3594	3,37	3,3804
74,1	3,1738	3,1889	3,2036	3,2178	3,2318	3,2454	3,2586	3,2716	3,2843	3,2967	3,3089	3,3208	3,3325	3,3439	3,3551	3,3661	3,377	3,3876	3,3981
74,2	3,1908	3,2059	3,2206	3,2349	3,249	3,2626	3,2759	3,2889	3,3017	3,3141	3,3263	3,3383	3,35	3,3615	3,3727	3,3838	3,3946	3,4053	3,4158
74,3	3,2078	3,223	3,2378	3,2522	3,2662	3,2799	3,2932	3,3063	3,3191	3,3316	3,3438	3,3558	3,3676	3,3791	3,3904	3,4015	3,4124	3,4232	3,4337
74,4	3,225	3,2402	3,255	3,2695	3,2836	3,2973	3,3107	3,3238	3,3366	3,3492	3,3615	3,3735	3,3853	3,3969	3,4082	3,4194	3,4303	3,4411	3,4516

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
71	2,9045	2,9136	2,9226	2,9313	2,94	2,9485	2,9569	2,9652	2,9734	2,9814	2,9893	2,9972	3,0049	3,0125	3,0201	3,0275	3,0348	3,0421	3,0492
71,1	2,9194	2,9286	2,9375	2,9463	2,955	2,9636	2,972	2,9803	2,9885	2,9966	3,0046	3,0124	3,0202	3,0278	3,0354	3,0428	3,0502	3,0575	3,0647
71,2	2,9344	2,9436	2,9526	2,9615	2,9702	2,9788	2,9872	2,9955	3,0038	3,0119	3,0199	3,0277	3,0355	3,0432	3,0508	3,0583	3,0656	3,0729	3,0801
71,3	2,9496	2,9587	2,9677	2,9766	2,9854	2,994	3,0025	3,0108	3,0191	3,0272	3,0353	3,0431	3,0509	3,0587	3,0663	3,0738	3,0812	3,0885	3,0957
71,4	2,9647	2,9739	2,983	2,9919	3,0007	3,0093	3,0178	3,0262	3,0345	3,0426	3,0507	3,0586	3,0665	3,0742	3,0818	3,0893	3,0968	3,1042	3,1114
71,5	2,98	2,9892	2,9983	3,0072	3,0161	3,0247	3,0333	3,0417	3,05	3,0582	3,0662	3,0742	3,0821	3,0898	3,0975	3,1051	3,1125	3,1199	3,1272
71,6	2,9953	3,0046	3,0137	3,0227	3,0315	3,0402	3,0488	3,0572	3,0656	3,0738	3,0819	3,0899	3,0978	3,1055	3,1132	3,1208	3,1283	3,1357	3,143
71,7	3,0108	3,02	3,0292	3,0382	3,0471	3,0558	3,0644	3,0729	3,0812	3,0895	3,0976	3,1056	3,1136	3,1214	3,129	3,1367	3,1442	3,1516	3,159
71,8	3,0263	3,0356	3,0448	3,0538	3,0627	3,0715	3,0801	3,0886	3,097	3,1053	3,1134	3,1215	3,1294	3,1373	3,145	3,1526	3,1601	3,1676	3,175
71,9	3,0419	3,0512	3,0605	3,0695	3,0784	3,0872	3,0959	3,1044	3,1128	3,1211	3,1293	3,1374	3,1454	3,1532	3,161	3,1687	3,1762	3,1837	3,1911
72	3,0575	3,0669	3,0762	3,0853	3,0943	3,1031	3,1118	3,1203	3,1288	3,1371	3,1453	3,1534	3,1614	3,1693	3,1771	3,1848	3,1924	3,1998	3,2073
72,1	3,0733	3,0827	3,092	3,1012	3,1102	3,119	3,1277	3,1363	3,1448	3,1532	3,1614	3,1695	3,1775	3,1854	3,1933	3,201	3,2086	3,2161	3,2236
72,2	3,0892	3,0987	3,1079	3,1171	3,1261	3,135	3,1438	3,1524	3,1609	3,1693	3,1775	3,1857	3,1938	3,2017	3,2096	3,2173	3,2249	3,2325	3,2399
72,3	3,1051	3,1146	3,124	3,1332	3,1422	3,1511	3,1599	3,1686	3,1771	3,1855	3,1938	3,202	3,2101	3,218	3,2259	3,2337	3,2413	3,2489	3,2564
72,4	3,1212	3,1307	3,1401	3,1493	3,1584	3,1673	3,1761	3,1849	3,1934	3,2018	3,2102	3,2184	3,2265	3,2345	3,2424	3,2502	3,2579	3,2655	3,273
72,5	3,1373	3,1469	3,1563	3,1655	3,1746	3,1837	3,1925	3,2012	3,2098	3,2183	3,2266	3,2349	3,243	3,251	3,2589	3,2667	3,2745	3,2821	3,2896
72,6	3,1536	3,1632	3,1726	3,1819	3,191	3,2	3,2089	3,2176	3,2263	3,2348	3,2431	3,2514	3,2596	3,2676	3,2756	3,2834	3,2912	3,2988	3,3064
72,7	3,1699	3,1795	3,1889	3,1983	3,2075	3,2165	3,2254	3,2342	3,2428	3,2513	3,2598	3,2681	3,2763	3,2843	3,2923	3,3002	3,308	3,3157	3,3232
72,8	3,1863	3,1959	3,2054	3,2148	3,224	3,2331	3,242	3,2508	3,2595	3,268	3,2765	3,2848	3,293	3,3011	3,3092	3,3171	3,3249	3,3326	3,3402
72,9	3,2028	3,2125	3,222	3,2314	3,2406	3,2497	3,2587	3,2675	3,2763	3,2848	3,2933	3,3017	3,3099	3,318	3,3261	3,334	3,3418	3,3496	3,3572
73	3,2194	3,2291	3,2387	3,2481	3,2573	3,2665	3,2755	3,2844	3,2931	3,3017	3,3102	3,3186	3,3269	3,335	3,3431	3,3511	3,3589	3,3667	3,3743
73,1	3,2361	3,2458	3,2554	3,2649	3,2742	3,2833	3,2924	3,3013	3,31	3,3187	3,3272	3,3357	3,3439	3,3521	3,3602	3,3682	3,3761	3,3839	3,3916
73,2	3,2528	3,2626	3,2723	3,2818	3,2911	3,3003	3,3094	3,3183	3,3271	3,3358	3,3443	3,3528	3,3611	3,3693	3,3774	3,3855	3,3934	3,4012	3,4089
73,3	3,2697	3,2796	3,2892	3,2988	3,3081	3,3174	3,3265	3,3354	3,3442	3,353	3,3615	3,37	3,3784	3,3866	3,3948	3,4028	3,4107	3,4186	3,4263
73,4	3,2867	3,2966	3,3063	3,3158	3,3252	3,3345	3,3436	3,3526	3,3615	3,3702	3,3789	3,3873	3,3957	3,404	3,4122	3,4202	3,4282	3,4361	3,4439
73,5	3,3038	3,3137	3,3234	3,333	3,3425	3,3518	3,3609	3,3699	3,3788	3,3876	3,3963	3,4048	3,4132	3,4215	3,4297	3,4378	3,4458	3,4537	3,4615
73,6	3,321	3,3309	3,3407	3,3503	3,3597	3,3691	3,3783	3,3873	3,3963	3,4051	3,4137	3,4223	3,4307	3,4391	3,4473	3,4554	3,4634	3,4714	3,4792
73,7	3,3383	3,3482	3,358	3,3677	3,3772	3,3865	3,3957	3,4048	3,4138	3,4226	3,4313	3,4399	3,4484	3,4568	3,465	3,4732	3,4812	3,4892	3,497
73,8	3,3556	3,3656	3,3755	3,3851	3,3947	3,4041	3,4133	3,4224	3,4314	3,4403	3,449	3,4577	3,4662	3,4746	3,4828	3,491	3,4991	3,5071	3,515
73,9	3,3731	3,3831	3,393	3,4027	3,4123	3,4217	3,431	3,4402	3,4492	3,4581	3,4668	3,4755	3,484	3,4924	3,5008	3,509	3,5171	3,5251	3,533
74	3,3907	3,4007	3,4106	3,4204	3,43	3,4395	3,4488	3,458	3,467	3,4759	3,4847	3,4934	3,502	3,5104	3,5188	3,527	3,5352	3,5432	3,5511
74,1	3,4083	3,4184	3,4284	3,4382	3,4478	3,4573	3,4667	3,4759	3,485	3,4939	3,5027	3,5115	3,5201	3,5285	3,5369	3,5452	3,5533	3,5614	3,5694
74,2	3,4261	3,4363	3,4462	3,4561	3,4658	3,4753	3,4847	3,4939	3,503	3,512	3,5209	3,5296	3,5382	3,5468	3,5551	3,5635	3,5716	3,5797	3,5877
74,3	3,444	3,4542	3,4642	3,4741	3,4838	3,4933	3,5028	3,512	3,5212	3,5302	3,5391	3,5478	3,5565	3,5651	3,5735	3,5818	3,59	3,5982	3,6062
74,4	3,462	3,4722	3,4823	3,4922	3,5019	3,5115	3,521	3,5303	3,5395	3,5485	3,5574	3,5662	3,5749	3,5835	3,5919	3,6003	3,6086	3,6167	3,6248

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
71	3,0563	3,0633	3,0702	3,0771	3,0838	3,0905	3,0971	3,1036	3,1101	3,1166	3,1229	3,1292	3,1354	3,1416	3,1476	3,1537	3,1597	3,1656	3,1715
71,1	3,0717	3,0788	3,0857	3,0926	3,0993	3,1061	3,1127	3,1192	3,1257	3,1322	3,1386	3,1449	3,1511	3,1573	3,1634	3,1694	3,1754	3,1814	3,1873
71,2	3,0873	3,0943	3,1013	3,1082	3,115	3,1217	3,1283	3,135	3,1415	3,1479	3,1543	3,1606	3,1669	3,1731	3,1792	3,1853	3,1913	3,1973	3,2032
71,3	3,1029	3,1099	3,1169	3,1238	3,1307	3,1374	3,1441	3,1507	3,1572	3,1638	3,1701	3,1765	3,1828	3,189	3,1952	3,2012	3,2073	3,2133	3,2192
71,4	3,1186	3,1257	3,1327	3,1396	3,1465	3,1532	3,1599	3,1666	3,1732	3,1797	3,1861	3,1924	3,1987	3,205	3,2111	3,2173	3,2233	3,2293	3,2353
71,5	3,1344	3,1415	3,1485	3,1555	3,1623	3,1691	3,1759	3,1825	3,1891	3,1956	3,2021	3,2085	3,2148	3,2211	3,2272	3,2334	3,2395	3,2455	3,2515
71,6	3,1503	3,1574	3,1644	3,1714	3,1783	3,1851	3,1919	3,1986	3,2052	3,2117	3,2182	3,2246	3,2309	3,2372	3,2434	3,2496	3,2557	3,2618	3,2677
71,7	3,1662	3,1734	3,1804	3,1874	3,1944	3,2012	3,208	3,2147	3,2213	3,2279	3,2344	3,2408	3,2472	3,2535	3,2597	3,2659	3,272	3,2781	3,2841
71,8	3,1822	3,1894	3,1965	3,2036	3,2105	3,2174	3,2242	3,2309	3,2375	3,2441	3,2507	3,2571	3,2635	3,2698	3,2761	3,2823	3,2884	3,2945	3,3005
71,9	3,1984	3,2056	3,2127	3,2198	3,2267	3,2336	3,2405	3,2472	3,2539	3,2605	3,267	3,2735	3,2799	3,2862	3,2925	3,2988	3,3049	3,311	3,3171
72	3,2146	3,2218	3,229	3,2361	3,2431	3,25	3,2568	3,2636	3,2703	3,2769	3,2835	3,29	3,2964	3,3028	3,3091	3,3153	3,3215	3,3276	3,3337
72,1	3,2309	3,2382	3,2454	3,2524	3,2595	3,2664	3,2733	3,2801	3,2868	3,2934	3,3	3,3066	3,313	3,3194	3,3257	3,332	3,3382	3,3443	3,3504
72,2	3,2473	3,2546	3,2618	3,2689	3,276	3,2829	3,2898	3,2967	3,3034	3,3101	3,3167	3,3232	3,3297	3,3361	3,3424	3,3487	3,355	3,3611	3,3673
72,3	3,2638	3,2711	3,2784	3,2855	3,2926	3,2996	3,3065	3,3133	3,3201	3,3268	3,3334	3,34	3,3465	3,3529	3,3593	3,3656	3,3718	3,378	3,3841
72,4	3,2804	3,2877	3,295	3,3022	3,3093	3,3163	3,3232	3,3301	3,3369	3,3436	3,3502	3,3568	3,3633	3,3698	3,3762	3,3825	3,3888	3,395	3,4012
72,5	3,2971	3,3045	3,3117	3,3189	3,326	3,3331	3,34	3,3469	3,3537	3,3605	3,3671	3,3738	3,3803	3,3868	3,3932	3,3995	3,4058	3,4121	3,4182
72,6	3,3138	3,3212	3,3286	3,3358	3,3429	3,35	3,3569	3,3639	3,3707	3,3775	3,3842	3,3908	3,3974	3,4039	3,4103	3,4167	3,423	3,4293	3,4355
72,7	3,3307	3,3382	3,3455	3,3527	3,3599	3,367	3,374	3,3809	3,3878	3,3946	3,4013	3,408	3,4145	3,4211	3,4275	3,4339	3,4402	3,4465	3,4527
72,8	3,3477	3,3551	3,3625	3,3698	3,3769	3,3841	3,3911	3,3981	3,4049	3,4118	3,4185	3,4252	3,4318	3,4383	3,4448	3,4512	3,4576	3,4639	3,4701
72,9	3,3648	3,3722	3,3796	3,3869	3,3941	3,4012	3,4083	3,4153	3,4222	3,429	3,4358	3,4425	3,4491	3,4557	3,4622	3,4686	3,475	3,4814	3,4876
73	3,3819	3,3894	3,3968	3,4042	3,4114	3,4185	3,4256	3,4326	3,4396	3,4464	3,4532	3,4599	3,4666	3,4732	3,4797	3,4862	3,4926	3,4989	3,5052
73,1	3,3992	3,4067	3,4141	3,4215	3,4287	3,4359	3,443	3,4501	3,457	3,4639	3,4707	3,4775	3,4841	3,4908	3,4973	3,5038	3,5102	3,5166	3,5229
73,2	3,4165	3,4241	3,4315	3,4389	3,4462	3,4534	3,4605	3,4676	3,4746	3,4815	3,4883	3,4951	3,5018	3,5084	3,515	3,5215	3,5279	3,5343	3,5407
73,3	3,434	3,4416	3,449	3,4564	3,4637	3,471	3,4781	3,4852	3,4922	3,4992	3,506	3,5128	3,5195	3,5262	3,5328	3,5393	3,5458	3,5522	3,5585
73,4	3,4515	3,4591	3,4666	3,4741	3,4814	3,4887	3,4959	3,503	3,51	3,5169	3,5238	3,5306	3,5374	3,5441	3,5507	3,5572	3,5637	3,5702	3,5765
73,5	3,4692	3,4768	3,4843	3,4918	3,4992	3,5064	3,5137	3,5208	3,5278	3,5348	3,5417	3,5486	3,5553	3,562	3,5687	3,5752	3,5818	3,5882	3,5946
73,6	3,487	3,4946	3,5022	3,5096	3,517	3,5243	3,5316	3,5387	3,5458	3,5528	3,5597	3,5666	3,5734	3,5801	3,5868	3,5934	3,5999	3,6064	3,6128
73,7	3,5048	3,5125	3,52	3,5276	3,535	3,5423	3,5496	3,5568	3,5639	3,5709	3,5778	3,5847	3,5915	3,5983	3,605	3,6116	3,6182	3,6246	3,6311
73,8	3,5228	3,5305	3,5381	3,5456	3,553	3,5604	3,5677	3,5749	3,582	3,5891	3,596	3,603	3,6098	3,6166	3,6233	3,6299	3,6365	3,643	3,6495
73,9	3,5408	3,5485	3,5562	3,5637	3,5712	3,5786	3,5859	3,5931	3,6003	3,6074	3,6144	3,6213	3,6282	3,635	3,6417	3,6484	3,655	3,6615	3,668
74	3,559	3,5667	3,5744	3,582	3,5895	3,5969	3,6042	3,6115	3,6186	3,6258	3,6328	3,6398	3,6466	3,6535	3,6602	3,6669	3,6735	3,6801	3,6866
74,1	3,5773	3,5851	3,5927	3,6003	3,6078	3,6153	3,6227	3,6299	3,6372	3,6443	3,6513	3,6583	3,6652	3,6721	3,6788	3,6855	3,6922	3,6988	3,7053
74,2	3,5957	3,6034	3,6112	3,6188	3,6263	3,6338	3,6412	3,6485	3,6557	3,6629	3,67	3,677	3,6839	3,6908	3,6976	3,7043	3,711	3,7176	3,7242
74,3	3,6141	3,622	3,6297	3,6374	3,6449	3,6524	3,6598	3,6672	3,6744	3,6816	3,6887	3,6957	3,7027	3,7096	3,7164	3,7232	3,7299	3,7365	3,7431
74,4	3,6327	3,6406	3,6483	3,656	3,6636	3,6712	3,6786	3,686	3,6932	3,7004	3,7075	3,7146	3,7216	3,7285	3,7354	3,7421	3,7489	3,7555	3,7621

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
71	3,1773	3,183	3,1888	3,1944	3,2	3,2056	3,2111	3,2166	3,222	3,2274	3,2327	3,238	3,2433	3,2485	3,2536	3,2588	3,2639	3,2689	3,274
71,1	3,1931	3,1989	3,2046	3,2103	3,2159	3,2215	3,2271	3,2325	3,238	3,2434	3,2488	3,2541	3,2594	3,2646	3,2698	3,2749	3,28	3,2851	3,2901
71,2	3,209	3,2149	3,2206	3,2263	3,232	3,2376	3,2431	3,2486	3,2541	3,2595	3,2649	3,2702	3,2755	3,2808	3,2859	3,2911	3,2963	3,3013	3,3064
71,3	3,2251	3,2309	3,2366	3,2424	3,2481	3,2537	3,2592	3,2648	3,2703	3,2757	3,2811	3,2864	3,2918	3,297	3,3022	3,3074	3,3126	3,3177	3,3228
71,4	3,2412	3,247	3,2528	3,2586	3,2642	3,2699	3,2755	3,281	3,2865	3,292	3,2974	3,3028	3,3081	3,3134	3,3186	3,3238	3,329	3,3341	3,3392
71,5	3,2574	3,2632	3,269	3,2748	3,2805	3,2862	3,2918	3,2974	3,3029	3,3083	3,3138	3,3191	3,3245	3,3298	3,3351	3,3403	3,3455	3,3506	3,3557
71,6	3,2737	3,2795	3,2854	3,2912	3,2969	3,3026	3,3082	3,3138	3,3193	3,3248	3,3303	3,3356	3,341	3,3463	3,3516	3,3569	3,3621	3,3672	3,3723
71,7	3,2901	3,2959	3,3018	3,3076	3,3133	3,319	3,3247	3,3303	3,3359	3,3414	3,3468	3,3523	3,3576	3,363	3,3683	3,3735	3,3787	3,3839	3,389
71,8	3,3065	3,3124	3,3183	3,3241	3,3299	3,3356	3,3413	3,3469	3,3525	3,358	3,3635	3,3689	3,3743	3,3797	3,385	3,3903	3,3955	3,4007	3,4058
71,9	3,3231	3,329	3,3349	3,3407	3,3465	3,3523	3,358	3,3636	3,3692	3,3748	3,3802	3,3857	3,3911	3,3965	3,4018	3,4071	3,4124	3,4176	3,4227
72	3,3397	3,3457	3,3516	3,3574	3,3633	3,369	3,3747	3,3804	3,386	3,3916	3,3971	3,4026	3,408	3,4134	3,4187	3,424	3,4293	3,4346	3,4398
72,1	3,3565	3,3625	3,3684	3,3742	3,3801	3,3859	3,3916	3,3973	3,4029	3,4085	3,414	3,4195	3,425	3,4304	3,4357	3,4411	3,4464	3,4516	3,4568
72,2	3,3733	3,3793	3,3852	3,3912	3,397	3,4028	3,4085	3,4142	3,4199	3,4255	3,4311	3,4366	3,442	3,4475	3,4529	3,4582	3,4635	3,4688	3,474
72,3	3,3902	3,3963	3,4022	3,4081	3,414	3,4198	3,4256	3,4313	3,437	3,4426	3,4482	3,4537	3,4592	3,4647	3,4701	3,4754	3,4807	3,486	3,4913
72,4	3,4073	3,4133	3,4193	3,4252	3,4311	3,4369	3,4427	3,4485	3,4542	3,4598	3,4654	3,471	3,4765	3,482	3,4873	3,4927	3,4981	3,5034	3,5086
72,5	3,4244	3,4305	3,4364	3,4424	3,4483	3,4542	3,46	3,4657	3,4715	3,4771	3,4827	3,4883	3,4938	3,4993	3,5047	3,5101	3,5155	3,5208	3,5261
72,6	3,4416	3,4477	3,4537	3,4597	3,4656	3,4715	3,4773	3,4831	3,4888	3,4945	3,5001	3,5057	3,5113	3,5168	3,5222	3,5277	3,533	3,5384	3,5437
72,7	3,4589	3,465	3,4711	3,4771	3,483	3,4889	3,4948	3,5005	3,5063	3,512	3,5176	3,5232	3,5288	3,5344	3,5398	3,5453	3,5507	3,556	3,5613
72,8	3,4763	3,4824	3,4885	3,4945	3,5005	3,5064	3,5123	3,5181	3,5239	3,5296	3,5352	3,5409	3,5465	3,552	3,5575	3,563	3,5684	3,5738	3,5791
72,9	3,4938	3,4999	3,506	3,5121	3,5181	3,524	3,5299	3,5357	3,5415	3,5473	3,553	3,5586	3,5642	3,5698	3,5753	3,5808	3,5862	3,5916	3,597
73	3,5114	3,5176	3,5237	3,5298	3,5358	3,5417	3,5476	3,5535	3,5593	3,5651	3,5708	3,5764	3,5821	3,5876	3,5932	3,5987	3,6041	3,6095	3,6149
73,1	3,5291	3,5353	3,5415	3,5475	3,5536	3,5596	3,5655	3,5713	3,5772	3,5829	3,5887	3,5944	3,6	3,6056	3,6112	3,6167	3,6221	3,6276	3,633
73,2	3,5469	3,5531	3,5593	3,5654	3,5715	3,5774	3,5834	3,5893	3,5951	3,601	3,6067	3,6124	3,618	3,6237	3,6292	3,6348	3,6403	3,6457	3,6511
73,3	3,5648	3,5711	3,5772	3,5834	3,5895	3,5955	3,6014	3,6073	3,6132	3,619	3,6248	3,6305	3,6362	3,6419	3,6474	3,653	3,6585	3,664	3,6694
73,4	3,5828	3,5891	3,5953	3,6014	3,6075	3,6136	3,6195	3,6255	3,6314	3,6372	3,643	3,6488	3,6545	3,6601	3,6657	3,6713	3,6768	3,6823	3,6878
73,5	3,6009	3,6072	3,6134	3,6196	3,6257	3,6318	3,6378	3,6438	3,6497	3,6555	3,6613	3,6671	3,6728	3,6785	3,6841	3,6897	3,6953	3,7008	3,7062
73,6	3,6192	3,6254	3,6317	3,6379	3,644	3,6501	3,6561	3,6621	3,668	3,6739	3,6798	3,6855	3,6913	3,697	3,7026	3,7082	3,7138	3,7193	3,7248
73,7	3,6375	3,6438	3,6501	3,6563	3,6624	3,6685	3,6746	3,6806	3,6865	3,6924	3,6983	3,7041	3,7099	3,7155	3,7212	3,7268	3,7324	3,738	3,7435
73,8	3,6559	3,6622	3,6685	3,6747	3,6809	3,6871	3,6931	3,6992	3,7051	3,711	3,7169	3,7227	3,7285	3,7343	3,74	3,7456	3,7512	3,7568	3,7623
73,9	3,6744	3,6808	3,6871	3,6933	3,6995	3,7057	3,7118	3,7178	3,7238	3,7297	3,7357	3,7415	3,7473	3,753	3,7588	3,7644	3,77	3,7756	3,7812
74	3,6931	3,6994	3,7058	3,712	3,7182	3,7244	3,7305	3,7366	3,7426	3,7486	3,7545	3,7604	3,7662	3,7719	3,7777	3,7834	3,789	3,7946	3,8002
74,1	3,7118	3,7182	3,7245	3,7309	3,7371	3,7433	3,7494	3,7555	3,7615	3,7675	3,7734	3,7793	3,7852	3,791	3,7967	3,8024	3,8081	3,8137	3,8193
74,2	3,7306	3,7371	3,7434	3,7498	3,756	3,7622	3,7684	3,7745	3,7805	3,7866	3,7925	3,7984	3,8043	3,8101	3,8158	3,8216	3,8273	3,8329	3,8385
74,3	3,7496	3,756	3,7625	3,7688	3,7751	3,7813	3,7875	3,7936	3,7997	3,8057	3,8117	3,8176	3,8235	3,8293	3,8351	3,8409	3,8465	3,8522	3,8578
74,4	3,7686	3,7751	3,7815	3,7879	3,7942	3,8005	3,8067	3,8128	3,8189	3,825	3,831	3,8369	3,8428	3,8486	3,8545	3,8602	3,866	3,8717	3,8773

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
71	3,2789	3,2839	3,2888	3,2937	3,2985	3,3033	3,3081	3,3128	3,3175	3,3222	3,3268	3,3314	3,336	3,3406	3,3451	3,3496	3,3541	3,3585	3,3629
71,1	3,2951	3,3001	3,305	3,3099	3,3148	3,3196	3,3243	3,3291	3,3338	3,3385	3,3432	3,3478	3,3524	3,357	3,3615	3,366	3,3705	3,3749	3,3794
71,2	3,3114	3,3164	3,3213	3,3262	3,3311	3,3359	3,3407	3,3455	3,3502	3,3549	3,3596	3,3643	3,3689	3,3735	3,378	3,3825	3,387	3,3915	3,3959
71,3	3,3278	3,3328	3,3377	3,3426	3,3475	3,3524	3,3572	3,362	3,3667	3,3715	3,3761	3,3808	3,3854	3,3901	3,3946	3,3991	3,4036	3,4081	3,4126
71,4	3,3442	3,3492	3,3542	3,3591	3,3641	3,3689	3,3737	3,3785	3,3833	3,3881	3,3928	3,3974	3,4021	3,4067	3,4113	3,4158	3,4204	3,4248	3,4293
71,5	3,3608	3,3658	3,3708	3,3758	3,3807	3,3856	3,3904	3,3952	3,4	3,4047	3,4095	3,4142	3,4188	3,4235	3,4281	3,4326	3,4372	3,4417	3,4462
71,6	3,3774	3,3825	3,3875	3,3925	3,3974	3,4023	3,4071	3,412	3,4168	3,4216	3,4263	3,431	3,4357	3,4403	3,4449	3,4495	3,4541	3,4586	3,4631
71,7	3,3941	3,3992	3,4042	3,4092	3,4142	3,4191	3,424	3,4288	3,4336	3,4384	3,4432	3,4479	3,4526	3,4573	3,4619	3,4665	3,4711	3,4756	3,4801
71,8	3,411	3,4161	3,4211	3,4261	3,4311	3,436	3,4409	3,4458	3,4506	3,4554	3,4602	3,4649	3,4696	3,4743	3,4789	3,4836	3,4881	3,4927	3,4972
71,9	3,4279	3,433	3,4381	3,4431	3,448	3,453	3,4579	3,4628	3,4677	3,4725	3,4773	3,482	3,4867	3,4914	3,4961	3,5007	3,5053	3,5099	3,5144
72	3,4449	3,45	3,4551	3,4601	3,4651	3,4701	3,475	3,4799	3,4848	3,4896	3,4944	3,4992	3,5039	3,5086	3,5133	3,518	3,5226	3,5272	3,5317
72,1	3,462	3,4671	3,4722	3,4773	3,4823	3,4873	3,4922	3,4972	3,502	3,5069	3,5117	3,5165	3,5212	3,526	3,5306	3,5353	3,54	3,5446	3,5491
72,2	3,4792	3,4843	3,4895	3,4945	3,4995	3,5046	3,5095	3,5145	3,5193	3,5242	3,5291	3,5339	3,5386	3,5434	3,5481	3,5527	3,5574	3,562	3,5666
72,3	3,4965	3,5016	3,5068	3,5119	3,5169	3,5219	3,5269	3,5319	3,5368	3,5417	3,5465	3,5514	3,5561	3,5609	3,5656	3,5703	3,575	3,5796	3,5842
72,4	3,5138	3,5191	3,5242	3,5293	3,5344	3,5394	3,5444	3,5494	3,5543	3,5592	3,5641	3,5689	3,5737	3,5785	3,5832	3,5879	3,5926	3,5973	3,6019
72,5	3,5313	3,5365	3,5417	3,5468	3,5519	3,557	3,562	3,567	3,5719	3,5768	3,5817	3,5866	3,5914	3,5962	3,6009	3,6057	3,6104	3,615	3,6197
72,6	3,5489	3,5542	3,5593	3,5645	3,5696	3,5746	3,5797	3,5847	3,5896	3,5946	3,5995	3,6043	3,6092	3,614	3,6188	3,6235	3,6282	3,6329	3,6376
72,7	3,5666	3,5718	3,577	3,5822	3,5873	3,5924	3,5975	3,6025	3,6075	3,6124	3,6174	3,6222	3,6271	3,6319	3,6367	3,6414	3,6462	3,6509	3,6555
72,8	3,5844	3,5896	3,5949	3,6	3,6052	3,6103	3,6154	3,6204	3,6254	3,6304	3,6353	3,6402	3,645	3,6499	3,6547	3,6595	3,6642	3,6689	3,6736
72,9	3,6022	3,6075	3,6128	3,6179	3,6231	3,6283	3,6333	3,6384	3,6434	3,6484	3,6534	3,6583	3,6632	3,668	3,6728	3,6776	3,6824	3,6871	3,6918
73	3,6202	3,6255	3,6308	3,636	3,6412	3,6463	3,6514	3,6565	3,6615	3,6665	3,6715	3,6764	3,6813	3,6862	3,691	3,6958	3,7006	3,7054	3,7101
73,1	3,6383	3,6436	3,6489	3,6541	3,6593	3,6645	3,6696	3,6747	3,6797	3,6848	3,6898	3,6947	3,6996	3,7045	3,7093	3,7142	3,719	3,7237	3,7285
73,2	3,6565	3,6618	3,6671	3,6724	3,6776	3,6827	3,6879	3,693	3,6981	3,7031	3,7081	3,7131	3,718	3,7229	3,7278	3,7326	3,7374	3,7422	3,747
73,3	3,6748	3,6801	3,6854	3,6907	3,6959	3,7011	3,7063	3,7114	3,7165	3,7215	3,7266	3,7315	3,7365	3,7414	3,7463	3,7512	3,756	3,7608	3,7656
73,4	3,6931	3,6985	3,7039	3,7091	3,7144	3,7196	3,7248	3,7299	3,735	3,7401	3,7451	3,7501	3,7551	3,76	3,7649	3,7698	3,7747	3,7795	3,7842
73,5	3,7117	3,717	3,7224	3,7277	3,7329	3,7382	3,7434	3,7485	3,7536	3,7587	3,7638	3,7688	3,7738	3,7788	3,7837	3,7886	3,7934	3,7983	3,803
73,6	3,7302	3,7356	3,741	3,7463	3,7516	3,7569	3,7621	3,7672	3,7724	3,7775	3,7826	3,7876	3,7926	3,7976	3,8025	3,8074	3,8123	3,8172	3,822
73,7	3,7489	3,7544	3,7597	3,7651	3,7704	3,7756	3,7809	3,7861	3,7912	3,7964	3,8015	3,8065	3,8115	3,8165	3,8215	3,8264	3,8313	3,8362	3,841
73,8	3,7678	3,7732	3,7786	3,784	3,7893	3,7946	3,7998	3,805	3,8102	3,8153	3,8204	3,8255	3,8306	3,8355	3,8405	3,8455	3,8504	3,8553	3,8601
73,9	3,7866	3,7921	3,7975	3,8029	3,8083	3,8136	3,8188	3,8241	3,8293	3,8344	3,8395	3,8446	3,8497	3,8547	3,8597	3,8646	3,8696	3,8745	3,8793
74	3,8057	3,8111	3,8166	3,822	3,8274	3,8327	3,838	3,8432	3,8484	3,8536	3,8587	3,8638	3,8689	3,874	3,879	3,8839	3,8889	3,8938	3,8987
74,1	3,8248	3,8303	3,8358	3,8412	3,8466	3,8519	3,8572	3,8625	3,8677	3,8729	3,878	3,8832	3,8883	3,8933	3,8984	3,9034	3,9083	3,9133	3,9181
74,2	3,8441	3,8496	3,855	3,8605	3,8659	3,8712	3,8765	3,8818	3,8871	3,8923	3,8975	3,9026	3,9077	3,9128	3,9179	3,9229	3,9278	3,9328	3,9377
74,3	3,8634	3,8689	3,8744	3,8799	3,8853	3,8907	3,896	3,9013	3,9066	3,9118	3,917	3,9222	3,9273	3,9324	3,9375	3,9425	3,9475	3,9524	3,9574
74,4	3,8829	3,8884	3,8939	3,8994	3,9048	3,9102	3,9156	3,9209	3,9262	3,9314	3,9367	3,9418	3,947	3,9521	3,9572	3,9622	3,9672	3,9722	3,9772

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
71	3,3673	3,3716	3,376	3,3803	3,3845	3,3888	3,393	3,3972	3,4014	3,4055	3,4097	3,4138	3,4179	3,4219	3,4259	3,43	3,434	3,4379	3,4419
71,1	3,3837	3,3881	3,3925	3,3968	3,4011	3,4054	3,4096	3,4138	3,418	3,4221	3,4263	3,4304	3,4345	3,4386	3,4426	3,4467	3,4507	3,4547	3,4586
71,2	3,4003	3,4047	3,4091	3,4134	3,4177	3,422	3,4263	3,4305	3,4347	3,4389	3,443	3,4472	3,4513	3,4554	3,4594	3,4634	3,4675	3,4715	3,4755
71,3	3,417	3,4214	3,4258	3,4301	3,4344	3,4387	3,443	3,4473	3,4515	3,4557	3,4598	3,464	3,4681	3,4722	3,4763	3,4803	3,4844	3,4884	3,4924
71,4	3,4338	3,4382	3,4426	3,4469	3,4513	3,4556	3,4599	3,4641	3,4684	3,4726	3,4767	3,4809	3,485	3,4891	3,4932	3,4973	3,5014	3,5054	3,5094
71,5	3,4506	3,455	3,4594	3,4638	3,4682	3,4725	3,4768	3,4811	3,4853	3,4895	3,4937	3,4979	3,502	3,5062	3,5103	3,5144	3,5184	3,5225	3,5265
71,6	3,4676	3,472	3,4764	3,4808	3,4852	3,4895	3,4938	3,4981	3,5024	3,5066	3,5108	3,515	3,5192	3,5233	3,5274	3,5315	3,5356	3,5397	3,5437
71,7	3,4846	3,489	3,4935	3,4979	3,5022	3,5066	3,511	3,5152	3,5195	3,5238	3,528	3,5322	3,5364	3,5405	3,5447	3,5488	3,5529	3,5569	3,561
71,8	3,5017	3,5062	3,5106	3,5151	3,5195	3,5238	3,5282	3,5325	3,5368	3,541	3,5453	3,5495	3,5537	3,5579	3,562	3,5661	3,5702	3,5743	3,5784
71,9	3,519	3,5234	3,5279	3,5323	3,5367	3,5411	3,5455	3,5498	3,5541	3,5584	3,5627	3,5669	3,5711	3,5753	3,5794	3,5835	3,5877	3,5918	3,5959
72	3,5363	3,5408	3,5452	3,5497	3,5541	3,5585	3,5629	3,5672	3,5715	3,5758	3,5801	3,5843	3,5886	3,5928	3,5969	3,6011	3,6052	3,6093	3,6134
72,1	3,5537	3,5582	3,5627	3,5671	3,5716	3,576	3,5804	3,5847	3,5891	3,5934	3,5977	3,6019	3,6062	3,6104	3,6146	3,6187	3,6229	3,627	3,6311
72,2	3,5712	3,5757	3,5802	3,5847	3,5892	3,5936	3,598	3,6023	3,6067	3,611	3,6153	3,6196	3,6238	3,6281	3,6323	3,6365	3,6406	3,6447	3,6488
72,3	3,5888	3,5933	3,5978	3,6024	3,6068	3,6112	3,6157	3,6201	3,6244	3,6288	3,6331	3,6374	3,6416	3,6459	3,6501	3,6543	3,6584	3,6626	3,6667
72,4	3,6065	3,611	3,6156	3,6201	3,6246	3,629	3,6334	3,6379	3,6422	3,6466	3,6509	3,6552	3,6595	3,6638	3,668	3,6722	3,6764	3,6805	3,6847
72,5	3,6243	3,6289	3,6334	3,6379	3,6424	3,6469	3,6513	3,6558	3,6601	3,6645	3,6689	3,6732	3,6775	3,6817	3,686	3,6902	3,6944	3,6986	3,7028
72,6	3,6422	3,6468	3,6513	3,6559	3,6604	3,6649	3,6693	3,6738	3,6782	3,6826	3,6869	3,6913	3,6956	3,6998	3,7041	3,7084	3,7126	3,7168	3,7209
72,7	3,6602	3,6648	3,6694	3,6739	3,6785	3,683	3,6874	3,6919	3,6963	3,7007	3,7051	3,7094	3,7138	3,7181	3,7223	3,7266	3,7308	3,735	3,7392
72,8	3,6783	3,6829	3,6875	3,6921	3,6966	3,7011	3,7056	3,7101	3,7145	3,7189	3,7233	3,7277	3,732	3,7363	3,7406	3,7449	3,7491	3,7534	3,7575
72,9	3,6965	3,7011	3,7057	3,7103	3,7149	3,7194	3,7239	3,7284	3,7328	3,7373	3,7417	3,7461	3,7504	3,7547	3,7591	3,7633	3,7676	3,7718	3,776
73	3,7148	3,7194	3,7241	3,7287	3,7332	3,7378	3,7423	3,7468	3,7513	3,7557	3,7601	3,7645	3,7689	3,7732	3,7776	3,7819	3,7861	3,7904	3,7946
73,1	3,7332	3,7379	3,7425	3,7471	3,7517	3,7563	3,7608	3,7653	3,7698	3,7743	3,7787	3,7831	3,7875	3,7919	3,7962	3,8005	3,8048	3,809	3,8133
73,2	3,7517	3,7564	3,761	3,7657	3,7703	3,7748	3,7794	3,7839	3,7884	3,7929	3,7974	3,8018	3,8062	3,8106	3,8149	3,8192	3,8235	3,8278	3,832
73,3	3,7703	3,775	3,7797	3,7843	3,789	3,7935	3,7981	3,8027	3,8072	3,8117	3,8161	3,8205	3,825	3,8294	3,8337	3,8381	3,8424	3,8467	3,851
73,4	3,789	3,7937	3,7984	3,8031	3,8077	3,8123	3,8169	3,8215	3,826	3,8305	3,835	3,8394	3,8439	3,8483	3,8527	3,857	3,8613	3,8657	3,8699
73,5	3,8078	3,8125	3,8173	3,8219	3,8266	3,8312	3,8359	3,8404	3,8449	3,8495	3,854	3,8584	3,8629	3,8673	3,8717	3,8761	3,8804	3,8847	3,889
73,6	3,8267	3,8315	3,8362	3,8409	3,8456	3,8502	3,8549	3,8595	3,864	3,8686	3,873	3,8775	3,882	3,8865	3,8909	3,8952	3,8996	3,9039	3,9082
73,7	3,8458	3,8505	3,8553	3,86	3,8647	3,8694	3,874	3,8786	3,8832	3,8878	3,8923	3,8968	3,9012	3,9057	3,9101	3,9145	3,9189	3,9232	3,9276
73,8	3,8649	3,8697	3,8745	3,8792	3,8839	3,8886	3,8933	3,8979	3,9025	3,907	3,9116	3,9161	3,9206	3,925	3,9294	3,9339	3,9383	3,9427	3,947
73,9	3,8842	3,889	3,8938	3,8985	3,9032	3,9079	3,9126	3,9172	3,9218	3,9264	3,931	3,9355	3,94	3,9445	3,9489	3,9534	3,9578	3,9622	3,9665
74	3,9035	3,9084	3,9132	3,9179	3,9226	3,9274	3,9321	3,9367	3,9413	3,9459	3,9505	3,955	3,9596	3,964	3,9685	3,973	3,9774	3,9818	3,9862
74,1	3,923	3,9278	3,9327	3,9374	3,9422	3,9469	3,9516	3,9563	3,9609	3,9655	3,9701	3,9747	3,9792	3,9837	3,9882	3,9927	3,9971	4,0016	4,0059
74,2	3,9426	3,9475	3,9523	3,9571	3,9618	3,9666	3,9713	3,976	3,9806	3,9853	3,9899	3,9944	3,999	4,0035	4,008	4,0125	4,017	4,0214	4,0258
74,3	3,9623	3,9672	3,972	3,9768	3,9816	3,9863	3,9911	3,9958	4,0005	4,0051	4,0097	4,0143	4,0189	4,0234	4,0279	4,0324	4,0369	4,0413	4,0458
74,4	3,9821	3,987	3,9919	3,9967	4,0015	4,0062	4,011	4,0157	4,0204	4,0251	4,0297	4,0343	4,0389	4,0434	4,048	4,0525	4,057	4,0614	4,0659

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
71	3,4458	3,4497	3,4536	3,4575	3,4613	3,4651	3,4689	3,4728
71,1	3,4626	3,4665	3,4704	3,4743	3,4781	3,482	3,4858	3,4896
71,2	3,4794	3,4834	3,4872	3,4911	3,495	3,4989	3,5027	3,5065
71,3	3,4964	3,5003	3,5042	3,5081	3,512	3,5159	3,5197	3,5235
71,4	3,5134	3,5173	3,5213	3,5252	3,5291	3,533	3,5368	3,5406
71,5	3,5305	3,5344	3,5384	3,5423	3,5463	3,5502	3,554	3,5579
71,6	3,5477	3,5517	3,5557	3,5596	3,5635	3,5674	3,5713	3,5752
71,7	3,565	3,569	3,573	3,577	3,5809	3,5848	3,5887	3,5926
71,8	3,5824	3,5864	3,5904	3,5944	3,5983	3,6023	3,6062	3,6101
71,9	3,5999	3,6039	3,6079	3,6119	3,6159	3,6198	3,6237	3,6277
72	3,6175	3,6215	3,6255	3,6295	3,6335	3,6375	3,6414	3,6454
72,1	3,6352	3,6392	3,6433	3,6473	3,6513	3,6552	3,6592	3,6631
72,2	3,653	3,657	3,6611	3,6651	3,6691	3,6731	3,6771	3,681
72,3	3,6708	3,6749	3,679	3,683	3,687	3,691	3,695	3,699
72,4	3,6888	3,6929	3,697	3,701	3,7051	3,7091	3,7131	3,717
72,5	3,7069	3,711	3,7151	3,7191	3,7232	3,7272	3,7312	3,7352
72,6	3,7251	3,7292	3,7333	3,7374	3,7414	3,7455	3,7495	3,7535
72,7	3,7434	3,7475	3,7516	3,7557	3,7598	3,7638	3,7679	3,7719
72,8	3,7617	3,7659	3,77	3,7741	3,7782	3,7823	3,7863	3,7904
72,9	3,7802	3,7844	3,7885	3,7927	3,7967	3,8008	3,8049	3,8089
73	3,7988	3,803	3,8071	3,8113	3,8154	3,8195	3,8236	3,8276
73,1	3,8175	3,8217	3,8259	3,83	3,8341	3,8383	3,8424	3,8464
73,2	3,8363	3,8405	3,8447	3,8489	3,853	3,8571	3,8612	3,8653
73,3	3,8552	3,8594	3,8636	3,8678	3,872	3,8761	3,8802	3,8843
73,4	3,8742	3,8784	3,8827	3,8869	3,891	3,8952	3,8993	3,9034
73,5	3,8933	3,8976	3,9018	3,906	3,9102	3,9144	3,9185	3,9226
73,6	3,9126	3,9168	3,921	3,9253	3,9295	3,9336	3,9378	3,942
73,7	3,9319	3,9361	3,9404	3,9447	3,9489	3,9531	3,9572	3,9614
73,8	3,9513	3,9556	3,9599	3,9641	3,9684	3,9726	3,9768	3,9809
73,9	3,9709	3,9752	3,9794	3,9838	3,988	3,9922	3,9964	4,0006
74	3,9905	3,9949	3,9992	4,0034	4,0077	4,0119	4,0162	4,0204
74,1	4,0103	4,0146	4,019	4,0233	4,0275	4,0318	4,036	4,0402
74,2	4,0302	4,0345	4,0389	4,0432	4,0475	4,0517	4,056	4,0602
74,3	4,0502	4,0545	4,0589	4,0632	4,0675	4,0718	4,0761	4,0803
74,4	4,0703	4,0747	4,079	4,0834	4,0877	4,092	4,0963	4,1005

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
74,5	2,8081	2,8437	2,8767	2,9075	2,9364	2,9637	2,9895	3,014	3,0374	3,0597	3,0811	3,1016	3,1214	3,1404	3,1588	3,1765	3,1937	3,2104	3,2266
74,6	2,8239	2,8596	2,8927	2,9236	2,9527	2,98	3,0059	3,0305	3,054	3,0764	3,0979	3,1185	3,1383	3,1574	3,1758	3,1936	3,2109	3,2276	3,2439
74,7	2,8398	2,8756	2,9088	2,9399	2,969	2,9965	3,0225	3,0472	3,0707	3,0932	3,1147	3,1354	3,1553	3,1745	3,193	3,2109	3,2282	3,245	3,2613
74,8	2,8557	2,8917	2,9251	2,9562	2,9855	3,013	3,0391	3,0639	3,0875	3,1101	3,1317	3,1525	3,1724	3,1917	3,2102	3,2282	3,2455	3,2624	3,2787
74,9	2,8718	2,9079	2,9414	2,9727	3,002	3,0297	3,0559	3,0808	3,1044	3,1271	3,1488	3,1696	3,1897	3,209	3,2276	3,2456	3,2631	3,28	3,2964
75	2,888	2,9242	2,9578	2,9892	3,0186	3,0464	3,0727	3,0977	3,1215	3,1442	3,166	3,1869	3,207	3,2264	3,2451	3,2631	3,2806	3,2976	3,3141
75,1	2,9042	2,9406	2,9743	3,0058	3,0354	3,0633	3,0897	3,1147	3,1386	3,1614	3,1833	3,2042	3,2244	3,2439	3,2626	3,2808	3,2983	3,3154	3,3319
75,2	2,9206	2,9571	2,991	3,0226	3,0523	3,0802	3,1067	3,1318	3,1558	3,1787	3,2007	3,2217	3,242	3,2615	3,2803	3,2985	3,3161	3,3332	3,3498
75,3	2,9371	2,9737	3,0077	3,0394	3,0692	3,0973	3,1238	3,1491	3,1732	3,1961	3,2181	3,2393	3,2596	3,2792	3,2981	3,3164	3,3341	3,3512	3,3679
75,4	2,9536	2,9904	3,0245	3,0564	3,0863	3,1144	3,1411	3,1664	3,1906	3,2137	3,2357	3,2569	3,2774	3,297	3,316	3,3343	3,3521	3,3693	3,386
75,5	2,9703	3,0072	3,0415	3,0734	3,1034	3,1317	3,1585	3,1839	3,2081	3,2313	3,2534	3,2747	3,2952	3,315	3,334	3,3524	3,3702	3,3875	3,4042
75,6	2,9871	3,0241	3,0585	3,0906	3,1207	3,1491	3,1759	3,2015	3,2258	3,249	3,2713	3,2926	3,3132	3,333	3,3521	3,3706	3,3885	3,4058	3,4226
75,7	3,0039	3,0412	3,0756	3,1078	3,138	3,1665	3,1935	3,2191	3,2435	3,2668	3,2892	3,3106	3,3313	3,3511	3,3703	3,3889	3,4068	3,4242	3,4411
75,8	3,0209	3,0583	3,0929	3,1252	3,1555	3,1841	3,2112	3,2369	3,2614	3,2848	3,3072	3,3287	3,3495	3,3694	3,3887	3,4073	3,4253	3,4427	3,4597
75,9	3,038	3,0755	3,1102	3,1427	3,1731	3,2018	3,229	3,2548	3,2794	3,3029	3,3254	3,347	3,3678	3,3878	3,4071	3,4258	3,4438	3,4614	3,4784
76	3,0552	3,0928	3,1277	3,1603	3,1908	3,2196	3,2469	3,2728	3,2975	3,321	3,3436	3,3653	3,3862	3,4063	3,4256	3,4444	3,4625	3,4801	3,4972
76,1	3,0725	3,1103	3,1453	3,178	3,2086	3,2375	3,2649	3,2909	3,3157	3,3393	3,362	3,3838	3,4047	3,4248	3,4443	3,4631	3,4813	3,499	3,5161
76,2	3,0899	3,1278	3,1629	3,1958	3,2265	3,2555	3,283	3,3091	3,334	3,3577	3,3805	3,4023	3,4233	3,4435	3,4631	3,482	3,5003	3,518	3,5351
76,3	3,1074	3,1455	3,1807	3,2136	3,2445	3,2737	3,3013	3,3274	3,3524	3,3762	3,3991	3,421	3,4421	3,4624	3,482	3,501	3,5193	3,5371	3,5543
76,4	3,125	3,1632	3,1986	3,2317	3,2627	3,2919	3,3196	3,3459	3,3709	3,3948	3,4178	3,4398	3,4609	3,4813	3,501	3,52	3,5384	3,5563	3,5736
76,5	3,1428	3,1811	3,2167	3,2498	3,2809	3,3103	3,3381	3,3644	3,3896	3,4136	3,4366	3,4587	3,4799	3,5004	3,5201	3,5392	3,5577	3,5756	3,593
76,6	3,1606	3,1991	3,2348	3,2681	3,2993	3,3288	3,3566	3,3831	3,4083	3,4324	3,4555	3,4777	3,499	3,5195	3,5394	3,5585	3,5771	3,5951	3,6125
76,7	3,1786	3,2172	3,253	3,2864	3,3178	3,3473	3,3753	3,4019	3,4272	3,4514	3,4746	3,4968	3,5182	3,5388	3,5587	3,578	3,5966	3,6146	3,6321
76,8	3,1967	3,2354	3,2713	3,3049	3,3364	3,366	3,3941	3,4208	3,4462	3,4705	3,4938	3,5161	3,5376	3,5583	3,5782	3,5975	3,6162	3,6343	3,6519
76,9	3,2148	3,2537	3,2898	3,3235	3,3551	3,3849	3,4131	3,4398	3,4653	3,4897	3,513	3,5354	3,557	3,5778	3,5978	3,6172	3,6359	3,6541	3,6718
77	3,2331	3,2722	3,3084	3,3422	3,3739	3,4038	3,4321	3,459	3,4846	3,509	3,5325	3,555	3,5766	3,5975	3,6176	3,637	3,6558	3,6741	3,6918
77,1	3,2516	3,2908	3,3271	3,361	3,3929	3,4228	3,4513	3,4782	3,5039	3,5285	3,552	3,5746	3,5963	3,6172	3,6374	3,6569	3,6758	3,6941	3,7119
77,2	3,2701	3,3094	3,3459	3,38	3,4119	3,442	3,4706	3,4976	3,5234	3,5481	3,5717	3,5943	3,6161	3,6371	3,6574	3,677	3,696	3,7143	3,7321
77,3	3,2888	3,3282	3,3649	3,399	3,4311	3,4613	3,49	3,5171	3,543	3,5678	3,5915	3,6142	3,6361	3,6572	3,6775	3,6971	3,7162	3,7346	3,7525
77,4	3,3075	3,3472	3,3839	3,4182	3,4504	3,4808	3,5095	3,5368	3,5628	3,5876	3,6114	3,6342	3,6562	3,6773	3,6977	3,7174	3,7365	3,7551	3,773
77,5	3,3264	3,3662	3,4031	3,4375	3,4698	3,5003	3,5291	3,5565	3,5826	3,6075	3,6314	3,6543	3,6763	3,6976	3,7181	3,7379	3,757	3,7756	3,7936
77,6	3,3454	3,3854	3,4224	3,457	3,4894	3,52	3,5489	3,5764	3,6026	3,6276	3,6516	3,6746	3,6967	3,718	3,7385	3,7584	3,7777	3,7963	3,8144
77,7	3,3645	3,4046	3,4418	3,4765	3,5091	3,5398	3,5688	3,5964	3,6227	3,6478	3,6718	3,6949	3,7171	3,7385	3,7591	3,7791	3,7984	3,8172	3,8353
77,8	3,3838	3,4241	3,4614	3,4962	3,5289	3,5597	3,5888	3,6165	3,6429	3,6681	3,6922	3,7154	3,7377	3,7592	3,7799	3,7999	3,8193	3,8381	3,8563
77,9	3,4032	3,4436	3,481	3,516	3,5488	3,5797	3,609	3,6368	3,6633	3,6886	3,7128	3,736	3,7584	3,78	3,8008	3,8209	3,8403	3,8592	3,8775

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
74,5	3,2423	3,2575	3,2724	3,2869	3,301	3,3148	3,3283	3,3414	3,3543	3,3669	3,3792	3,3913	3,4031	3,4148	3,4261	3,4373	3,4483	3,4591	3,4697
74,6	3,2596	3,275	3,2899	3,3044	3,3186	3,3324	3,3459	3,3592	3,372	3,3847	3,3971	3,4092	3,4211	3,4327	3,4441	3,4554	3,4664	3,4772	3,4879
74,7	3,2771	3,2924	3,3074	3,322	3,3363	3,3502	3,3637	3,3769	3,3899	3,4026	3,415	3,4272	3,4391	3,4508	3,4623	3,4735	3,4846	3,4954	3,5061
74,8	3,2946	3,3101	3,3251	3,3397	3,354	3,368	3,3816	3,3949	3,4079	3,4206	3,4331	3,4453	3,4573	3,469	3,4805	3,4918	3,5029	3,5138	3,5245
74,9	3,3123	3,3278	3,3429	3,3576	3,3719	3,3859	3,3995	3,4129	3,4259	3,4387	3,4512	3,4635	3,4755	3,4873	3,4988	3,5102	3,5213	3,5322	3,543
75	3,3301	3,3456	3,3608	3,3755	3,3899	3,4039	3,4176	3,431	3,4441	3,457	3,4695	3,4818	3,4938	3,5057	3,5172	3,5286	3,5398	3,5508	3,5616
75,1	3,348	3,3636	3,3787	3,3935	3,408	3,4221	3,4358	3,4493	3,4624	3,4753	3,4879	3,5002	3,5123	3,5242	3,5358	3,5472	3,5584	3,5695	3,5803
75,2	3,3659	3,3816	3,3969	3,4117	3,4262	3,4403	3,4541	3,4676	3,4808	3,4937	3,5064	3,5187	3,5309	3,5428	3,5545	3,5659	3,5772	3,5883	3,5991
75,3	3,384	3,3997	3,415	3,43	3,4445	3,4587	3,4726	3,4861	3,4993	3,5123	3,5249	3,5374	3,5496	3,5615	3,5732	3,5847	3,596	3,6071	3,618
75,4	3,4022	3,418	3,4334	3,4483	3,4629	3,4772	3,4911	3,5046	3,5179	3,5309	3,5437	3,5561	3,5684	3,5804	3,5921	3,6037	3,615	3,6261	3,6371
75,5	3,4206	3,4364	3,4518	3,4668	3,4815	3,4957	3,5097	3,5233	3,5367	3,5497	3,5625	3,575	3,5873	3,5993	3,6111	3,6227	3,6341	3,6452	3,6562
75,6	3,439	3,4549	3,4703	3,4854	3,5001	3,5144	3,5285	3,5421	3,5555	3,5686	3,5814	3,594	3,6063	3,6184	3,6302	3,6419	3,6533	3,6645	3,6755
75,7	3,4575	3,4735	3,489	3,5041	3,5188	3,5332	3,5473	3,561	3,5745	3,5876	3,6005	3,6131	3,6254	3,6375	3,6494	3,6611	3,6726	3,6838	3,6949
75,8	3,4762	3,4921	3,5077	3,5229	3,5377	3,5521	3,5663	3,58	3,5935	3,6067	3,6196	3,6323	3,6447	3,6568	3,6688	3,6805	3,692	3,7033	3,7144
75,9	3,4949	3,511	3,5266	3,5418	3,5567	3,5712	3,5853	3,5992	3,6127	3,6259	3,6389	3,6516	3,6641	3,6763	3,6882	3,7	3,7115	3,7229	3,734
76	3,5138	3,5299	3,5456	3,5609	3,5758	3,5904	3,6046	3,6184	3,632	3,6453	3,6583	3,6711	3,6835	3,6958	3,7078	3,7196	3,7312	3,7426	3,7537
76,1	3,5327	3,5489	3,5647	3,58	3,595	3,6096	3,6238	3,6378	3,6514	3,6648	3,6778	3,6906	3,7031	3,7154	3,7275	3,7393	3,751	3,7624	3,7736
76,2	3,5518	3,5681	3,5839	3,5993	3,6143	3,629	3,6433	3,6573	3,6709	3,6843	3,6975	3,7103	3,7229	3,7352	3,7473	3,7592	3,7708	3,7823	3,7936
76,3	3,5711	3,5874	3,6032	3,6187	3,6338	3,6485	3,6629	3,6769	3,6906	3,7041	3,7172	3,7301	3,7427	3,7551	3,7672	3,7791	3,7908	3,8024	3,8137
76,4	3,5904	3,6068	3,6227	3,6382	3,6534	3,6681	3,6825	3,6966	3,7104	3,7239	3,7371	3,75	3,7627	3,7751	3,7873	3,7992	3,811	3,8226	3,8339
76,5	3,6099	3,6263	3,6423	3,6579	3,673	3,6878	3,7023	3,7164	3,7303	3,7438	3,7571	3,77	3,7828	3,7952	3,8075	3,8195	3,8313	3,8429	3,8542
76,6	3,6295	3,6459	3,662	3,6776	3,6929	3,7077	3,7222	3,7364	3,7503	3,7639	3,7772	3,7902	3,803	3,8155	3,8277	3,8398	3,8517	3,8633	3,8747
76,7	3,6491	3,6657	3,6818	3,6975	3,7128	3,7277	3,7423	3,7565	3,7704	3,7841	3,7974	3,8105	3,8233	3,8359	3,8482	3,8603	3,8721	3,8838	3,8953
76,8	3,669	3,6856	3,7017	3,7175	3,7328	3,7478	3,7624	3,7767	3,7907	3,8044	3,8177	3,8309	3,8437	3,8563	3,8687	3,8809	3,8928	3,9045	3,916
76,9	3,6889	3,7056	3,7218	3,7376	3,753	3,768	3,7827	3,7971	3,8111	3,8248	3,8383	3,8514	3,8643	3,877	3,8894	3,9016	3,9136	3,9253	3,9369
77	3,7089	3,7257	3,742	3,7578	3,7733	3,7884	3,8031	3,8175	3,8316	3,8454	3,8589	3,8721	3,885	3,8977	3,9102	3,9224	3,9344	3,9462	3,9578
77,1	3,7292	3,7459	3,7623	3,7782	3,7937	3,8089	3,8236	3,8381	3,8522	3,866	3,8796	3,8929	3,9059	3,9186	3,9311	3,9434	3,9554	3,9673	3,9789
77,2	3,7495	3,7663	3,7827	3,7987	3,8143	3,8295	3,8443	3,8588	3,873	3,8869	3,9005	3,9138	3,9268	3,9396	3,9522	3,9645	3,9766	3,9885	4,0001
77,3	3,7699	3,7868	3,8033	3,8193	3,8349	3,8502	3,8651	3,8797	3,8939	3,9078	3,9214	3,9348	3,9479	3,9607	3,9734	3,9857	3,9979	4,0098	4,0215
77,4	3,7905	3,8075	3,824	3,84	3,8558	3,8711	3,886	3,9006	3,9149	3,9289	3,9426	3,956	3,9691	3,982	3,9947	4,0071	4,0193	4,0312	4,043
77,5	3,8112	3,8282	3,8448	3,8609	3,8767	3,8921	3,9071	3,9217	3,9361	3,9501	3,9638	3,9773	3,9905	4,0034	4,0161	4,0286	4,0408	4,0528	4,0646
77,6	3,832	3,8491	3,8657	3,882	3,8978	3,9132	3,9282	3,943	3,9574	3,9714	3,9852	3,9987	4,012	4,025	4,0377	4,0502	4,0625	4,0746	4,0864
77,7	3,8529	3,8701	3,8868	3,9031	3,919	3,9344	3,9496	3,9644	3,9788	3,9929	4,0067	4,0203	4,0336	4,0467	4,0594	4,072	4,0843	4,0964	4,1083
77,8	3,874	3,8913	3,908	3,9244	3,9403	3,9559	3,971	3,9858	4,0003	4,0145	4,0284	4,042	4,0554	4,0685	4,0813	4,0939	4,1062	4,1184	4,1303
77,9	3,8953	3,9126	3,9294	3,9458	3,9618	3,9774	3,9926	4,0075	4,022	4,0363	4,0502	4,0639	4,0773	4,0904	4,1033	4,1159	4,1283	4,1405	4,1525

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
74,5	3,4801	3,4903	3,5004	3,5104	3,5201	3,5298	3,5393	3,5486	3,5578	3,5669	3,5759	3,5847	3,5934	3,602	3,6105	3,6189	3,6271	3,6353	3,6434
74,6	3,4983	3,5086	3,5187	3,5287	3,5385	3,5481	3,5577	3,567	3,5763	3,5854	3,5944	3,6033	3,612	3,6206	3,6291	3,6376	3,6459	3,6541	3,6622
74,7	3,5166	3,5269	3,5371	3,5471	3,557	3,5666	3,5762	3,5856	3,5949	3,604	3,613	3,6219	3,6307	3,6394	3,6479	3,6564	3,6647	3,673	3,6811
74,8	3,535	3,5454	3,5556	3,5656	3,5755	3,5852	3,5948	3,6043	3,6136	3,6227	3,6318	3,6407	3,6495	3,6582	3,6668	3,6753	3,6836	3,6919	3,7001
74,9	3,5535	3,564	3,5742	3,5842	3,5942	3,6039	3,6135	3,623	3,6323	3,6416	3,6507	3,6596	3,6685	3,6772	3,6858	3,6943	3,7027	3,711	3,7192
75	3,5722	3,5826	3,5929	3,603	3,613	3,6228	3,6324	3,6419	3,6513	3,6605	3,6696	3,6786	3,6875	3,6962	3,7049	3,7134	3,7219	3,7302	3,7384
75,1	3,5909	3,6014	3,6117	3,6219	3,6318	3,6417	3,6514	3,6609	3,6703	3,6796	3,6887	3,6977	3,7066	3,7154	3,7241	3,7327	3,7411	3,7495	3,7578
75,2	3,6098	3,6203	3,6306	3,6408	3,6508	3,6607	3,6704	3,68	3,6895	3,6988	3,7079	3,717	3,7259	3,7347	3,7434	3,752	3,7605	3,7689	3,7772
75,3	3,6288	3,6393	3,6497	3,6599	3,67	3,6798	3,6896	3,6992	3,7087	3,718	3,7272	3,7363	3,7453	3,7541	3,7629	3,7715	3,78	3,7884	3,7968
75,4	3,6478	3,6584	3,6688	3,6791	3,6892	3,6991	3,7089	3,7185	3,7281	3,7374	3,7467	3,7558	3,7648	3,7737	3,7824	3,7911	3,7997	3,8081	3,8165
75,5	3,667	3,6776	3,6881	3,6984	3,7085	3,7185	3,7283	3,738	3,7475	3,7569	3,7662	3,7754	3,7844	3,7933	3,8021	3,8108	3,8194	3,8278	3,8362
75,6	3,6864	3,697	3,7075	3,7178	3,728	3,738	3,7478	3,7576	3,7671	3,7766	3,7859	3,7951	3,8041	3,8131	3,8219	3,8306	3,8392	3,8477	3,8561
75,7	3,7058	3,7165	3,727	3,7374	3,7476	3,7576	3,7675	3,7773	3,7869	3,7963	3,8057	3,8149	3,824	3,833	3,8418	3,8506	3,8592	3,8678	3,8762
75,8	3,7253	3,736	3,7466	3,757	3,7672	3,7773	3,7872	3,797	3,8067	3,8162	3,8256	3,8348	3,8439	3,853	3,8619	3,8706	3,8793	3,8879	3,8963
75,9	3,745	3,7557	3,7663	3,7768	3,7871	3,7972	3,8071	3,8169	3,8266	3,8362	3,8456	3,8549	3,864	3,8731	3,882	3,8908	3,8995	3,9081	3,9166
76	3,7647	3,7755	3,7862	3,7967	3,807	3,8171	3,8271	3,837	3,8467	3,8563	3,8657	3,875	3,8842	3,8933	3,9023	3,9111	3,9198	3,9285	3,937
76,1	3,7846	3,7955	3,8062	3,8167	3,827	3,8372	3,8473	3,8571	3,8669	3,8765	3,886	3,8953	3,9046	3,9137	3,9227	3,9315	3,9403	3,949	3,9575
76,2	3,8047	3,8156	3,8263	3,8368	3,8472	3,8574	3,8675	3,8774	3,8872	3,8968	3,9064	3,9158	3,925	3,9341	3,9432	3,9521	3,9609	3,9696	3,9782
76,3	3,8248	3,8357	3,8465	3,8571	3,8675	3,8777	3,8879	3,8978	3,9076	3,9173	3,9269	3,9363	3,9456	3,9548	3,9638	3,9728	3,9816	3,9903	3,9989
76,4	3,8451	3,856	3,8668	3,8774	3,8879	3,8982	3,9084	3,9183	3,9282	3,9379	3,9475	3,9569	3,9663	3,9755	3,9846	3,9935	4,0024	4,0112	4,0198
76,5	3,8654	3,8765	3,8873	3,898	3,9084	3,9188	3,929	3,939	3,9489	3,9586	3,9682	3,9778	3,9871	3,9963	4,0055	4,0145	4,0234	4,0321	4,0408
76,6	3,8859	3,897	3,9078	3,9186	3,9291	3,9395	3,9497	3,9598	3,9697	3,9795	3,9891	3,9986	4,008	4,0173	4,0265	4,0355	4,0444	4,0533	4,062
76,7	3,9066	3,9177	3,9286	3,9393	3,9499	3,9603	3,9706	3,9806	3,9906	4,0004	4,0102	4,0197	4,0291	4,0384	4,0476	4,0567	4,0656	4,0745	4,0832
76,8	3,9273	3,9385	3,9494	3,9602	3,9708	3,9812	3,9915	4,0017	4,0117	4,0215	4,0313	4,0409	4,0503	4,0597	4,0689	4,078	4,087	4,0958	4,1046
76,9	3,9482	3,9594	3,9704	3,9812	3,9918	4,0023	4,0127	4,0228	4,0329	4,0428	4,0526	4,0621	4,0717	4,081	4,0903	4,0994	4,1084	4,1173	4,1261
77	3,9692	3,9805	3,9915	4,0023	4,013	4,0236	4,0339	4,0441	4,0542	4,0641	4,0739	4,0836	4,0931	4,1025	4,1118	4,121	4,1301	4,139	4,1478
77,1	3,9904	4,0016	4,0127	4,0236	4,0343	4,0449	4,0553	4,0656	4,0756	4,0856	4,0955	4,1051	4,1147	4,1241	4,1335	4,1427	4,1518	4,1607	4,1696
77,2	4,0116	4,023	4,034	4,045	4,0557	4,0664	4,0768	4,0871	4,0972	4,1072	4,1171	4,1268	4,1365	4,1459	4,1553	4,1645	4,1736	4,1826	4,1915
77,3	4,033	4,0444	4,0555	4,0665	4,0773	4,088	4,0984	4,1088	4,119	4,129	4,1389	4,1486	4,1583	4,1678	4,1772	4,1865	4,1956	4,2046	4,2136
77,4	4,0546	4,0659	4,0771	4,0882	4,099	4,1097	4,1202	4,1306	4,1408	4,1509	4,1608	4,1706	4,1803	4,1898	4,1993	4,2086	4,2178	4,2268	4,2358
77,5	4,0763	4,0877	4,0989	4,11	4,1208	4,1316	4,1421	4,1525	4,1628	4,1729	4,1829	4,1927	4,2024	4,212	4,2214	4,2308	4,24	4,2491	4,2581
77,6	4,098	4,1095	4,1208	4,1319	4,1428	4,1536	4,1642	4,1746	4,1849	4,1951	4,2051	4,215	4,2247	4,2343	4,2438	4,2532	4,2624	4,2716	4,2806
77,7	4,12	4,1315	4,1428	4,1539	4,1649	4,1757	4,1864	4,1968	4,2072	4,2174	4,2274	4,2373	4,2471	4,2567	4,2663	4,2757	4,285	4,2941	4,3032
77,8	4,1421	4,1536	4,165	4,1762	4,1872	4,198	4,2087	4,2192	4,2296	4,2398	4,2499	4,2598	4,2696	4,2793	4,2889	4,2983	4,3077	4,3169	4,326
77,9	4,1643	4,1759	4,1873	4,1985	4,2095	4,2204	4,2311	4,2417	4,2521	4,2624	4,2725	4,2825	4,2923	4,302	4,3116	4,3211	4,3305	4,3397	4,3489

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
74,5	3,6514	3,6593	3,6671	3,6748	3,6824	3,69	3,6975	3,7048	3,7121	3,7194	3,7265	3,7336	3,7406	3,7476	3,7544	3,7612	3,768	3,7747	3,7813
74,6	3,6702	3,6781	3,6859	3,6937	3,7014	3,7089	3,7164	3,7238	3,7312	3,7384	3,7456	3,7527	3,7597	3,7667	3,7736	3,7804	3,7872	3,7939	3,8005
74,7	3,6891	3,6971	3,7049	3,7127	3,7204	3,728	3,7355	3,7429	3,7503	3,7575	3,7648	3,7719	3,7789	3,786	3,7928	3,7997	3,8065	3,8132	3,8199
74,8	3,7082	3,7161	3,724	3,7318	3,7395	3,7472	3,7547	3,7621	3,7695	3,7768	3,7841	3,7912	3,7983	3,8053	3,8123	3,8191	3,826	3,8327	3,8394
74,9	3,7273	3,7353	3,7432	3,751	3,7588	3,7664	3,774	3,7815	3,7889	3,7962	3,8035	3,8107	3,8177	3,8248	3,8318	3,8387	3,8455	3,8523	3,859
75	3,7465	3,7546	3,7625	3,7704	3,7781	3,7858	3,7934	3,8009	3,8083	3,8157	3,823	3,8302	3,8373	3,8444	3,8514	3,8583	3,8652	3,872	3,8787
75,1	3,7659	3,774	3,7819	3,7898	3,7976	3,8053	3,8129	3,8205	3,8279	3,8353	3,8426	3,8498	3,857	3,8641	3,8711	3,8781	3,885	3,8918	3,8985
75,2	3,7854	3,7935	3,8015	3,8094	3,8172	3,8249	3,8326	3,8401	3,8476	3,855	3,8624	3,8696	3,8768	3,8839	3,891	3,8979	3,9049	3,9117	3,9185
75,3	3,805	3,8131	3,8211	3,829	3,8369	3,8446	3,8523	3,8599	3,8674	3,8749	3,8822	3,8895	3,8967	3,9038	3,911	3,9179	3,9249	3,9317	3,9385
75,4	3,8247	3,8328	3,8409	3,8488	3,8567	3,8645	3,8722	3,8798	3,8874	3,8948	3,9022	3,9095	3,9168	3,9239	3,931	3,9381	3,945	3,9519	3,9587
75,5	3,8445	3,8527	3,8608	3,8687	3,8767	3,8845	3,8922	3,8999	3,9074	3,9149	3,9223	3,9297	3,9369	3,9441	3,9512	3,9583	3,9652	3,9722	3,979
75,6	3,8644	3,8726	3,8808	3,8888	3,8967	3,9046	3,9123	3,92	3,9276	3,9351	3,9425	3,9499	3,9572	3,9644	3,9716	3,9786	3,9856	3,9926	3,9995
75,7	3,8845	3,8928	3,9009	3,9089	3,9169	3,9248	3,9325	3,9402	3,9479	3,9554	3,9629	3,9702	3,9776	3,9848	3,992	3,9991	4,0061	4,0131	4,02
75,8	3,9047	3,913	3,9211	3,9292	3,9372	3,9451	3,9529	3,9606	3,9683	3,9758	3,9833	3,9907	3,9981	4,0054	4,0126	4,0197	4,0267	4,0337	4,0407
75,9	3,925	3,9333	3,9415	3,9496	3,9576	3,9655	3,9734	3,9811	3,9888	3,9964	4,0039	4,0114	4,0187	4,026	4,0332	4,0404	4,0475	4,0545	4,0614
76	3,9454	3,9537	3,962	3,9701	3,9781	3,9861	3,994	4,0018	4,0094	4,0171	4,0246	4,0321	4,0395	4,0468	4,054	4,0612	4,0684	4,0754	4,0824
76,1	3,9659	3,9743	3,9826	3,9907	3,9988	4,0068	4,0147	4,0225	4,0302	4,0379	4,0455	4,0529	4,0603	4,0677	4,075	4,0822	4,0893	4,0964	4,1034
76,2	3,9866	3,995	4,0033	4,0115	4,0196	4,0276	4,0355	4,0434	4,0511	4,0588	4,0664	4,0739	4,0814	4,0887	4,096	4,1033	4,1104	4,1175	4,1246
76,3	4,0074	4,0158	4,0242	4,0324	4,0405	4,0485	4,0565	4,0644	4,0722	4,0799	4,0875	4,095	4,1025	4,1099	4,1172	4,1245	4,1317	4,1388	4,1458
76,4	4,0283	4,0368	4,0452	4,0534	4,0615	4,0696	4,0776	4,0855	4,0933	4,1011	4,1087	4,1163	4,1238	4,1312	4,1385	4,1458	4,153	4,1602	4,1673
76,5	4,0494	4,0579	4,0663	4,0745	4,0827	4,0908	4,0988	4,1067	4,1146	4,1224	4,13	4,1376	4,1451	4,1526	4,16	4,1673	4,1745	4,1817	4,1888
76,6	4,0706	4,0791	4,0875	4,0958	4,104	4,1121	4,1202	4,1281	4,136	4,1438	4,1515	4,1591	4,1667	4,1742	4,1815	4,1889	4,1962	4,2033	4,2105
76,7	4,0919	4,1004	4,1088	4,1172	4,1254	4,1336	4,1417	4,1496	4,1575	4,1653	4,1731	4,1807	4,1883	4,1958	4,2033	4,2106	4,2179	4,2251	4,2323
76,8	4,1133	4,1218	4,1303	4,1387	4,147	4,1552	4,1633	4,1713	4,1792	4,187	4,1948	4,2025	4,2101	4,2176	4,2251	4,2325	4,2398	4,247	4,2542
76,9	4,1349	4,1434	4,152	4,1604	4,1686	4,1768	4,185	4,193	4,201	4,2089	4,2167	4,2244	4,232	4,2396	4,247	4,2545	4,2618	4,2691	4,2763
77	4,1566	4,1652	4,1737	4,1821	4,1905	4,1987	4,2069	4,215	4,2229	4,2308	4,2386	4,2464	4,2541	4,2616	4,2692	4,2766	4,284	4,2913	4,2985
77,1	4,1784	4,187	4,1956	4,204	4,2124	4,2207	4,2289	4,237	4,245	4,2529	4,2608	4,2685	4,2762	4,2839	4,2914	4,2988	4,3062	4,3136	4,3209
77,2	4,2003	4,209	4,2176	4,2261	4,2345	4,2428	4,251	4,2591	4,2672	4,2751	4,283	4,2908	4,2985	4,3062	4,3138	4,3213	4,3287	4,336	4,3433
77,3	4,2224	4,2312	4,2398	4,2483	4,2567	4,265	4,2733	4,2815	4,2895	4,2975	4,3054	4,3132	4,321	4,3287	4,3363	4,3438	4,3512	4,3586	4,3659
77,4	4,2446	4,2534	4,2621	4,2706	4,2791	4,2874	4,2957	4,3039	4,312	4,32	4,328	4,3358	4,3436	4,3513	4,3589	4,3665	4,3739	4,3814	4,3887
77,5	4,267	4,2758	4,2845	4,2931	4,3016	4,3099	4,3183	4,3265	4,3346	4,3426	4,3506	4,3585	4,3663	4,3741	4,3817	4,3893	4,3968	4,4042	4,4116
77,6	4,2895	4,2983	4,307	4,3157	4,3242	4,3326	4,341	4,3492	4,3573	4,3654	4,3734	4,3814	4,3892	4,3969	4,4046	4,4122	4,4197	4,4272	4,4346
77,7	4,3122	4,321	4,3298	4,3384	4,347	4,3554	4,3638	4,372	4,3803	4,3884	4,3964	4,4043	4,4122	4,42	4,4277	4,4353	4,4429	4,4504	4,4578
77,8	4,3349	4,3438	4,3526	4,3613	4,3699	4,3784	4,3868	4,3951	4,4033	4,4114	4,4195	4,4274	4,4353	4,4432	4,4509	4,4586	4,4661	4,4737	4,4811
77,9	4,3578	4,3668	4,3756	4,3843	4,3929	4,4015	4,4099	4,4182	4,4264	4,4346	4,4427	4,4507	4,4586	4,4665	4,4742	4,4819	4,4895	4,4971	4,5046

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
74,5	3,7878	3,7943	3,8008	3,8072	3,8135	3,8197	3,826	3,8321	3,8383	3,8443	3,8503	3,8563	3,8622	3,8681	3,8739	3,8798	3,8855	3,8912	3,8968
74,6	3,8071	3,8136	3,8201	3,8265	3,8329	3,8392	3,8454	3,8516	3,8577	3,8638	3,8699	3,8759	3,8818	3,8877	3,8935	3,8993	3,9051	3,9108	3,9165
74,7	3,8265	3,8331	3,8395	3,8459	3,8523	3,8587	3,8649	3,8711	3,8773	3,8834	3,8895	3,8955	3,9015	3,9074	3,9132	3,9191	3,9249	3,9306	3,9363
74,8	3,846	3,8526	3,8591	3,8655	3,8719	3,8783	3,8846	3,8908	3,897	3,9031	3,9092	3,9152	3,9212	3,9272	3,933	3,9389	3,9447	3,9504	3,9562
74,9	3,8656	3,8723	3,8787	3,8852	3,8917	3,898	3,9043	3,9106	3,9168	3,923	3,929	3,9351	3,9411	3,9471	3,953	3,9588	3,9647	3,9705	3,9762
75	3,8854	3,892	3,8985	3,9051	3,9115	3,9179	3,9242	3,9305	3,9367	3,9429	3,949	3,9551	3,9611	3,9671	3,973	3,9789	3,9847	3,9906	3,9963
75,1	3,9052	3,9119	3,9184	3,925	3,9314	3,9379	3,9442	3,9505	3,9568	3,9629	3,9691	3,9752	3,9813	3,9872	3,9932	3,9991	4,0049	4,0108	4,0165
75,2	3,9252	3,9319	3,9385	3,945	3,9515	3,958	3,9643	3,9706	3,9769	3,9831	3,9893	3,9954	4,0015	4,0075	4,0135	4,0194	4,0253	4,0311	4,0369
75,3	3,9453	3,952	3,9586	3,9652	3,9717	3,9781	3,9845	3,9909	3,9972	4,0034	4,0096	4,0157	4,0218	4,0279	4,0339	4,0398	4,0457	4,0516	4,0574
75,4	3,9655	3,9722	3,9789	3,9855	3,992	3,9985	4,0049	4,0113	4,0176	4,0238	4,03	4,0362	4,0423	4,0484	4,0544	4,0604	4,0663	4,0722	4,078
75,5	3,9858	3,9926	3,9993	4,0058	4,0124	4,0189	4,0253	4,0317	4,0381	4,0443	4,0506	4,0568	4,0629	4,069	4,075	4,0811	4,087	4,0929	4,0987
75,6	4,0063	4,013	4,0197	4,0263	4,033	4,0395	4,0459	4,0524	4,0587	4,065	4,0713	4,0775	4,0836	4,0897	4,0958	4,1018	4,1078	4,1137	4,1196
75,7	4,0269	4,0336	4,0403	4,047	4,0536	4,0602	4,0666	4,0731	4,0795	4,0858	4,0921	4,0983	4,1045	4,1106	4,1167	4,1227	4,1287	4,1347	4,1406
75,8	4,0475	4,0543	4,0611	4,0678	4,0744	4,081	4,0875	4,0939	4,1003	4,1067	4,113	4,1192	4,1254	4,1316	4,1377	4,1437	4,1498	4,1557	4,1616
75,9	4,0683	4,0752	4,082	4,0886	4,0953	4,1019	4,1084	4,1149	4,1213	4,1277	4,134	4,1403	4,1466	4,1527	4,1588	4,1649	4,1709	4,1769	4,1829
76	4,0893	4,0961	4,1029	4,1097	4,1164	4,1229	4,1295	4,136	4,1425	4,1489	4,1552	4,1615	4,1678	4,1739	4,1801	4,1862	4,1922	4,1983	4,2042
76,1	4,1104	4,1172	4,124	4,1308	4,1375	4,1441	4,1507	4,1572	4,1637	4,1701	4,1765	4,1828	4,1891	4,1953	4,2015	4,2076	4,2137	4,2197	4,2257
76,2	4,1315	4,1384	4,1453	4,152	4,1588	4,1655	4,1721	4,1786	4,1851	4,1915	4,1979	4,2043	4,2106	4,2168	4,223	4,2291	4,2352	4,2413	4,2473
76,3	4,1528	4,1598	4,1666	4,1734	4,1802	4,1869	4,1935	4,2001	4,2066	4,2131	4,2195	4,2258	4,2322	4,2384	4,2446	4,2508	4,2569	4,263	4,269
76,4	4,1743	4,1812	4,1881	4,195	4,2017	4,2084	4,2151	4,2217	4,2282	4,2347	4,2412	4,2475	4,2539	4,2601	4,2664	4,2726	4,2787	4,2848	4,2909
76,5	4,1959	4,2028	4,2098	4,2166	4,2234	4,2301	4,2368	4,2434	4,25	4,2565	4,263	4,2694	4,2757	4,282	4,2883	4,2945	4,3007	4,3068	4,3128
76,6	4,2176	4,2246	4,2315	4,2384	4,2452	4,252	4,2587	4,2653	4,2719	4,2784	4,2849	4,2914	4,2977	4,304	4,3103	4,3165	4,3227	4,3289	4,335
76,7	4,2394	4,2464	4,2534	4,2603	4,2671	4,2739	4,2806	4,2873	4,2939	4,3005	4,307	4,3135	4,3198	4,3262	4,3325	4,3388	4,3449	4,3511	4,3572
76,8	4,2614	4,2684	4,2754	4,2823	4,2892	4,296	4,3027	4,3094	4,3161	4,3227	4,3292	4,3357	4,3421	4,3485	4,3548	4,3611	4,3673	4,3735	4,3796
76,9	4,2834	4,2905	4,2975	4,3045	4,3114	4,3182	4,325	4,3317	4,3384	4,345	4,3516	4,358	4,3645	4,3709	4,3772	4,3835	4,3898	4,396	4,4021
77	4,3057	4,3128	4,3198	4,3268	4,3337	4,3406	4,3474	4,3541	4,3608	4,3674	4,374	4,3805	4,387	4,3934	4,3998	4,4061	4,4124	4,4186	4,4248
77,1	4,328	4,3352	4,3423	4,3492	4,3562	4,3631	4,3699	4,3766	4,3834	4,39	4,3966	4,4032	4,4097	4,4161	4,4225	4,4288	4,4351	4,4414	4,4476
77,2	4,3505	4,3577	4,3648	4,3718	4,3788	4,3857	4,3925	4,3993	4,406	4,4127	4,4194	4,426	4,4324	4,439	4,4454	4,4517	4,458	4,4643	4,4705
77,3	4,3732	4,3804	4,3875	4,3945	4,4015	4,4085	4,4154	4,4221	4,4289	4,4356	4,4423	4,4489	4,4554	4,4619	4,4684	4,4747	4,4811	4,4874	4,4936
77,4	4,396	4,4032	4,4103	4,4174	4,4244	4,4314	4,4383	4,4451	4,4519	4,4586	4,4653	4,4719	4,4785	4,485	4,4915	4,4979	4,5043	4,5106	4,5169
77,5	4,4189	4,4261	4,4333	4,4404	4,4474	4,4544	4,4613	4,4682	4,475	4,4818	4,4885	4,4951	4,5017	4,5082	4,5148	4,5212	4,5276	4,5339	4,5402
77,6	4,4419	4,4492	4,4564	4,4635	4,4706	4,4776	4,4846	4,4915	4,4983	4,505	4,5118	4,5185	4,5251	4,5317	4,5382	4,5446	4,551	4,5574	4,5637
77,7	4,4651	4,4724	4,4797	4,4868	4,4939	4,5009	4,5079	4,5148	4,5217	4,5285	4,5353	4,5419	4,5486	4,5551	4,5617	4,5682	4,5746	4,581	4,5874
77,8	4,4885	4,4958	4,503	4,5102	4,5174	4,5244	4,5314	4,5383	4,5452	4,5521	4,5588	4,5656	4,5722	4,5789	4,5854	4,5919	4,5984	4,6048	4,6111
77,9	4,512	4,5193	4,5266	4,5338	4,5409	4,548	4,5551	4,562	4,5689	4,5758	4,5826	4,5893	4,596	4,6026	4,6092	4,6158	4,6223	4,6287	4,6351

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
74,5	3,9025	3,908	3,9136	3,919	3,9245	3,9299	3,9353	3,9406	3,9459	3,9512	3,9564	3,9616	3,9668	3,9719	3,977	3,9821	3,9871	3,9921	3,9971
74,6	3,9221	3,9277	3,9333	3,9388	3,9442	3,9497	3,9551	3,9604	3,9658	3,9711	3,9763	3,9815	3,9867	3,9918	3,997	4,0021	4,0071	4,0121	4,0171
74,7	3,9419	3,9475	3,9531	3,9587	3,9642	3,9696	3,975	3,9804	3,9857	3,991	3,9963	4,0015	4,0067	4,0119	4,017	4,0221	4,0272	4,0322	4,0373
74,8	3,9619	3,9675	3,9731	3,9786	3,9841	3,9896	3,995	4,0004	4,0058	4,0111	4,0164	4,0216	4,0269	4,0321	4,0372	4,0423	4,0474	4,0525	4,0575
74,9	3,9819	3,9875	3,9931	3,9987	4,0042	4,0097	4,0152	4,0206	4,026	4,0313	4,0366	4,0419	4,0471	4,0523	4,0575	4,0626	4,0678	4,0728	4,0779
75	4,002	4,0077	4,0134	4,0189	4,0245	4,03	4,0355	4,0409	4,0463	4,0516	4,057	4,0623	4,0675	4,0727	4,0779	4,0831	4,0882	4,0933	4,0983
75,1	4,0223	4,028	4,0337	4,0393	4,0448	4,0504	4,0558	4,0613	4,0667	4,0721	4,0774	4,0827	4,088	4,0932	4,0985	4,1036	4,1088	4,1139	4,1189
75,2	4,0427	4,0484	4,0541	4,0597	4,0653	4,0708	4,0763	4,0818	4,0872	4,0927	4,098	4,1033	4,1086	4,1139	4,1191	4,1243	4,1295	4,1346	4,1396
75,3	4,0632	4,0689	4,0746	4,0802	4,0859	4,0914	4,0969	4,1025	4,1079	4,1133	4,1187	4,1241	4,1293	4,1346	4,1399	4,1451	4,1503	4,1554	4,1605
75,4	4,0838	4,0896	4,0953	4,1009	4,1066	4,1122	4,1177	4,1232	4,1287	4,1341	4,1395	4,1449	4,1502	4,1555	4,1608	4,166	4,1712	4,1764	4,1815
75,5	4,1046	4,1103	4,1161	4,1217	4,1274	4,133	4,1386	4,1441	4,1496	4,1551	4,1605	4,1659	4,1712	4,1765	4,1818	4,187	4,1923	4,1974	4,2026
75,6	4,1254	4,1312	4,137	4,1427	4,1483	4,154	4,1595	4,1651	4,1706	4,1761	4,1816	4,1869	4,1923	4,1977	4,2029	4,2082	4,2134	4,2186	4,2238
75,7	4,1464	4,1522	4,158	4,1637	4,1694	4,175	4,1807	4,1863	4,1918	4,1973	4,2027	4,2082	4,2135	4,2189	4,2242	4,2295	4,2347	4,2399	4,2451
75,8	4,1675	4,1734	4,1791	4,1849	4,1906	4,1963	4,2019	4,2075	4,2131	4,2186	4,224	4,2295	4,2349	4,2402	4,2456	4,2509	4,2561	4,2614	4,2666
75,9	4,1888	4,1946	4,2004	4,2062	4,2119	4,2176	4,2233	4,2289	4,2345	4,24	4,2455	4,251	4,2564	4,2617	4,2671	4,2724	4,2777	4,2829	4,2882
76	4,2101	4,216	4,2218	4,2276	4,2334	4,2391	4,2448	4,2504	4,256	4,2615	4,2671	4,2725	4,278	4,2834	4,2888	4,2941	4,2994	4,3047	4,3099
76,1	4,2316	4,2375	4,2434	4,2492	4,255	4,2607	4,2664	4,272	4,2776	4,2832	4,2888	4,2942	4,2997	4,3051	4,3105	4,3159	4,3212	4,3265	4,3317
76,2	4,2532	4,2592	4,265	4,2709	4,2766	4,2824	4,2881	4,2938	4,2994	4,305	4,3106	4,3161	4,3216	4,327	4,3324	4,3378	4,3431	4,3484	4,3538
76,3	4,275	4,2809	4,2868	4,2927	4,2985	4,3043	4,31	4,3157	4,3214	4,3269	4,3325	4,3381	4,3435	4,349	4,3545	4,3599	4,3652	4,3705	4,3758
76,4	4,2969	4,3028	4,3087	4,3146	4,3205	4,3262	4,332	4,3377	4,3434	4,349	4,3546	4,3602	4,3657	4,3712	4,3766	4,382	4,3874	4,3928	4,3981
76,5	4,3189	4,3249	4,3308	4,3367	4,3426	4,3484	4,3541	4,3599	4,3655	4,3712	4,3768	4,3824	4,388	4,3935	4,399	4,4044	4,4097	4,4151	4,4205
76,6	4,341	4,347	4,353	4,3589	4,3648	4,3706	4,3764	4,3822	4,3879	4,3935	4,3992	4,4048	4,4104	4,4159	4,4214	4,4268	4,4322	4,4376	4,443
76,7	4,3633	4,3693	4,3753	4,3812	4,3871	4,393	4,3988	4,4046	4,4103	4,416	4,4217	4,4273	4,4329	4,4384	4,4439	4,4494	4,4548	4,4602	4,4656
76,8	4,3857	4,3918	4,3977	4,4037	4,4096	4,4155	4,4213	4,4271	4,4329	4,4386	4,4443	4,4499	4,4556	4,4611	4,4666	4,4721	4,4776	4,483	4,4884
76,9	4,4083	4,4143	4,4203	4,4263	4,4323	4,4382	4,444	4,4498	4,4556	4,4614	4,4671	4,4727	4,4783	4,4839	4,4895	4,495	4,5005	4,5059	4,5113
77	4,431	4,437	4,4431	4,4491	4,4551	4,461	4,4668	4,4727	4,4785	4,4842	4,49	4,4956	4,5013	4,5069	4,5124	4,518	4,5234	4,5289	4,5344
77,1	4,4538	4,4599	4,4659	4,472	4,4779	4,4839	4,4898	4,4956	4,5015	4,5072	4,513	4,5187	4,5243	4,53	4,5356	4,5411	4,5466	4,5521	4,5576
77,2	4,4767	4,4828	4,4889	4,495	4,501	4,507	4,5129	4,5188	4,5246	4,5304	4,5361	4,5419	4,5475	4,5532	4,5588	4,5644	4,5699	4,5754	4,5809
77,3	4,4998	4,506	4,5121	4,5182	4,5242	4,5302	4,5361	4,542	4,5479	4,5537	4,5595	4,5652	4,5709	4,5766	4,5822	4,5878	4,5934	4,5989	4,6044
77,4	4,5231	4,5292	4,5354	4,5415	4,5475	4,5535	4,5595	4,5654	4,5713	4,5771	4,5829	4,5887	4,5944	4,6001	4,6057	4,6114	4,6169	4,6225	4,628
77,5	4,5464	4,5527	4,5588	4,5649	4,571	4,577	4,583	4,589	4,5948	4,6007	4,6065	4,6123	4,6181	4,6237	4,6294	4,6351	4,6407	4,6462	4,6518
77,6	4,57	4,5762	4,5824	4,5885	4,5946	4,6006	4,6066	4,6126	4,6185	4,6244	4,6303	4,6361	4,6418	4,6476	4,6533	4,6589	4,6646	4,6701	4,6757
77,7	4,5936	4,5999	4,6061	4,6123	4,6184	4,6244	4,6305	4,6364	4,6424	4,6483	4,6541	4,66	4,6658	4,6715	4,6772	4,6829	4,6885	4,6942	4,6997
77,8	4,6174	4,6237	4,6299	4,6361	4,6422	4,6483	4,6544	4,6604	4,6664	4,6723	4,6782	4,6841	4,6899	4,6957	4,7014	4,707	4,7127	4,7183	4,7239
77,9	4,6414	4,6477	4,6539	4,6602	4,6663	4,6724	4,6785	4,6845	4,6905	4,6965	4,7024	4,7082	4,7141	4,7199	4,7256	4,7313	4,737	4,7427	4,7483

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
74,5	4,002	4,0069	4,0118	4,0167	4,0215	4,0262	4,031	4,0358	4,0405	4,0451	4,0498	4,0544	4,059	4,0636	4,0681	4,0727	4,0771	4,0817	4,0861
74,6	4,0221	4,027	4,0319	4,0368	4,0416	4,0464	4,0511	4,0559	4,0606	4,0653	4,07	4,0746	4,0792	4,0839	4,0884	4,093	4,0975	4,1019	4,1064
74,7	4,0422	4,0472	4,052	4,057	4,0618	4,0666	4,0714	4,0762	4,0809	4,0856	4,0903	4,095	4,0996	4,1042	4,1088	4,1133	4,1179	4,1224	4,1269
74,8	4,0625	4,0674	4,0724	4,0773	4,0821	4,0869	4,0918	4,0966	4,1013	4,106	4,1107	4,1154	4,1201	4,1247	4,1293	4,1339	4,1384	4,1429	4,1474
74,9	4,0829	4,0879	4,0928	4,0977	4,1026	4,1074	4,1123	4,117	4,1219	4,1266	4,1313	4,136	4,1406	4,1453	4,1499	4,1545	4,1591	4,1636	4,1681
75	4,1034	4,1084	4,1133	4,1183	4,1231	4,128	4,1329	4,1377	4,1425	4,1472	4,152	4,1567	4,1614	4,166	4,1707	4,1753	4,1799	4,1844	4,1889
75,1	4,124	4,129	4,134	4,1389	4,1439	4,1487	4,1536	4,1584	4,1633	4,168	4,1728	4,1775	4,1822	4,1869	4,1915	4,1962	4,2007	4,2053	4,2099
75,2	4,1447	4,1498	4,1548	4,1597	4,1646	4,1696	4,1744	4,1793	4,1841	4,1889	4,1937	4,1984	4,2032	4,2078	4,2125	4,2171	4,2217	4,2263	4,2309
75,3	4,1656	4,1706	4,1756	4,1806	4,1856	4,1905	4,1954	4,2003	4,2051	4,2099	4,2147	4,2195	4,2242	4,2289	4,2336	4,2382	4,2429	4,2475	4,2521
75,4	4,1866	4,1916	4,1967	4,2017	4,2067	4,2116	4,2165	4,2214	4,2263	4,2311	4,2359	4,2407	4,2454	4,2501	4,2548	4,2595	4,2641	4,2688	4,2733
75,5	4,2077	4,2128	4,2178	4,2228	4,2278	4,2328	4,2377	4,2426	4,2475	4,2524	4,2571	4,262	4,2667	4,2715	4,2762	4,2809	4,2855	4,2902	4,2948
75,6	4,2289	4,234	4,2391	4,2441	4,2491	4,2541	4,2591	4,264	4,2689	4,2737	4,2786	4,2834	4,2882	4,2929	4,2976	4,3023	4,307	4,3117	4,3163
75,7	4,2503	4,2554	4,2605	4,2655	4,2706	4,2755	4,2806	4,2855	4,2904	4,2953	4,3001	4,3049	4,3097	4,3145	4,3192	4,324	4,3287	4,3333	4,338
75,8	4,2718	4,2769	4,282	4,2871	4,2921	4,2971	4,3021	4,3071	4,312	4,3169	4,3218	4,3266	4,3314	4,3362	4,341	4,3457	4,3504	4,3551	4,3597
75,9	4,2934	4,2985	4,3037	4,3087	4,3138	4,3188	4,3238	4,3288	4,3338	4,3387	4,3436	4,3484	4,3533	4,358	4,3628	4,3676	4,3723	4,377	4,3817
76	4,3151	4,3203	4,3254	4,3305	4,3356	4,3407	4,3457	4,3507	4,3557	4,3606	4,3655	4,3704	4,3752	4,38	4,3848	4,3896	4,3943	4,399	4,4037
76,1	4,337	4,3422	4,3473	4,3524	4,3575	4,3626	4,3677	4,3727	4,3777	4,3826	4,3875	4,3924	4,3973	4,4022	4,4069	4,4117	4,4165	4,4212	4,4259
76,2	4,359	4,3642	4,3694	4,3745	4,3796	4,3847	4,3898	4,3948	4,3998	4,4047	4,4097	4,4146	4,4195	4,4244	4,4292	4,434	4,4388	4,4435	4,4483
76,3	4,3811	4,3863	4,3915	4,3967	4,4018	4,407	4,412	4,4171	4,4221	4,427	4,432	4,4369	4,4418	4,4467	4,4516	4,4564	4,4612	4,466	4,4707
76,4	4,4033	4,4086	4,4138	4,419	4,4242	4,4293	4,4344	4,4395	4,4445	4,4495	4,4544	4,4594	4,4643	4,4692	4,4741	4,4789	4,4837	4,4885	4,4933
76,5	4,4258	4,431	4,4363	4,4415	4,4466	4,4518	4,4569	4,462	4,467	4,472	4,477	4,482	4,4869	4,4918	4,4967	4,5016	4,5064	4,5112	4,516
76,6	4,4483	4,4536	4,4588	4,464	4,4692	4,4744	4,4795	4,4846	4,4897	4,4947	4,4997	4,5047	4,5097	4,5146	4,5195	4,5244	4,5292	4,534	4,5388
76,7	4,4709	4,4762	4,4815	4,4868	4,492	4,4972	4,5023	4,5074	4,5125	4,5176	4,5226	4,5276	4,5326	4,5375	4,5424	4,5473	4,5522	4,557	4,5618
76,8	4,4938	4,4991	4,5044	4,5096	4,5149	4,52	4,5252	4,5304	4,5354	4,5405	4,5456	4,5506	4,5556	4,5606	4,5655	4,5704	4,5753	4,5801	4,585
76,9	4,5167	4,5221	4,5274	4,5326	4,5379	4,5431	4,5483	4,5534	4,5585	4,5637	4,5687	4,5737	4,5788	4,5837	4,5887	4,5936	4,5985	4,6034	4,6082
77	4,5398	4,5451	4,5505	4,5558	4,561	4,5662	4,5715	4,5766	4,5818	4,5869	4,592	4,597	4,602	4,607	4,612	4,617	4,6219	4,6268	4,6317
77,1	4,563	4,5683	4,5737	4,579	4,5843	4,5896	4,5948	4,6	4,6051	4,6103	4,6154	4,6204	4,6255	4,6305	4,6355	4,6404	4,6454	4,6503	4,6552
77,2	4,5863	4,5917	4,5971	4,6025	4,6078	4,613	4,6182	4,6235	4,6287	4,6338	4,6389	4,644	4,6491	4,6541	4,6591	4,6641	4,6691	4,674	4,6789
77,3	4,6098	4,6153	4,6207	4,626	4,6313	4,6366	4,6419	4,6471	4,6523	4,6575	4,6626	4,6677	4,6728	4,6779	4,6829	4,6879	4,6928	4,6978	4,7027
77,4	4,6335	4,6389	4,6443	4,6497	4,655	4,6604	4,6656	4,6709	4,6761	4,6813	4,6864	4,6916	4,6967	4,7017	4,7068	4,7118	4,7168	4,7218	4,7267
77,5	4,6572	4,6627	4,6682	4,6735	4,6789	4,6842	4,6895	4,6948	4,7	4,7052	4,7104	4,7156	4,7207	4,7258	4,7309	4,7359	4,7409	4,7459	4,7508
77,6	4,6812	4,6867	4,6921	4,6975	4,7029	4,7083	4,7136	4,7189	4,7241	4,7294	4,7345	4,7397	4,7449	4,75	4,755	4,7601	4,7651	4,7701	4,7751
77,7	4,7053	4,7107	4,7162	4,7217	4,7271	4,7324	4,7378	4,7431	4,7483	4,7536	4,7588	4,764	4,7692	4,7743	4,7794	4,7845	4,7895	4,7945	4,7995
77,8	4,7295	4,735	4,7405	4,7459	4,7514	4,7567	4,7621	4,7674	4,7727	4,778	4,7833	4,7884	4,7936	4,7987	4,8039	4,809	4,814	4,8191	4,8241
77,9	4,7539	4,7594	4,7649	4,7704	4,7758	4,7812	4,7866	4,7919	4,7973	4,8025	4,8078	4,813	4,8182	4,8234	4,8285	4,8336	4,8387	4,8438	4,8488

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
74,5	4,0905	4,0949	4,0993	4,1037	4,108	4,1123	4,1166	4,1209
74,6	4,1109	4,1153	4,1197	4,1241	4,1284	4,1327	4,137	4,1413
74,7	4,1313	4,1357	4,1402	4,1446	4,1489	4,1533	4,1576	4,1619
74,8	4,1519	4,1564	4,1608	4,1652	4,1695	4,1739	4,1782	4,1826
74,9	4,1726	4,1771	4,1815	4,1859	4,1903	4,1947	4,1991	4,2034
75	4,1934	4,1979	4,2024	4,2068	4,2112	4,2156	4,22	4,2243
75,1	4,2144	4,2189	4,2233	4,2278	4,2322	4,2366	4,241	4,2454
75,2	4,2354	4,2399	4,2444	4,2489	4,2533	4,2578	4,2622	4,2665
75,3	4,2566	4,2611	4,2657	4,2701	4,2746	4,279	4,2835	4,2878
75,4	4,2779	4,2825	4,287	4,2915	4,296	4,3004	4,3048	4,3092
75,5	4,2994	4,3039	4,3085	4,313	4,3175	4,3219	4,3264	4,3308
75,6	4,3209	4,3255	4,3301	4,3346	4,3391	4,3435	4,348	4,3525
75,7	4,3426	4,3472	4,3518	4,3563	4,3608	4,3653	4,3698	4,3743
75,8	4,3644	4,369	4,3736	4,3781	4,3827	4,3872	4,3917	4,3962
75,9	4,3864	4,391	4,3956	4,4002	4,4047	4,4092	4,4137	4,4182
76	4,4084	4,4131	4,4177	4,4223	4,4268	4,4314	4,4359	4,4404
76,1	4,4306	4,4353	4,4399	4,4445	4,4491	4,4537	4,4582	4,4627
76,2	4,4529	4,4576	4,4623	4,4669	4,4715	4,4761	4,4807	4,4852
76,3	4,4754	4,4801	4,4848	4,4894	4,4941	4,4986	4,5032	4,5077
76,4	4,498	4,5027	4,5074	4,5121	4,5167	4,5213	4,5259	4,5305
76,5	4,5207	4,5255	4,5302	4,5348	4,5395	4,5441	4,5487	4,5533
76,6	4,5436	4,5483	4,5531	4,5578	4,5624	4,5671	4,5717	4,5763
76,7	4,5666	4,5714	4,5761	4,5808	4,5855	4,5902	4,5948	4,5994
76,8	4,5897	4,5945	4,5993	4,604	4,6087	4,6134	4,6181	4,6227
76,9	4,6131	4,6178	4,6226	4,6274	4,6321	4,6368	4,6414	4,6461
77	4,6365	4,6413	4,6461	4,6508	4,6556	4,6603	4,665	4,6696
77,1	4,66	4,6649	4,6697	4,6745	4,6792	4,684	4,6886	4,6933
77,2	4,6838	4,6886	4,6934	4,6982	4,703	4,7077	4,7125	4,7172
77,3	4,7076	4,7125	4,7173	4,7221	4,7269	4,7317	4,7364	4,7411
77,4	4,7316	4,7365	4,7413	4,7462	4,751	4,7557	4,7605	4,7652
77,5	4,7558	4,7606	4,7655	4,7704	4,7752	4,78	4,7848	4,7895
77,6	4,78	4,785	4,7898	4,7947	4,7996	4,8044	4,8092	4,8139
77,7	4,8045	4,8094	4,8143	4,8192	4,8241	4,8289	4,8337	4,8385
77,8	4,8291	4,834	4,839	4,8438	4,8487	4,8536	4,8584	4,8632
77,9	4,8538	4,8588	4,8637	4,8687	4,8735	4,8784	4,8832	4,8881

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
78	3,4227	3,4632	3,5008	3,5359	3,5689	3,5999	3,6293	3,6572	3,6838	3,7091	3,7335	3,7568	3,7793	3,8009	3,8218	3,842	3,8615	3,8804	3,8988
78,1	3,4423	3,4831	3,5208	3,556	3,589	3,6202	3,6497	3,6777	3,7044	3,7299	3,7543	3,7777	3,8003	3,8219	3,8429	3,8632	3,8828	3,9018	3,9202
78,2	3,4621	3,5029	3,5408	3,5762	3,6094	3,6406	3,6703	3,6983	3,7251	3,7507	3,7752	3,7987	3,8214	3,8431	3,8642	3,8845	3,9042	3,9232	3,9418
78,3	3,482	3,523	3,561	3,5965	3,6298	3,6612	3,6909	3,7191	3,746	3,7717	3,7963	3,8199	3,8426	3,8645	3,8856	3,906	3,9258	3,9449	3,9635
78,4	3,502	3,5432	3,5813	3,617	3,6504	3,6819	3,7117	3,7401	3,767	3,7928	3,8175	3,8412	3,864	3,8859	3,9071	3,9276	3,9474	3,9666	3,9853
78,5	3,5221	3,5635	3,6018	3,6375	3,6711	3,7027	3,7327	3,7611	3,7882	3,814	3,8388	3,8626	3,8855	3,9075	3,9288	3,9494	3,9693	3,9886	4,0073
78,6	3,5424	3,5839	3,6224	3,6583	3,692	3,7237	3,7537	3,7823	3,8095	3,8354	3,8603	3,8842	3,9071	3,9293	3,9507	3,9713	3,9913	4,0106	4,0294
78,7	3,5628	3,6045	3,6431	3,6791	3,7129	3,7448	3,775	3,8036	3,8309	3,857	3,8819	3,9059	3,929	3,9512	3,9726	3,9933	4,0133	4,0328	4,0516
78,8	3,5834	3,6252	3,6639	3,7001	3,734	3,766	3,7963	3,8251	3,8525	3,8786	3,9037	3,9278	3,9509	3,9732	3,9947	4,0155	4,0356	4,0551	4,074
78,9	3,604	3,646	3,6849	3,7212	3,7553	3,7874	3,8178	3,8467	3,8742	3,9004	3,9256	3,9498	3,973	3,9954	4,0169	4,0378	4,058	4,0776	4,0966
79	3,6249	3,667	3,706	3,7425	3,7767	3,8089	3,8394	3,8684	3,896	3,9224	3,9476	3,9719	3,9952	4,0176	4,0393	4,0603	4,0806	4,1002	4,1193
79,1	3,6458	3,6881	3,7273	3,7639	3,7982	3,8306	3,8612	3,8903	3,918	3,9445	3,9698	3,9942	4,0176	4,0401	4,0619	4,0829	4,1032	4,123	4,1421
79,2	3,6669	3,7093	3,7487	3,7854	3,8199	3,8524	3,8831	3,9123	3,9401	3,9667	3,9921	4,0166	4,0401	4,0627	4,0846	4,1057	4,1261	4,1459	4,1651
79,3	3,6881	3,7307	3,7703	3,8071	3,8417	3,8743	3,9052	3,9345	3,9624	3,9891	4,0146	4,0391	4,0627	4,0855	4,1074	4,1286	4,1491	4,169	4,1883
79,4	3,7095	3,7523	3,7919	3,829	3,8637	3,8964	3,9274	3,9568	3,9849	4,0116	4,0372	4,0619	4,0855	4,1083	4,1304	4,1516	4,1722	4,1922	4,2115
79,5	3,731	3,774	3,8138	3,8509	3,8858	3,9187	3,9498	3,9793	4,0074	4,0343	4,06	4,0847	4,1085	4,1314	4,1535	4,1748	4,1955	4,2155	4,235
79,6	3,7527	3,7958	3,8358	3,8731	3,9081	3,9411	3,9722	4,0019	4,0301	4,0571	4,0829	4,1077	4,1316	4,1546	4,1768	4,1982	4,2189	4,239	4,2586
79,7	3,7745	3,8178	3,8579	3,8953	3,9305	3,9636	3,9949	4,0247	4,053	4,0801	4,106	4,1309	4,1549	4,1779	4,2002	4,2217	4,2426	4,2627	4,2823
79,8	3,7964	3,8399	3,8801	3,9177	3,953	3,9862	4,0177	4,0476	4,076	4,1032	4,1293	4,1542	4,1783	4,2014	4,2238	4,2454	4,2663	4,2865	4,3062
79,9	3,8185	3,8621	3,9026	3,9403	3,9757	4,0091	4,0406	4,0706	4,0992	4,1265	4,1526	4,1777	4,2018	4,2251	4,2475	4,2692	4,2902	4,3105	4,3303
80	3,8407	3,8845	3,9251	3,963	3,9986	4,032	4,0638	4,0938	4,1225	4,1499	4,1762	4,2013	4,2256	4,2489	4,2714	4,2932	4,3143	4,3347	4,3545
80,1	3,8631	3,9071	3,9478	3,9859	4,0216	4,0552	4,087	4,1172	4,146	4,1735	4,1998	4,2252	4,2494	4,2729	4,2955	4,3173	4,3385	4,3589	4,3788
80,2	3,8857	3,9298	3,9707	4,0089	4,0447	4,0785	4,1104	4,1407	4,1697	4,1973	4,2237	4,2491	4,2735	4,297	4,3197	4,3416	4,3629	4,3835	4,4034
80,3	3,9083	3,9527	3,9937	4,0321	4,068	4,1019	4,134	4,1644	4,1934	4,2212	4,2477	4,2732	4,2977	4,3213	4,3441	4,3661	4,3874	4,408	4,4281
80,4	3,9312	3,9757	4,0169	4,0554	4,0915	4,1255	4,1577	4,1883	4,2174	4,2452	4,2719	4,2974	4,322	4,3457	4,3686	4,3907	4,4121	4,4328	4,4529
80,5	3,9542	3,9988	4,0402	4,0789	4,1151	4,1493	4,1816	4,2123	4,2415	4,2694	4,2962	4,3219	4,3466	4,3704	4,3933	4,4155	4,437	4,4578	4,478
80,6	3,9774	4,0222	4,0638	4,1025	4,1389	4,1732	4,2056	4,2365	4,2658	4,2938	4,3207	4,3465	4,3713	4,3951	4,4182	4,4405	4,462	4,4829	4,5032
80,7	4,0007	4,0457	4,0874	4,1263	4,1628	4,1973	4,2298	4,2608	4,2903	4,3184	4,3453	4,3712	4,3961	4,4201	4,4432	4,4656	4,4872	4,5082	4,5286
80,8	4,0241	4,0693	4,1112	4,1503	4,1869	4,2215	4,2542	4,2853	4,3149	4,3431	4,3702	4,3962	4,4211	4,4452	4,4684	4,4909	4,5126	4,5336	4,5541
80,9	4,0478	4,0931	4,1352	4,1744	4,2112	4,2459	4,2788	4,31	4,3396	4,368	4,3952	4,4213	4,4463	4,4705	4,4938	4,5163	4,5382	4,5593	4,5798
81	4,0716	4,1171	4,1593	4,1987	4,2357	4,2705	4,3034	4,3348	4,3646	4,3931	4,4203	4,4465	4,4717	4,4959	4,5194	4,542	4,5639	4,5851	4,6057
81,1	4,0955	4,1413	4,1836	4,2232	4,2603	4,2952	4,3283	4,3598	4,3897	4,4183	4,4457	4,472	4,4972	4,5216	4,5451	4,5678	4,5897	4,611	4,6317
81,2	4,1196	4,1656	4,2081	4,2478	4,285	4,3202	4,3534	4,3849	4,415	4,4437	4,4711	4,4975	4,5229	4,5473	4,571	4,5937	4,6158	4,6372	4,658
81,3	4,1439	4,19	4,2328	4,2726	4,31	4,3452	4,3786	4,4102	4,4404	4,4693	4,4968	4,5233	4,5488	4,5733	4,597	4,6199	4,6421	4,6635	4,6844
81,4	4,1684	4,2146	4,2576	4,2976	4,3351	4,3705	4,404	4,4358	4,466	4,495	4,5227	4,5493	4,5749	4,5995	4,6233	4,6462	4,6685	4,69	4,7109

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
78	3,9166	3,934	3,9509	3,9673	3,9834	3,999	4,0143	4,0292	4,0438	4,0581	4,0721	4,0859	4,0993	4,1125	4,1254	4,1381	4,1505	4,1628	4,1748
78,1	3,9381	3,9555	3,9725	3,989	4,0051	4,0208	4,0362	4,0512	4,0658	4,0802	4,0942	4,108	4,1215	4,1347	4,1477	4,1604	4,1729	4,1852	4,1973
78,2	3,9598	3,9772	3,9942	4,0108	4,027	4,0428	4,0582	4,0732	4,0879	4,1023	4,1164	4,1302	4,1438	4,157	4,1701	4,1828	4,1954	4,2077	4,2198
78,3	3,9815	3,9991	4,0162	4,0328	4,049	4,0648	4,0803	4,0954	4,1102	4,1246	4,1388	4,1526	4,1662	4,1796	4,1926	4,2055	4,2181	4,2304	4,2426
78,4	4,0034	4,021	4,0382	4,0549	4,0712	4,0871	4,1026	4,1177	4,1325	4,1471	4,1613	4,1752	4,1888	4,2022	4,2153	4,2282	4,2408	4,2533	4,2655
78,5	4,0255	4,0432	4,0604	4,0771	4,0934	4,1094	4,125	4,1402	4,1551	4,1696	4,1839	4,1979	4,2115	4,225	4,2381	4,2511	4,2638	4,2763	4,2885
78,6	4,0477	4,0654	4,0827	4,0995	4,1159	4,1319	4,1475	4,1628	4,1777	4,1924	4,2067	4,2207	4,2344	4,2479	4,2611	4,2741	4,2869	4,2993	4,3117
78,7	4,0699	4,0878	4,1051	4,122	4,1385	4,1546	4,1702	4,1856	4,2006	4,2152	4,2296	4,2437	4,2575	4,271	4,2842	4,2973	4,31	4,3226	4,335
78,8	4,0925	4,1103	4,1277	4,1447	4,1612	4,1774	4,1931	4,2085	4,2235	4,2383	4,2527	4,2668	4,2806	4,2942	4,3075	4,3206	4,3335	4,3461	4,3584
78,9	4,1151	4,133	4,1505	4,1675	4,1841	4,2003	4,2161	4,2315	4,2466	4,2614	4,2759	4,2901	4,304	4,3176	4,331	4,3441	4,3569	4,3696	4,382
79	4,1378	4,1559	4,1734	4,1904	4,2071	4,2234	4,2392	4,2547	4,2699	4,2848	4,2992	4,3135	4,3274	4,3411	4,3545	4,3677	4,3806	4,3933	4,4058
79,1	4,1607	4,1788	4,1964	4,2136	4,2303	4,2466	4,2625	4,2781	4,2933	4,3082	4,3228	4,3371	4,351	4,3648	4,3783	4,3915	4,4044	4,4172	4,4297
79,2	4,1838	4,2019	4,2196	4,2368	4,2536	4,27	4,286	4,3016	4,3169	4,3318	4,3464	4,3608	4,3748	4,3886	4,4021	4,4154	4,4284	4,4412	4,4538
79,3	4,207	4,2252	4,2429	4,2602	4,277	4,2935	4,3095	4,3252	4,3406	4,3556	4,3702	4,3847	4,3988	4,4126	4,4261	4,4395	4,4525	4,4654	4,478
79,4	4,2303	4,2486	4,2664	4,2838	4,3007	4,3172	4,3333	4,3491	4,3644	4,3795	4,3942	4,4087	4,4228	4,4367	4,4503	4,4637	4,4768	4,4898	4,5024
79,5	4,2539	4,2722	4,2901	4,3075	4,3244	4,341	4,3572	4,373	4,3885	4,4035	4,4184	4,4329	4,4471	4,461	4,4747	4,4881	4,5013	4,5142	4,5269
79,6	4,2775	4,2959	4,3139	4,3314	4,3484	4,365	4,3812	4,3971	4,4126	4,4278	4,4427	4,4572	4,4715	4,4855	4,4992	4,5127	4,5259	4,5389	4,5517
79,7	4,3013	4,3198	4,3378	4,3554	4,3725	4,3891	4,4055	4,4214	4,4369	4,4522	4,4671	4,4817	4,496	4,5101	4,5238	4,5374	4,5507	4,5637	4,5765
79,8	4,3253	4,3439	4,3619	4,3796	4,3967	4,4135	4,4298	4,4458	4,4614	4,4767	4,4917	4,5064	4,5208	4,5348	4,5486	4,5623	4,5756	4,5886	4,6015
79,9	4,3494	4,3681	4,3862	4,4039	4,4211	4,4379	4,4543	4,4704	4,4861	4,5014	4,5165	4,5312	4,5456	4,5598	4,5737	4,5873	4,6006	4,6138	4,6267
80	4,3737	4,3924	4,4107	4,4284	4,4457	4,4626	4,479	4,4952	4,5109	4,5263	4,5414	4,5562	4,5707	4,5848	4,5988	4,6125	4,6259	4,6391	4,6521
80,1	4,3982	4,417	4,4353	4,453	4,4704	4,4874	4,5039	4,5201	4,5359	4,5513	4,5665	4,5813	4,5958	4,6101	4,6241	4,6378	4,6513	4,6646	4,6776
80,2	4,4228	4,4416	4,46	4,4779	4,4953	4,5123	4,5289	4,5451	4,561	4,5765	4,5918	4,6066	4,6212	4,6355	4,6496	4,6634	4,6769	4,6902	4,7033
80,3	4,4476	4,4665	4,4849	4,5028	4,5204	4,5374	4,5541	4,5704	4,5863	4,6019	4,6172	4,6321	4,6468	4,6611	4,6752	4,6891	4,7026	4,716	4,7291
80,4	4,4725	4,4915	4,51	4,528	4,5456	4,5627	4,5794	4,5958	4,6118	4,6274	4,6428	4,6578	4,6725	4,6869	4,701	4,7149	4,7285	4,7419	4,7551
80,5	4,4976	4,5167	4,5352	4,5533	4,571	4,5881	4,605	4,6214	4,6374	4,6531	4,6685	4,6836	4,6984	4,7128	4,727	4,741	4,7547	4,7681	4,7813
80,6	4,5228	4,542	4,5607	4,5788	4,5965	4,6138	4,6306	4,6471	4,6633	4,679	4,6945	4,7095	4,7244	4,7389	4,7532	4,7672	4,7809	4,7944	4,8077
80,7	4,5483	4,5675	4,5862	4,6045	4,6222	4,6396	4,6565	4,6731	4,6893	4,7051	4,7205	4,7358	4,7506	4,7652	4,7795	4,7936	4,8073	4,8209	4,8342
80,8	4,5739	4,5932	4,612	4,6303	4,6481	4,6655	4,6825	4,6992	4,7154	4,7313	4,7468	4,7621	4,777	4,7916	4,806	4,8201	4,834	4,8476	4,8609
80,9	4,5997	4,6191	4,638	4,6563	4,6742	4,6917	4,7087	4,7254	4,7417	4,7577	4,7733	4,7886	4,8036	4,8183	4,8327	4,8469	4,8608	4,8744	4,8878
81	4,6257	4,6451	4,664	4,6825	4,7005	4,718	4,7351	4,7519	4,7682	4,7843	4,7999	4,8153	4,8304	4,8451	4,8596	4,8738	4,8877	4,9015	4,9149
81,1	4,6518	4,6713	4,6903	4,7088	4,7269	4,7445	4,7617	4,7785	4,7949	4,811	4,8267	4,8422	4,8572	4,8721	4,8866	4,9009	4,9149	4,9286	4,9422
81,2	4,6781	4,6977	4,7168	4,7354	4,7535	4,7712	4,7884	4,8053	4,8218	4,8379	4,8537	4,8692	4,8844	4,8993	4,9138	4,9282	4,9422	4,9561	4,9696
81,3	4,7046	4,7242	4,7434	4,7621	4,7802	4,798	4,8154	4,8323	4,8488	4,865	4,8809	4,8964	4,9117	4,9266	4,9412	4,9556	4,9697	4,9836	4,9973
81,4	4,7312	4,751	4,7703	4,789	4,8072	4,825	4,8424	4,8594	4,876	4,8923	4,9082	4,9238	4,9391	4,9541	4,9689	4,9833	4,9974	5,0114	5,0251

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
78	4,1867	4,1983	4,2097	4,221	4,2321	4,243	4,2538	4,2643	4,2748	4,2851	4,2953	4,3053	4,3152	4,3249	4,3346	4,344	4,3535	4,3627	4,3719
78,1	4,2092	4,2208	4,2323	4,2436	4,2548	4,2657	4,2765	4,2871	4,2976	4,3079	4,3182	4,3282	4,3381	4,3479	4,3576	4,3671	4,3766	4,3859	4,395
78,2	4,2318	4,2435	4,255	4,2664	4,2775	4,2886	4,2994	4,3101	4,3206	4,331	4,3412	4,3513	4,3612	4,371	4,3808	4,3904	4,3998	4,4091	4,4184
78,3	4,2546	4,2663	4,2779	4,2893	4,3005	4,3115	4,3224	4,3331	4,3437	4,3541	4,3644	4,3745	4,3845	4,3943	4,4041	4,4137	4,4232	4,4326	4,4419
78,4	4,2775	4,2893	4,3009	4,3123	4,3236	4,3347	4,3456	4,3563	4,3669	4,3774	4,3877	4,3978	4,4079	4,4178	4,4276	4,4372	4,4468	4,4562	4,4655
78,5	4,3005	4,3124	4,324	4,3355	4,3468	4,3579	4,3689	4,3797	4,3903	4,4008	4,4112	4,4214	4,4314	4,4414	4,4512	4,4609	4,4705	4,4799	4,4892
78,6	4,3238	4,3357	4,3474	4,3588	4,3702	4,3813	4,3923	4,4032	4,4139	4,4244	4,4348	4,445	4,4552	4,4651	4,475	4,4847	4,4943	4,5038	4,5132
78,7	4,3471	4,3591	4,3708	4,3824	4,3937	4,4049	4,416	4,4269	4,4376	4,4481	4,4586	4,4688	4,479	4,489	4,4989	4,5087	4,5183	4,5278	4,5372
78,8	4,3706	4,3826	4,3944	4,406	4,4174	4,4287	4,4397	4,4507	4,4614	4,4721	4,4825	4,4928	4,503	4,513	4,523	4,5328	4,5424	4,552	4,5614
78,9	4,3943	4,4063	4,4181	4,4298	4,4413	4,4526	4,4636	4,4746	4,4854	4,4961	4,5066	4,5169	4,5272	4,5373	4,5472	4,557	4,5667	4,5763	4,5858
79	4,4181	4,4302	4,442	4,4537	4,4652	4,4766	4,4877	4,4987	4,5096	4,5202	4,5308	4,5412	4,5514	4,5616	4,5716	4,5814	4,5912	4,6008	4,6104
79,1	4,4421	4,4542	4,4661	4,4778	4,4894	4,5008	4,5119	4,523	4,5339	4,5446	4,5552	4,5656	4,5759	4,5861	4,5961	4,6061	4,6158	4,6255	4,635
79,2	4,4662	4,4783	4,4903	4,5021	4,5137	4,5251	4,5364	4,5474	4,5583	4,5691	4,5797	4,5902	4,6006	4,6107	4,6208	4,6308	4,6406	4,6503	4,6599
79,3	4,4904	4,5026	4,5147	4,5265	4,5381	4,5496	4,5609	4,572	4,5829	4,5938	4,6045	4,6149	4,6253	4,6356	4,6457	4,6556	4,6655	4,6752	4,6849
79,4	4,5149	4,5271	4,5392	4,551	4,5627	4,5742	4,5855	4,5967	4,6077	4,6186	4,6293	4,6398	4,6503	4,6605	4,6707	4,6807	4,6906	4,7004	4,7101
79,5	4,5394	4,5518	4,5638	4,5758	4,5875	4,5991	4,6104	4,6216	4,6327	4,6436	4,6543	4,6649	4,6754	4,6857	4,6959	4,7059	4,7158	4,7257	4,7354
79,6	4,5642	4,5765	4,5887	4,6006	4,6124	4,624	4,6354	4,6467	4,6578	4,6687	4,6795	4,6901	4,7006	4,711	4,7212	4,7313	4,7413	4,7511	4,7608
79,7	4,5891	4,6015	4,6137	4,6257	4,6375	4,6491	4,6606	4,6719	4,683	4,694	4,7048	4,7155	4,726	4,7365	4,7467	4,7569	4,7669	4,7767	4,7865
79,8	4,6142	4,6266	4,6389	4,6509	4,6628	4,6744	4,686	4,6973	4,7085	4,7195	4,7304	4,7411	4,7516	4,7621	4,7724	4,7825	4,7926	4,8025	4,8123
79,9	4,6394	4,6519	4,6642	4,6763	4,6882	4,6999	4,7115	4,7229	4,734	4,7451	4,756	4,7668	4,7774	4,7879	4,7982	4,8084	4,8185	4,8285	4,8383
80	4,6648	4,6773	4,6897	4,7018	4,7138	4,7256	4,7371	4,7486	4,7598	4,7709	4,7819	4,7927	4,8033	4,8138	4,8242	4,8345	4,8446	4,8546	4,8644
80,1	4,6904	4,7029	4,7153	4,7275	4,7395	4,7513	4,763	4,7745	4,7858	4,7969	4,8079	4,8187	4,8294	4,84	4,8504	4,8607	4,8708	4,8808	4,8908
80,2	4,7161	4,7287	4,7411	4,7534	4,7654	4,7773	4,789	4,8005	4,8118	4,823	4,8341	4,8449	4,8557	4,8662	4,8767	4,887	4,8972	4,9073	4,9173
80,3	4,742	4,7547	4,7671	4,7794	4,7915	4,8034	4,8151	4,8267	4,8381	4,8493	4,8604	4,8713	4,8821	4,8927	4,9032	4,9136	4,9238	4,9339	4,9439
80,4	4,7681	4,7808	4,7933	4,8056	4,8178	4,8297	4,8415	4,8531	4,8645	4,8758	4,8869	4,8979	4,9087	4,9194	4,9299	4,9403	4,9506	4,9607	4,9708
80,5	4,7943	4,8071	4,8197	4,8321	4,8442	4,8562	4,868	4,8797	4,8912	4,9025	4,9136	4,9246	4,9355	4,9462	4,9568	4,9672	4,9775	4,9877	4,9978
80,6	4,8207	4,8335	4,8462	4,8586	4,8708	4,8829	4,8947	4,9064	4,9179	4,9293	4,9405	4,9516	4,9624	4,9732	4,9838	4,9943	5,0047	5,0149	5,025
80,7	4,8473	4,8602	4,8729	4,8853	4,8976	4,9097	4,9216	4,9334	4,9449	4,9563	4,9675	4,9786	4,9896	5,0004	5,011	5,0216	5,032	5,0422	5,0524
80,8	4,8741	4,887	4,8998	4,9122	4,9246	4,9367	4,9487	4,9604	4,9721	4,9835	4,9948	5,0059	5,0169	5,0278	5,0385	5,049	5,0594	5,0698	5,0799
80,9	4,9011	4,914	4,9268	4,9394	4,9517	4,9639	4,9759	4,9877	4,9994	5,0109	5,0222	5,0333	5,0444	5,0553	5,066	5,0766	5,0871	5,0975	5,1077
81	4,9282	4,9412	4,954	4,9666	4,979	4,9913	5,0033	5,0152	5,0269	5,0384	5,0498	5,061	5,0721	5,083	5,0938	5,1045	5,115	5,1253	5,1356
81,1	4,9555	4,9686	4,9814	4,994	5,0065	5,0188	5,0309	5,0428	5,0546	5,0661	5,0776	5,0888	5,1	5,1109	5,1217	5,1324	5,143	5,1534	5,1637
81,2	4,9829	4,9961	5,009	5,0217	5,0342	5,0465	5,0587	5,0706	5,0824	5,0941	5,1055	5,1168	5,128	5,139	5,1499	5,1606	5,1712	5,1817	5,192
81,3	5,0106	5,0238	5,0368	5,0496	5,0621	5,0745	5,0867	5,0987	5,1105	5,1222	5,1337	5,1451	5,1562	5,1673	5,1782	5,189	5,1996	5,2101	5,2205
81,4	5,0385	5,0517	5,0647	5,0775	5,0902	5,1026	5,1148	5,1269	5,1387	5,1505	5,162	5,1734	5,1846	5,1958	5,2067	5,2175	5,2282	5,2387	5,2492

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
78	4,3809	4,3899	4,3987	4,4075	4,4161	4,4247	4,4331	4,4415	4,4498	4,458	4,4661	4,4741	4,4821	4,49	4,4977	4,5055	4,5131	4,5207	4,5282
78,1	4,4041	4,4131	4,422	4,4308	4,4395	4,4481	4,4565	4,4649	4,4733	4,4815	4,4896	4,4977	4,5057	4,5135	4,5214	4,5291	4,5368	4,5444	4,5519
78,2	4,4275	4,4365	4,4454	4,4543	4,4629	4,4716	4,4801	4,4885	4,4969	4,5051	4,5133	4,5214	4,5294	4,5373	4,5451	4,5529	4,5606	4,5683	4,5758
78,3	4,451	4,46	4,469	4,4779	4,4866	4,4952	4,5038	4,5123	4,5206	4,5289	4,5371	4,5452	4,5533	4,5612	4,5691	4,5769	4,5846	4,5923	4,5999
78,4	4,4747	4,4838	4,4927	4,5016	4,5104	4,5191	4,5277	4,5362	4,5445	4,5528	4,5611	4,5692	4,5773	4,5853	4,5932	4,601	4,6088	4,6165	4,6241
78,5	4,4985	4,5076	4,5166	4,5255	4,5343	4,543	4,5516	4,5602	4,5686	4,5769	4,5852	4,5934	4,6015	4,6095	4,6174	4,6253	4,6331	4,6408	4,6484
78,6	4,5224	4,5316	4,5406	4,5495	4,5584	4,5671	4,5758	4,5843	4,5928	4,6012	4,6095	4,6177	4,6258	4,6338	4,6418	4,6497	4,6575	4,6653	4,6729
78,7	4,5465	4,5557	4,5648	4,5738	4,5826	4,5914	4,6001	4,6087	4,6172	4,6256	4,6339	4,6422	4,6503	4,6584	4,6664	4,6743	4,6821	4,6899	4,6976
78,8	4,5708	4,58	4,5891	4,5981	4,607	4,6158	4,6245	4,6332	4,6417	4,6501	4,6585	4,6667	4,675	4,6831	4,6911	4,699	4,7069	4,7147	4,7224
78,9	4,5952	4,6044	4,6136	4,6226	4,6315	4,6404	4,6491	4,6578	4,6664	4,6748	4,6832	4,6915	4,6997	4,7079	4,7159	4,7239	4,7318	4,7396	4,7474
79	4,6197	4,629	4,6382	4,6473	4,6562	4,6651	4,6739	4,6826	4,6912	4,6997	4,7081	4,7165	4,7247	4,7328	4,7409	4,749	4,7569	4,7647	4,7726
79,1	4,6444	4,6538	4,663	4,6721	4,6811	4,69	4,6988	4,7075	4,7162	4,7247	4,7332	4,7415	4,7498	4,758	4,7661	4,7742	4,7821	4,79	4,7978
79,2	4,6694	4,6787	4,6879	4,6971	4,7061	4,7151	4,7239	4,7327	4,7413	4,7499	4,7583	4,7667	4,7751	4,7833	4,7914	4,7995	4,8075	4,8154	4,8233
79,3	4,6944	4,7038	4,713	4,7222	4,7313	4,7403	4,7491	4,7579	4,7666	4,7752	4,7838	4,7922	4,8005	4,8088	4,8169	4,825	4,8331	4,841	4,8489
79,4	4,7196	4,729	4,7383	4,7475	4,7567	4,7656	4,7746	4,7834	4,7921	4,8007	4,8093	4,8177	4,8261	4,8344	4,8426	4,8507	4,8588	4,8667	4,8747
79,5	4,7449	4,7544	4,7637	4,773	4,7821	4,7912	4,8001	4,809	4,8177	4,8264	4,8349	4,8435	4,8518	4,8602	4,8684	4,8766	4,8847	4,8927	4,9006
79,6	4,7704	4,78	4,7893	4,7986	4,8078	4,8169	4,8258	4,8347	4,8435	4,8522	4,8608	4,8693	4,8778	4,8862	4,8944	4,9026	4,9107	4,9188	4,9267
79,7	4,7961	4,8057	4,8151	4,8244	4,8336	4,8427	4,8517	4,8607	4,8695	4,8782	4,8869	4,8954	4,9039	4,9123	4,9205	4,9288	4,9369	4,945	4,953
79,8	4,822	4,8315	4,841	4,8504	4,8596	4,8688	4,8778	4,8867	4,8956	4,9044	4,913	4,9217	4,9302	4,9385	4,9469	4,9551	4,9633	4,9714	4,9794
79,9	4,848	4,8576	4,8671	4,8765	4,8858	4,895	4,9041	4,913	4,9219	4,9307	4,9394	4,9481	4,9565	4,965	4,9734	4,9817	4,9899	4,998	5,0061
80	4,8742	4,8838	4,8934	4,9028	4,9121	4,9213	4,9304	4,9395	4,9484	4,9572	4,9659	4,9746	4,9832	4,9917	5,0001	5,0084	5,0166	5,0248	5,0329
80,1	4,9006	4,9102	4,9198	4,9292	4,9386	4,9479	4,957	4,9661	4,975	4,9839	4,9927	5,0014	5,01	5,0185	5,0269	5,0352	5,0435	5,0517	5,0598
80,2	4,9271	4,9368	4,9464	4,9559	4,9653	4,9746	4,9838	4,9929	5,0019	5,0107	5,0196	5,0283	5,0369	5,0455	5,0539	5,0623	5,0706	5,0788	5,0869
80,3	4,9538	4,9635	4,9732	4,9827	4,9921	5,0015	5,0107	5,0198	5,0288	5,0378	5,0466	5,0553	5,064	5,0726	5,0811	5,0895	5,0978	5,1061	5,1143
80,4	4,9807	4,9904	5,0002	5,0097	5,0192	5,0285	5,0378	5,047	5,056	5,065	5,0738	5,0826	5,0913	5,0999	5,1085	5,1169	5,1253	5,1336	5,1418
80,5	5,0078	5,0175	5,0273	5,0369	5,0464	5,0558	5,0651	5,0743	5,0834	5,0923	5,1013	5,1101	5,1188	5,1275	5,136	5,1445	5,1529	5,1612	5,1694
80,6	5,035	5,0448	5,0546	5,0642	5,0738	5,0832	5,0925	5,1018	5,1109	5,1199	5,1289	5,1377	5,1465	5,1551	5,1637	5,1722	5,1807	5,189	5,1973
80,7	5,0624	5,0723	5,0821	5,0918	5,1013	5,1108	5,1202	5,1294	5,1386	5,1476	5,1567	5,1655	5,1743	5,183	5,1916	5,2002	5,2086	5,217	5,2253
80,8	5,09	5,1	5,1098	5,1195	5,1291	5,1386	5,148	5,1573	5,1665	5,1756	5,1846	5,1935	5,2023	5,2111	5,2197	5,2283	5,2368	5,2452	5,2536
80,9	5,1178	5,1278	5,1376	5,1474	5,157	5,1666	5,176	5,1853	5,1946	5,2037	5,2128	5,2217	5,2306	5,2393	5,248	5,2566	5,2652	5,2736	5,282
81	5,1457	5,1557	5,1656	5,1755	5,1851	5,1947	5,2042	5,2135	5,2228	5,232	5,2411	5,2501	5,259	5,2678	5,2765	5,2852	5,2937	5,3022	5,3106
81,1	5,1739	5,184	5,1939	5,2037	5,2135	5,2231	5,2325	5,242	5,2512	5,2605	5,2696	5,2786	5,2875	5,2964	5,3052	5,3139	5,3224	5,3309	5,3393
81,2	5,2022	5,2123	5,2223	5,2322	5,2419	5,2516	5,2611	5,2705	5,2799	5,2892	5,2983	5,3074	5,3163	5,3252	5,334	5,3427	5,3513	5,3599	5,3683
81,3	5,2307	5,2409	5,2509	5,2608	5,2706	5,2803	5,2899	5,2993	5,3087	5,318	5,3272	5,3363	5,3453	5,3542	5,3631	5,3718	5,3804	5,389	5,3975
81,4	5,2595	5,2696	5,2797	5,2896	5,2995	5,3092	5,3188	5,3284	5,3377	5,3471	5,3563	5,3654	5,3744	5,3834	5,3923	5,4011	5,4098	5,4183	5,4269

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
78	4,5356	4,543	4,5503	4,5575	4,5647	4,5718	4,5788	4,5859	4,5928	4,5996	4,6065	4,6132	4,62	4,6266	4,6332	4,6398	4,6463	4,6528	4,6592
78,1	4,5594	4,5668	4,5741	4,5814	4,5886	4,5957	4,6028	4,6098	4,6168	4,6237	4,6305	4,6373	4,6441	4,6507	4,6574	4,6639	4,6705	4,677	4,6834
78,2	4,5833	4,5908	4,5981	4,6054	4,6126	4,6198	4,6269	4,6339	4,6409	4,6479	4,6547	4,6615	4,6683	4,675	4,6817	4,6883	4,6948	4,7013	4,7078
78,3	4,6074	4,6149	4,6222	4,6296	4,6368	4,644	4,6511	4,6582	4,6652	4,6722	4,679	4,6859	4,6927	4,6994	4,7061	4,7127	4,7193	4,7259	4,7323
78,4	4,6316	4,6391	4,6465	4,6539	4,6611	4,6684	4,6755	4,6826	4,6896	4,6966	4,7036	4,7104	4,7173	4,724	4,7307	4,7374	4,7439	4,7505	4,757
78,5	4,656	4,6635	4,671	4,6783	4,6856	4,6929	4,7001	4,7072	4,7143	4,7213	4,7282	4,7351	4,7419	4,7487	4,7555	4,7621	4,7687	4,7753	4,7819
78,6	4,6806	4,6881	4,6955	4,7029	4,7103	4,7175	4,7247	4,7319	4,739	4,746	4,753	4,7599	4,7668	4,7736	4,7803	4,787	4,7937	4,8003	4,8069
78,7	4,7052	4,7128	4,7203	4,7277	4,7351	4,7424	4,7496	4,7568	4,7639	4,771	4,778	4,7849	4,7918	4,7987	4,8054	4,8121	4,8189	4,8255	4,8321
78,8	4,7301	4,7377	4,7452	4,7527	4,76	4,7674	4,7746	4,7818	4,789	4,7961	4,8031	4,8101	4,817	4,8238	4,8306	4,8374	4,8441	4,8507	4,8574
78,9	4,7551	4,7627	4,7703	4,7777	4,7851	4,7925	4,7998	4,807	4,8142	4,8213	4,8283	4,8353	4,8423	4,8492	4,856	4,8628	4,8695	4,8762	4,8828
79	4,7802	4,7879	4,7955	4,803	4,8104	4,8178	4,8251	4,8324	4,8396	4,8467	4,8538	4,8608	4,8678	4,8747	4,8815	4,8884	4,8951	4,9018	4,9085
79,1	4,8055	4,8132	4,8208	4,8284	4,8358	4,8433	4,8506	4,8579	4,8651	4,8723	4,8794	4,8865	4,8935	4,9004	4,9072	4,9141	4,9209	4,9276	4,9343
79,2	4,8311	4,8387	4,8464	4,854	4,8614	4,8689	4,8763	4,8836	4,8908	4,898	4,9051	4,9122	4,9193	4,9262	4,9331	4,94	4,9468	4,9535	4,9603
79,3	4,8567	4,8644	4,8721	4,8797	4,8872	4,8947	4,9021	4,9094	4,9167	4,9239	4,9311	4,9382	4,9452	4,9522	4,9591	4,966	4,9728	4,9796	4,9864
79,4	4,8825	4,8903	4,8979	4,9056	4,9131	4,9206	4,9281	4,9354	4,9427	4,95	4,9572	4,9643	4,9714	4,9784	4,9853	4,9923	4,9991	5,0059	5,0126
79,5	4,9085	4,9163	4,924	4,9317	4,9392	4,9468	4,9542	4,9616	4,9689	4,9762	4,9834	4,9906	4,9977	5,0047	5,0117	5,0186	5,0255	5,0323	5,0391
79,6	4,9346	4,9424	4,9502	4,9579	4,9655	4,973	4,9805	4,9879	4,9953	5,0026	5,0098	5,017	5,0241	5,0312	5,0382	5,0452	5,0521	5,059	5,0658
79,7	4,9609	4,9688	4,9765	4,9842	4,9919	4,9995	5,007	5,0144	5,0218	5,0292	5,0364	5,0436	5,0508	5,0579	5,0649	5,0719	5,0789	5,0857	5,0925
79,8	4,9874	4,9952	5,0031	5,0108	5,0185	5,0261	5,0337	5,0411	5,0485	5,0559	5,0632	5,0704	5,0776	5,0848	5,0918	5,0988	5,1057	5,1127	5,1195
79,9	5,014	5,0219	5,0298	5,0376	5,0453	5,0529	5,0605	5,068	5,0754	5,0828	5,0901	5,0974	5,1046	5,1117	5,1188	5,1259	5,1328	5,1398	5,1467
80	5,0409	5,0488	5,0566	5,0645	5,0722	5,0799	5,0875	5,095	5,1025	5,1099	5,1172	5,1245	5,1317	5,1389	5,1461	5,1531	5,1601	5,1671	5,174
80,1	5,0679	5,0758	5,0837	5,0916	5,0993	5,107	5,1146	5,1222	5,1297	5,1371	5,1445	5,1518	5,1591	5,1663	5,1734	5,1806	5,1876	5,1946	5,2015
80,2	5,095	5,103	5,111	5,1188	5,1266	5,1343	5,142	5,1496	5,1571	5,1646	5,172	5,1793	5,1866	5,1938	5,201	5,2081	5,2152	5,2222	5,2292
80,3	5,1224	5,1304	5,1384	5,1463	5,1541	5,1618	5,1695	5,1771	5,1847	5,1922	5,1996	5,207	5,2143	5,2216	5,2288	5,2359	5,243	5,25	5,257
80,4	5,1499	5,158	5,1659	5,1739	5,1817	5,1895	5,1972	5,2049	5,2125	5,22	5,2274	5,2349	5,2422	5,2495	5,2567	5,2639	5,271	5,2781	5,2851
80,5	5,1776	5,1857	5,1937	5,2017	5,2095	5,2174	5,2251	5,2328	5,2404	5,248	5,2555	5,2629	5,2702	5,2776	5,2848	5,292	5,2992	5,3063	5,3133
80,6	5,2055	5,2136	5,2217	5,2296	5,2376	5,2454	5,2532	5,2609	5,2685	5,2761	5,2837	5,2911	5,2985	5,3059	5,3131	5,3203	5,3275	5,3347	5,3417
80,7	5,2336	5,2417	5,2498	5,2578	5,2657	5,2736	5,2814	5,2892	5,2969	5,3045	5,312	5,3195	5,3269	5,3343	5,3416	5,3489	5,356	5,3632	5,3703
80,8	5,2618	5,27	5,2781	5,2862	5,2942	5,302	5,3099	5,3177	5,3254	5,333	5,3406	5,3481	5,3556	5,3629	5,3703	5,3776	5,3848	5,392	5,3991
80,9	5,2903	5,2985	5,3066	5,3147	5,3227	5,3306	5,3385	5,3463	5,3541	5,3617	5,3693	5,3769	5,3843	5,3918	5,3991	5,4065	5,4137	5,4209	5,4281
81	5,3189	5,3272	5,3353	5,3435	5,3514	5,3594	5,3673	5,3752	5,3829	5,3906	5,3983	5,4058	5,4133	5,4208	5,4282	5,4356	5,4428	5,45	5,4572
81,1	5,3477	5,356	5,3642	5,3723	5,3804	5,3884	5,3963	5,4042	5,412	5,4197	5,4274	5,435	5,4425	5,45	5,4574	5,4648	5,4721	5,4794	5,4866
81,2	5,3767	5,385	5,3933	5,4015	5,4095	5,4176	5,4256	5,4334	5,4413	5,449	5,4567	5,4643	5,4719	5,4795	5,4869	5,4943	5,5016	5,5089	5,5162
81,3	5,4059	5,4143	5,4226	5,4307	5,4389	5,4469	5,455	5,4628	5,4707	5,4785	5,4862	5,4939	5,5015	5,509	5,5165	5,5239	5,5313	5,5386	5,5459
81,4	5,4354	5,4438	5,452	5,4603	5,4684	5,4765	5,4845	5,4924	5,5003	5,5082	5,5159	5,5236	5,5313	5,5388	5,5463	5,5538	5,5612	5,5686	5,5759

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
78	4,6655	4,6718	4,6781	4,6844	4,6905	4,6967	4,7027	4,7088	4,7148	4,7208	4,7267	4,7326	4,7385	4,7443	4,7501	4,7558	4,7615	4,7672	4,7728
78,1	4,6898	4,6961	4,7024	4,7087	4,7149	4,7211	4,7272	4,7332	4,7393	4,7453	4,7512	4,7571	4,763	4,7688	4,7746	4,7804	4,7861	4,7918	4,7975
78,2	4,7142	4,7205	4,7269	4,7332	4,7394	4,7456	4,7517	4,7578	4,7638	4,7699	4,7759	4,7818	4,7877	4,7936	4,7993	4,8051	4,8109	4,8166	4,8223
78,3	4,7388	4,7452	4,7515	4,7578	4,764	4,7702	4,7764	4,7825	4,7886	4,7946	4,8006	4,8066	4,8125	4,8184	4,8242	4,83	4,8358	4,8415	4,8472
78,4	4,7635	4,7699	4,7762	4,7826	4,7888	4,7951	4,8013	4,8074	4,8135	4,8196	4,8256	4,8315	4,8375	4,8434	4,8493	4,8551	4,8609	4,8666	4,8723
78,5	4,7884	4,7948	4,8012	4,8075	4,8138	4,8201	4,8263	4,8324	4,8386	4,8446	4,8507	4,8567	4,8627	4,8685	4,8745	4,8803	4,8861	4,8919	4,8976
78,6	4,8134	4,8198	4,8263	4,8326	4,8389	4,8452	4,8515	4,8576	4,8638	4,8699	4,8759	4,882	4,888	4,8939	4,8998	4,9056	4,9115	4,9173	4,923
78,7	4,8386	4,845	4,8515	4,8579	4,8642	4,8705	4,8768	4,883	4,8891	4,8953	4,9014	4,9074	4,9134	4,9194	4,9253	4,9312	4,937	4,9428	4,9486
78,8	4,8639	4,8704	4,8769	4,8833	4,8897	4,896	4,9023	4,9085	4,9147	4,9208	4,9269	4,933	4,939	4,945	4,951	4,9568	4,9627	4,9686	4,9744
78,9	4,8894	4,8959	4,9024	4,9089	4,9152	4,9216	4,9279	4,9341	4,9403	4,9465	4,9526	4,9587	4,9648	4,9708	4,9768	4,9827	4,9886	4,9945	5,0003
79	4,9151	4,9216	4,9281	4,9346	4,941	4,9474	4,9537	4,96	4,9662	4,9724	4,9786	4,9847	4,9908	4,9968	5,0028	5,0088	5,0146	5,0206	5,0264
79,1	4,9409	4,9475	4,954	4,9605	4,9669	4,9733	4,9797	4,986	4,9922	4,9985	5,0046	5,0108	5,0169	5,0229	5,0289	5,0349	5,0409	5,0467	5,0526
79,2	4,9669	4,9735	4,9801	4,9865	4,993	4,9994	5,0058	5,0121	5,0184	5,0246	5,0308	5,037	5,0432	5,0492	5,0552	5,0613	5,0672	5,0731	5,079
79,3	4,993	4,9997	5,0063	5,0128	5,0193	5,0257	5,0321	5,0385	5,0447	5,051	5,0573	5,0634	5,0696	5,0757	5,0817	5,0877	5,0937	5,0997	5,1056
79,4	5,0193	5,026	5,0326	5,0391	5,0457	5,0521	5,0586	5,0649	5,0713	5,0776	5,0838	5,09	5,0962	5,1023	5,1084	5,1144	5,1205	5,1264	5,1324
79,5	5,0459	5,0525	5,0591	5,0657	5,0723	5,0787	5,0852	5,0916	5,098	5,1043	5,1106	5,1168	5,123	5,1291	5,1352	5,1413	5,1473	5,1533	5,1592
79,6	5,0725	5,0792	5,0859	5,0925	5,099	5,1055	5,112	5,1184	5,1248	5,1311	5,1375	5,1437	5,1499	5,1561	5,1622	5,1683	5,1744	5,1804	5,1863
79,7	5,0993	5,106	5,1127	5,1193	5,126	5,1325	5,139	5,1454	5,1518	5,1582	5,1645	5,1708	5,177	5,1832	5,1894	5,1955	5,2015	5,2076	5,2136
79,8	5,1263	5,1331	5,1398	5,1465	5,1531	5,1596	5,1661	5,1726	5,1791	5,1854	5,1918	5,1981	5,2043	5,2105	5,2167	5,2228	5,229	5,235	5,241
79,9	5,1535	5,1603	5,167	5,1737	5,1804	5,1869	5,1935	5,1999	5,2064	5,2128	5,2192	5,2255	5,2318	5,238	5,2442	5,2504	5,2565	5,2626	5,2686
80	5,1808	5,1876	5,1944	5,2011	5,2078	5,2144	5,221	5,2275	5,234	5,2404	5,2468	5,2531	5,2595	5,2657	5,2719	5,2781	5,2843	5,2904	5,2964
80,1	5,2084	5,2152	5,222	5,2287	5,2354	5,2421	5,2486	5,2552	5,2617	5,2681	5,2746	5,281	5,2873	5,2935	5,2998	5,306	5,3122	5,3183	5,3244
80,2	5,2361	5,243	5,2497	5,2565	5,2632	5,2699	5,2765	5,2831	5,2896	5,2961	5,3025	5,3089	5,3153	5,3216	5,3279	5,3341	5,3403	5,3464	5,3526
80,3	5,264	5,2709	5,2777	5,2845	5,2912	5,2979	5,3046	5,3112	5,3177	5,3242	5,3307	5,3371	5,3435	5,3498	5,3561	5,3624	5,3685	5,3747	5,3809
80,4	5,292	5,2989	5,3058	5,3126	5,3194	5,3261	5,3328	5,3394	5,346	5,3525	5,359	5,3654	5,3718	5,3782	5,3845	5,3908	5,397	5,4032	5,4094
80,5	5,3203	5,3272	5,3341	5,3409	5,3478	5,3545	5,3612	5,3679	5,3744	5,381	5,3875	5,394	5,4004	5,4068	5,4131	5,4194	5,4257	5,4319	5,4381
80,6	5,3487	5,3557	5,3626	5,3695	5,3763	5,3831	5,3898	5,3965	5,4031	5,4097	5,4162	5,4227	5,4291	5,4356	5,4419	5,4482	5,4545	5,4608	5,467
80,7	5,3774	5,3844	5,3913	5,3981	5,405	5,4118	5,4185	5,4252	5,4319	5,4385	5,4451	5,4516	5,458	5,4645	5,4709	5,4772	5,4835	5,4898	5,496
80,8	5,4062	5,4132	5,4202	5,427	5,434	5,4407	5,4475	5,4543	5,4609	5,4675	5,4742	5,4807	5,4872	5,4936	5,5001	5,5065	5,5128	5,5191	5,5253
80,9	5,4352	5,4422	5,4492	5,4561	5,463	5,4699	5,4767	5,4834	5,4902	5,4968	5,5034	5,51	5,5165	5,523	5,5294	5,5358	5,5422	5,5485	5,5548
81	5,4643	5,4715	5,4785	5,4854	5,4923	5,4992	5,506	5,5128	5,5195	5,5262	5,5328	5,5395	5,546	5,5525	5,559	5,5654	5,5718	5,5781	5,5844
81,1	5,4938	5,5009	5,5079	5,5149	5,5219	5,5287	5,5356	5,5424	5,5491	5,5559	5,5625	5,5691	5,5757	5,5823	5,5887	5,5952	5,6016	5,608	5,6143
81,2	5,5233	5,5304	5,5375	5,5445	5,5515	5,5585	5,5653	5,5721	5,579	5,5857	5,5924	5,599	5,6056	5,6122	5,6187	5,6252	5,6316	5,638	5,6444
81,3	5,5531	5,5603	5,5674	5,5744	5,5814	5,5884	5,5953	5,6021	5,6089	5,6157	5,6224	5,6291	5,6357	5,6423	5,6488	5,6553	5,6618	5,6682	5,6746
81,4	5,5831	5,5903	5,5974	5,6045	5,6115	5,6185	5,6254	5,6323	5,6391	5,6459	5,6526	5,6593	5,666	5,6726	5,6792	5,6857	5,6922	5,6986	5,705

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
78	4,7784	4,784	4,7895	4,795	4,8004	4,8059	4,8113	4,8166	4,822	4,8273	4,8325	4,8378	4,843	4,8482	4,8533	4,8584	4,8636	4,8686	4,8737
78,1	4,8031	4,8086	4,8142	4,8197	4,8252	4,8307	4,836	4,8414	4,8468	4,8521	4,8574	4,8627	4,8679	4,8731	4,8783	4,8834	4,8886	4,8936	4,8987
78,2	4,8279	4,8335	4,8391	4,8446	4,8501	4,8556	4,861	4,8664	4,8718	4,8771	4,8824	4,8877	4,893	4,8982	4,9034	4,9085	4,9137	4,9188	4,9239
78,3	4,8529	4,8585	4,8641	4,8696	4,8752	4,8806	4,8861	4,8915	4,8969	4,9023	4,9076	4,9129	4,9182	4,9234	4,9287	4,9338	4,939	4,9441	4,9492
78,4	4,878	4,8836	4,8893	4,8949	4,9004	4,9059	4,9114	4,9168	4,9222	4,9276	4,933	4,9383	4,9436	4,9488	4,954	4,9593	4,9645	4,9696	4,9747
78,5	4,9033	4,909	4,9146	4,9202	4,9258	4,9313	4,9368	4,9422	4,9477	4,9531	4,9585	4,9638	4,9691	4,9744	4,9797	4,9849	4,99	4,9952	5,0004
78,6	4,9288	4,9345	4,9401	4,9457	4,9513	4,9568	4,9624	4,9679	4,9733	4,9787	4,9841	4,9895	4,9948	5,0001	5,0054	5,0106	5,0158	5,021	5,0262
78,7	4,9544	4,9601	4,9657	4,9714	4,977	4,9826	4,9881	4,9936	4,9991	5,0045	5,01	5,0153	5,0207	5,026	5,0312	5,0365	5,0418	5,047	5,0521
78,8	4,9802	4,9859	4,9916	4,9972	5,0028	5,0085	5,014	5,0196	5,025	5,0305	5,0359	5,0413	5,0467	5,052	5,0573	5,0626	5,0679	5,0731	5,0783
78,9	5,0061	5,0118	5,0175	5,0232	5,0289	5,0345	5,04	5,0456	5,0511	5,0566	5,062	5,0675	5,0729	5,0782	5,0835	5,0889	5,0941	5,0994	5,1046
79	5,0322	5,038	5,0437	5,0494	5,0551	5,0607	5,0663	5,0718	5,0774	5,0829	5,0884	5,0938	5,0992	5,1046	5,1099	5,1153	5,1205	5,1258	5,131
79,1	5,0584	5,0642	5,07	5,0757	5,0814	5,087	5,0927	5,0982	5,1038	5,1094	5,1148	5,1203	5,1257	5,1312	5,1365	5,1418	5,1471	5,1524	5,1577
79,2	5,0849	5,0907	5,0965	5,1022	5,1079	5,1136	5,1192	5,1248	5,1304	5,136	5,1415	5,1469	5,1524	5,1578	5,1632	5,1686	5,1739	5,1792	5,1845
79,3	5,1114	5,1173	5,1231	5,1289	5,1346	5,1403	5,146	5,1516	5,1572	5,1628	5,1683	5,1738	5,1793	5,1847	5,1901	5,1955	5,2009	5,2062	5,2115
79,4	5,1382	5,1441	5,1499	5,1557	5,1614	5,1672	5,1728	5,1785	5,1841	5,1897	5,1953	5,2008	5,2063	5,2118	5,2172	5,2225	5,2279	5,2333	5,2386
79,5	5,1651	5,171	5,1769	5,1827	5,1885	5,1942	5,1999	5,2056	5,2113	5,2168	5,2224	5,228	5,2335	5,239	5,2444	5,2499	5,2552	5,2606	5,2659
79,6	5,1923	5,1982	5,2041	5,2099	5,2157	5,2214	5,2272	5,2329	5,2385	5,2442	5,2498	5,2553	5,2609	5,2663	5,2718	5,2772	5,2827	5,2881	5,2934
79,7	5,2195	5,2255	5,2314	5,2372	5,2431	5,2488	5,2546	5,2603	5,2659	5,2716	5,2773	5,2828	5,2884	5,2939	5,2994	5,3048	5,3103	5,3157	5,3211
79,8	5,247	5,253	5,2588	5,2648	5,2706	5,2764	5,2822	5,2879	5,2936	5,2993	5,3049	5,3105	5,3161	5,3216	5,3272	5,3326	5,3381	5,3435	5,3489
79,9	5,2747	5,2806	5,2865	5,2925	5,2983	5,3042	5,31	5,3157	5,3214	5,3271	5,3328	5,3384	5,344	5,3496	5,3551	5,3606	5,366	5,3715	5,3769
80	5,3025	5,3085	5,3144	5,3203	5,3262	5,3321	5,3379	5,3436	5,3494	5,3551	5,3608	5,3664	5,372	5,3777	5,3832	5,3887	5,3942	5,3997	5,4051
80,1	5,3304	5,3365	5,3424	5,3484	5,3543	5,3602	5,366	5,3718	5,3776	5,3833	5,389	5,3947	5,4003	5,4059	5,4115	5,4171	5,4225	5,4281	5,4335
80,2	5,3586	5,3647	5,3707	5,3766	5,3826	5,3884	5,3943	5,4001	5,4059	5,4117	5,4174	5,4231	5,4287	5,4344	5,44	5,4456	5,4511	5,4566	5,4621
80,3	5,387	5,393	5,399	5,405	5,411	5,4169	5,4228	5,4286	5,4345	5,4402	5,446	5,4517	5,4574	5,4631	5,4687	5,4742	5,4798	5,4853	5,4908
80,4	5,4155	5,4216	5,4276	5,4337	5,4396	5,4455	5,4515	5,4574	5,4632	5,469	5,4747	5,4805	5,4862	5,4919	5,4975	5,5031	5,5087	5,5143	5,5198
80,5	5,4443	5,4503	5,4564	5,4624	5,4684	5,4744	5,4803	5,4862	5,4921	5,4979	5,5037	5,5095	5,5152	5,5209	5,5266	5,5322	5,5378	5,5433	5,5489
80,6	5,4731	5,4793	5,4854	5,4914	5,4974	5,5034	5,5094	5,5153	5,5212	5,527	5,5328	5,5386	5,5444	5,5501	5,5558	5,5614	5,567	5,5726	5,5782
80,7	5,5023	5,5084	5,5145	5,5206	5,5266	5,5326	5,5386	5,5446	5,5504	5,5564	5,5622	5,568	5,5738	5,5795	5,5852	5,5909	5,5965	5,6021	5,6077
80,8	5,5315	5,5377	5,5439	5,55	5,556	5,5621	5,5681	5,574	5,58	5,5859	5,5917	5,5975	5,6033	5,6091	5,6148	5,6205	5,6262	5,6318	5,6374
80,9	5,5611	5,5672	5,5734	5,5795	5,5856	5,5916	5,5977	5,6037	5,6096	5,6156	5,6214	5,6273	5,6331	5,6389	5,6446	5,6504	5,656	5,6617	5,6673
81	5,5907	5,597	5,6031	5,6093	5,6154	5,6214	5,6275	5,6335	5,6395	5,6454	5,6513	5,6572	5,663	5,6688	5,6746	5,6803	5,6861	5,6917	5,6974
81,1	5,6206	5,6268	5,6331	5,6392	5,6454	5,6515	5,6575	5,6635	5,6696	5,6755	5,6815	5,6873	5,6932	5,699	5,7048	5,7106	5,7163	5,722	5,7277
81,2	5,6506	5,657	5,6631	5,6694	5,6755	5,6816	5,6877	5,6938	5,6998	5,7058	5,7117	5,7176	5,7236	5,7294	5,7352	5,741	5,7467	5,7524	5,7581
81,3	5,6809	5,6872	5,6935	5,6997	5,7059	5,7121	5,7182	5,7243	5,7303	5,7363	5,7422	5,7482	5,7541	5,76	5,7658	5,7717	5,7774	5,7832	5,7889
81,4	5,7114	5,7177	5,724	5,7303	5,7364	5,7426	5,7488	5,7549	5,761	5,767	5,773	5,7789	5,7849	5,7908	5,7967	5,8025	5,8083	5,814	5,8197

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
78	4,8787	4,8837	4,8887	4,8936	4,8985	4,9034	4,9082	4,9131
78,1	4,9037	4,9087	4,9137	4,9187	4,9236	4,9285	4,9334	4,9383
78,2	4,9289	4,934	4,939	4,9439	4,9489	4,9538	4,9587	4,9636
78,3	4,9543	4,9593	4,9643	4,9693	4,9743	4,9792	4,9842	4,9891
78,4	4,9798	4,9849	4,9899	4,9949	4,9999	5,0049	5,0098	5,0147
78,5	5,0055	5,0105	5,0156	5,0206	5,0257	5,0306	5,0356	5,0405
78,6	5,0313	5,0364	5,0415	5,0466	5,0515	5,0566	5,0615	5,0665
78,7	5,0573	5,0624	5,0675	5,0726	5,0776	5,0827	5,0876	5,0926
78,8	5,0834	5,0886	5,0937	5,0988	5,1039	5,1089	5,1139	5,1189
78,9	5,1098	5,1149	5,1201	5,1252	5,1303	5,1353	5,1403	5,1454
79	5,1363	5,1415	5,1466	5,1517	5,1568	5,1619	5,1669	5,172
79,1	5,1629	5,1681	5,1733	5,1784	5,1835	5,1886	5,1937	5,1987
79,2	5,1897	5,195	5,2002	5,2053	5,2105	5,2155	5,2206	5,2257
79,3	5,2167	5,2219	5,2272	5,2324	5,2375	5,2426	5,2477	5,2528
79,4	5,2439	5,2491	5,2544	5,2595	5,2647	5,2699	5,275	5,2801
79,5	5,2712	5,2765	5,2817	5,287	5,2921	5,2974	5,3025	5,3076
79,6	5,2987	5,304	5,3093	5,3145	5,3197	5,3249	5,3301	5,3352
79,7	5,3264	5,3317	5,337	5,3423	5,3475	5,3527	5,3579	5,3631
79,8	5,3543	5,3596	5,3649	5,3702	5,3755	5,3807	5,3859	5,391
79,9	5,3823	5,3877	5,393	5,3983	5,4036	5,4088	5,4141	5,4192
80	5,4106	5,4159	5,4213	5,4266	5,4319	5,4372	5,4424	5,4476
80,1	5,439	5,4443	5,4497	5,455	5,4603	5,4657	5,4709	5,4762
80,2	5,4675	5,4729	5,4783	5,4837	5,489	5,4944	5,4996	5,5049
80,3	5,4963	5,5017	5,5072	5,5125	5,5179	5,5232	5,5285	5,5338
80,4	5,5253	5,5307	5,5361	5,5415	5,5469	5,5523	5,5576	5,5629
80,5	5,5544	5,5599	5,5653	5,5708	5,5762	5,5816	5,5869	5,5921
80,6	5,5838	5,5892	5,5947	5,6001	5,6056	5,611	5,6163	5,6216
80,7	5,6133	5,6188	5,6243	5,6297	5,6352	5,6406	5,646	5,6513
80,8	5,643	5,6485	5,654	5,6595	5,665	5,6704	5,6759	5,6812
80,9	5,6729	5,6785	5,684	5,6895	5,695	5,7005	5,7058	5,7113
81	5,703	5,7086	5,7141	5,7197	5,7252	5,7307	5,7361	5,7415
81,1	5,7333	5,7389	5,7445	5,7501	5,7556	5,7611	5,7666	5,772
81,2	5,7638	5,7695	5,7751	5,7806	5,7862	5,7917	5,7972	5,8026
81,3	5,7945	5,8002	5,8058	5,8114	5,817	5,8225	5,828	5,8335
81,4	5,8255	5,8312	5,8368	5,8424	5,848	5,8535	5,8591	5,8646

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
81,5	4,193	4,2395	4,2825	4,3227	4,3604	4,3959	4,4295	4,4615	4,4918	4,5209	4,5487	4,5754	4,6011	4,6258	4,6497	4,6728	4,6951	4,7167	4,7377
81,6	4,2178	4,2644	4,3077	4,348	4,3859	4,4215	4,4553	4,4873	4,5178	4,547	4,5749	4,6017	4,6275	4,6523	4,6763	4,6995	4,7219	4,7436	4,7646
81,7	4,2428	4,2896	4,333	4,3735	4,4115	4,4473	4,4812	4,5134	4,544	4,5733	4,6013	4,6282	4,6541	4,679	4,7031	4,7264	4,7489	4,7706	4,7918
81,8	4,2679	4,3149	4,3585	4,3992	4,4373	4,4733	4,5073	4,5396	4,5704	4,5997	4,6279	4,6549	4,6809	4,7059	4,7301	4,7534	4,776	4,7979	4,8191
81,9	4,2933	4,3404	4,3842	4,425	4,4633	4,4994	4,5336	4,566	4,5969	4,6264	4,6547	4,6818	4,7078	4,733	4,7572	4,7807	4,8034	4,8253	4,8466
82	4,3187	4,3661	4,4101	4,4511	4,4895	4,5257	4,56	4,5926	4,6236	4,6532	4,6816	4,7088	4,735	4,7602	4,7846	4,8081	4,8308	4,8529	4,8743
82,1	4,3444	4,392	4,4361	4,4772	4,5158	4,5522	4,5867	4,6193	4,6505	4,6802	4,7087	4,736	4,7623	4,7877	4,8121	4,8357	4,8586	4,8807	4,9022
82,2	4,3703	4,4181	4,4623	4,5037	4,5424	4,5789	4,6135	4,6463	4,6775	4,7074	4,736	4,7634	4,7899	4,8153	4,8398	4,8635	4,8865	4,9087	4,9303
82,3	4,3963	4,4443	4,4887	4,5302	4,5691	4,6058	4,6405	4,6734	4,7048	4,7348	4,7635	4,7911	4,8176	4,8431	4,8677	4,8915	4,9146	4,9369	4,9586
82,4	4,4225	4,4707	4,5153	4,557	4,5961	4,6328	4,6677	4,7008	4,7323	4,7624	4,7912	4,8189	4,8455	4,8711	4,8959	4,9197	4,9429	4,9653	4,9871
82,5	4,4489	4,4973	4,5421	4,5839	4,6231	4,6601	4,6951	4,7283	4,76	4,7902	4,8191	4,8469	4,8736	4,8993	4,9241	4,9482	4,9714	4,9939	5,0157
82,6	4,4755	4,5241	4,5691	4,6111	4,6505	4,6875	4,7227	4,756	4,7878	4,8181	4,8472	4,8751	4,9019	4,9277	4,9527	4,9768	5,0001	5,0227	5,0446
82,7	4,5023	4,551	4,5963	4,6384	4,6779	4,7152	4,7504	4,7839	4,8158	4,8463	4,8755	4,9035	4,9304	4,9564	4,9814	5,0056	5,029	5,0517	5,0737
82,8	4,5293	4,5783	4,6236	4,6659	4,7056	4,743	4,7784	4,8121	4,8441	4,8747	4,904	4,9321	4,9591	4,9852	5,0103	5,0345	5,0581	5,0809	5,1029
82,9	4,5565	4,6056	4,6511	4,6936	4,7335	4,7711	4,8066	4,8404	4,8725	4,9032	4,9327	4,9609	4,988	5,0141	5,0394	5,0638	5,0874	5,1103	5,1324
83	4,5838	4,6332	4,6789	4,7216	4,7616	4,7993	4,835	4,8689	4,9012	4,932	4,9615	4,9899	5,0171	5,0434	5,0687	5,0932	5,1169	5,1399	5,1622
83,1	4,6114	4,661	4,7068	4,7497	4,7899	4,8277	4,8636	4,8976	4,93	4,961	4,9906	5,0191	5,0465	5,0728	5,0983	5,1228	5,1466	5,1697	5,192
83,2	4,6391	4,6889	4,735	4,778	4,8184	4,8564	4,8924	4,9265	4,9591	4,9902	5,0199	5,0485	5,076	5,1024	5,128	5,1527	5,1766	5,1997	5,2222
83,3	4,6671	4,717	4,7634	4,8065	4,8471	4,8852	4,9213	4,9557	4,9883	5,0196	5,0495	5,0781	5,1057	5,1323	5,1579	5,1827	5,2067	5,2299	5,2525
83,4	4,6953	4,7454	4,7919	4,8352	4,876	4,9143	4,9505	4,985	5,0178	5,0491	5,0791	5,1079	5,1356	5,1624	5,1881	5,213	5,237	5,2604	5,283
83,5	4,7236	4,774	4,8207	4,8642	4,9051	4,9435	4,9799	5,0146	5,0475	5,079	5,1091	5,138	5,1658	5,1926	5,2185	5,2435	5,2676	5,2911	5,3138
83,6	4,7522	4,8028	4,8496	4,8934	4,9343	4,973	5,0096	5,0443	5,0774	5,109	5,1392	5,1683	5,1962	5,2231	5,249	5,2742	5,2984	5,322	5,3448
83,7	4,781	4,8318	4,8788	4,9227	4,9639	5,0027	5,0394	5,0743	5,1075	5,1392	5,1696	5,1987	5,2268	5,2538	5,2798	5,3051	5,3294	5,3531	5,376
83,8	4,8099	4,8609	4,9082	4,9523	4,9936	5,0326	5,0695	5,1045	5,1378	5,1697	5,2002	5,2295	5,2576	5,2847	5,3109	5,3362	5,3607	5,3844	5,4074
83,9	4,8391	4,8904	4,9378	4,9821	5,0236	5,0627	5,0997	5,1349	5,1684	5,2004	5,231	5,2604	5,2886	5,3159	5,3422	5,3676	5,3921	5,416	5,4391
84	4,8686	4,92	4,9676	5,0121	5,0538	5,093	5,1302	5,1655	5,1992	5,2313	5,262	5,2915	5,3199	5,3473	5,3736	5,3991	5,4238	5,4477	5,471
84,1	4,8982	4,9498	4,9977	5,0423	5,0842	5,1236	5,1609	5,1964	5,2301	5,2624	5,2933	5,3229	5,3514	5,3789	5,4054	5,431	5,4557	5,4798	5,5031
84,2	4,928	4,9799	5,0279	5,0727	5,1148	5,1544	5,1918	5,2275	5,2614	5,2937	5,3248	5,3545	5,3831	5,4107	5,4373	5,463	5,4879	5,512	5,5354
84,3	4,9581	5,0102	5,0584	5,1034	5,1456	5,1854	5,223	5,2588	5,2928	5,3254	5,3565	5,3864	5,4151	5,4428	5,4695	5,4953	5,5203	5,5445	5,568
84,4	4,9884	5,0407	5,0891	5,1343	5,1767	5,2166	5,2544	5,2903	5,3245	5,3571	5,3884	5,4185	5,4473	5,4751	5,5019	5,5278	5,5529	5,5773	5,6008
84,5	5,0189	5,0714	5,1201	5,1654	5,208	5,2481	5,286	5,3221	5,3564	5,3892	5,4206	5,4507	5,4797	5,5076	5,5345	5,5606	5,5858	5,6102	5,6339
84,6	5,0496	5,1023	5,1512	5,1968	5,2395	5,2798	5,3179	5,3541	5,3885	5,4215	5,453	5,4833	5,5123	5,5404	5,5674	5,5936	5,6189	5,6434	5,6672
84,7	5,0806	5,1336	5,1826	5,2284	5,2713	5,3117	5,35	5,3863	5,421	5,454	5,4857	5,5161	5,5452	5,5734	5,6006	5,6268	5,6523	5,6768	5,7008
84,8	5,1118	5,1649	5,2142	5,2602	5,3033	5,3439	5,3823	5,4188	5,4536	5,4868	5,5186	5,5491	5,5784	5,6067	5,634	5,6603	5,6858	5,7105	5,7345
84,9	5,1432	5,1966	5,2461	5,2923	5,3355	5,3763	5,4149	5,4516	5,4865	5,5198	5,5517	5,5824	5,6118	5,6402	5,6676	5,6941	5,7197	5,7445	5,7686

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
81,5	4,7581	4,7779	4,7972	4,816	4,8343	4,8522	4,8697	4,8868	4,9035	4,9198	4,9358	4,9515	4,9668	4,9818	4,9966	5,0111	5,0253	5,0393	5,053
81,6	4,7852	4,8051	4,8244	4,8433	4,8617	4,8796	4,8972	4,9143	4,9311	4,9475	4,9635	4,9792	4,9946	5,0097	5,0246	5,0391	5,0534	5,0675	5,0812
81,7	4,8123	4,8323	4,8518	4,8708	4,8892	4,9072	4,9248	4,942	4,9588	4,9753	4,9914	5,0072	5,0227	5,0378	5,0527	5,0673	5,0817	5,0958	5,1096
81,8	4,8398	4,8598	4,8794	4,8984	4,9169	4,935	4,9527	4,9699	4,9868	5,0034	5,0195	5,0354	5,0509	5,0662	5,0811	5,0957	5,1101	5,1243	5,1382
81,9	4,8674	4,8875	4,9071	4,9262	4,9448	4,963	4,9807	4,998	5,015	5,0316	5,0478	5,0637	5,0793	5,0946	5,1096	5,1244	5,1388	5,153	5,1669
82	4,8952	4,9153	4,935	4,9542	4,9729	4,9912	5,009	5,0264	5,0434	5,06	5,0764	5,0923	5,1079	5,1233	5,1384	5,1532	5,1676	5,1819	5,1959
82,1	4,9231	4,9434	4,9632	4,9824	5,0012	5,0195	5,0374	5,0548	5,072	5,0887	5,105	5,1211	5,1368	5,1522	5,1673	5,1821	5,1967	5,211	5,2251
82,2	4,9513	4,9716	4,9915	5,0108	5,0297	5,0481	5,066	5,0835	5,1007	5,1175	5,1339	5,15	5,1658	5,1813	5,1964	5,2113	5,2259	5,2403	5,2544
82,3	4,9796	5,0001	5,02	5,0394	5,0583	5,0768	5,0948	5,1124	5,1297	5,1465	5,163	5,1791	5,195	5,2105	5,2258	5,2407	5,2554	5,2699	5,284
82,4	5,0082	5,0288	5,0487	5,0682	5,0872	5,1057	5,1239	5,1415	5,1588	5,1757	5,1923	5,2085	5,2244	5,24	5,2553	5,2703	5,285	5,2995	5,3138
82,5	5,0369	5,0576	5,0777	5,0972	5,1163	5,1349	5,1531	5,1708	5,1882	5,2052	5,2218	5,2381	5,254	5,2697	5,2851	5,3001	5,3149	5,3294	5,3437
82,6	5,0659	5,0866	5,1068	5,1264	5,1456	5,1643	5,1825	5,2003	5,2177	5,2348	5,2515	5,2678	5,2838	5,2996	5,315	5,3301	5,345	5,3596	5,3739
82,7	5,0951	5,1159	5,1361	5,1558	5,1751	5,1938	5,2121	5,23	5,2475	5,2646	5,2814	5,2978	5,3139	5,3297	5,3451	5,3603	5,3753	5,3899	5,4043
82,8	5,1244	5,1453	5,1656	5,1854	5,2047	5,2235	5,2419	5,2599	5,2775	5,2947	5,3115	5,328	5,3441	5,36	5,3755	5,3908	5,4057	5,4205	5,4349
82,9	5,154	5,175	5,1954	5,2153	5,2346	5,2535	5,272	5,29	5,3077	5,3249	5,3418	5,3583	5,3746	5,3905	5,4061	5,4214	5,4364	5,4512	5,4657
83	5,1838	5,2048	5,2253	5,2453	5,2647	5,2837	5,3023	5,3203	5,338	5,3554	5,3723	5,3889	5,4052	5,4212	5,4369	5,4523	5,4673	5,4822	5,4968
83,1	5,2138	5,2349	5,2555	5,2755	5,2951	5,3141	5,3327	5,3509	5,3687	5,3861	5,4031	5,4198	5,4362	5,4522	5,4679	5,4833	5,4985	5,5134	5,528
83,2	5,244	5,2652	5,2858	5,306	5,3256	5,3447	5,3634	5,3816	5,3995	5,417	5,4341	5,4508	5,4673	5,4833	5,4991	5,5146	5,5299	5,5448	5,5595
83,3	5,2744	5,2957	5,3164	5,3366	5,3563	5,3755	5,3943	5,4126	5,4305	5,4481	5,4652	5,482	5,4985	5,5147	5,5306	5,5461	5,5614	5,5764	5,5912
83,4	5,305	5,3264	5,3472	5,3675	5,3873	5,4066	5,4254	5,4438	5,4618	5,4794	5,4967	5,5135	5,5301	5,5463	5,5623	5,5779	5,5932	5,6083	5,6231
83,5	5,3359	5,3574	5,3782	5,3986	5,4185	5,4379	5,4567	5,4752	5,4933	5,511	5,5283	5,5453	5,5618	5,5782	5,5942	5,6098	5,6253	5,6404	5,6552
83,6	5,3669	5,3885	5,4095	5,4299	5,4499	5,4693	5,4883	5,5069	5,525	5,5428	5,5601	5,5772	5,5939	5,6102	5,6263	5,642	5,6575	5,6727	5,6876
83,7	5,3982	5,4199	5,4409	5,4615	5,4815	5,5011	5,5201	5,5387	5,5569	5,5748	5,5922	5,6093	5,6261	5,6425	5,6586	5,6744	5,69	5,7052	5,7202
83,8	5,4297	5,4515	5,4727	5,4933	5,5134	5,533	5,5521	5,5708	5,5891	5,607	5,6245	5,6417	5,6585	5,675	5,6912	5,7071	5,7226	5,738	5,7531
83,9	5,4615	5,4833	5,5046	5,5253	5,5455	5,5651	5,5843	5,6031	5,6215	5,6395	5,6571	5,6743	5,6912	5,7078	5,724	5,74	5,7556	5,771	5,7861
84	5,4935	5,5154	5,5367	5,5575	5,5778	5,5975	5,6169	5,6357	5,6541	5,6722	5,6898	5,7072	5,7242	5,7408	5,7571	5,7731	5,7888	5,8043	5,8194
84,1	5,5257	5,5477	5,5691	5,59	5,6103	5,6302	5,6496	5,6685	5,687	5,7052	5,7228	5,7403	5,7573	5,774	5,7903	5,8065	5,8222	5,8377	5,853
84,2	5,5581	5,5802	5,6017	5,6227	5,6431	5,6631	5,6825	5,7015	5,7201	5,7383	5,7561	5,7736	5,7907	5,8074	5,8239	5,84	5,8559	5,8715	5,8867
84,3	5,5908	5,613	5,6346	5,6556	5,6762	5,6962	5,7157	5,7348	5,7534	5,7717	5,7896	5,8071	5,8243	5,8411	5,8577	5,8739	5,8898	5,9054	5,9208
84,4	5,6238	5,646	5,6677	5,6888	5,7094	5,7295	5,7491	5,7683	5,7871	5,8054	5,8233	5,8409	5,8582	5,8751	5,8917	5,908	5,9239	5,9397	5,9551
84,5	5,6569	5,6793	5,7011	5,7222	5,7429	5,7631	5,7828	5,802	5,8209	5,8393	5,8573	5,875	5,8923	5,9093	5,9259	5,9423	5,9583	5,9741	5,9896
84,6	5,6903	5,7128	5,7346	5,7559	5,7767	5,797	5,8167	5,8361	5,8549	5,8735	5,8916	5,9093	5,9267	5,9438	5,9605	5,9768	5,993	6,0088	6,0244
84,7	5,7239	5,7465	5,7684	5,7899	5,8107	5,831	5,8509	5,8703	5,8893	5,9079	5,9261	5,9438	5,9613	5,9784	5,9952	6,0117	6,0279	6,0438	6,0594
84,8	5,7578	5,7805	5,8025	5,824	5,8449	5,8654	5,8853	5,9048	5,9239	5,9426	5,9608	5,9787	5,9962	6,0134	6,0302	6,0468	6,063	6,079	6,0947
84,9	5,7919	5,8147	5,8368	5,8584	5,8794	5,9	5,92	5,9396	5,9587	5,9774	5,9958	6,0137	6,0313	6,0486	6,0655	6,0821	6,0984	6,1145	6,1302

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
81,5	5,0665	5,0799	5,0929	5,1057	5,1184	5,1309	5,1432	5,1552	5,1672	5,179	5,1906	5,202	5,2133	5,2244	5,2354	5,2463	5,257	5,2676	5,278
81,6	5,0948	5,1081	5,1212	5,1342	5,1469	5,1594	5,1717	5,1839	5,1958	5,2076	5,2193	5,2307	5,2421	5,2533	5,2643	5,2752	5,286	5,2966	5,3071
81,7	5,1232	5,1366	5,1498	5,1627	5,1755	5,1881	5,2004	5,2127	5,2247	5,2365	5,2482	5,2597	5,2711	5,2823	5,2934	5,3044	5,3152	5,3258	5,3364
81,8	5,1518	5,1653	5,1785	5,1915	5,2043	5,2169	5,2294	5,2416	5,2537	5,2656	5,2773	5,2889	5,3003	5,3116	5,3227	5,3337	5,3446	5,3552	5,3659
81,9	5,1807	5,1942	5,2074	5,2205	5,2333	5,246	5,2585	5,2708	5,2829	5,2949	5,3067	5,3183	5,3297	5,341	5,3522	5,3633	5,3741	5,3849	5,3955
82	5,2097	5,2233	5,2366	5,2496	5,2626	5,2753	5,2878	5,3002	5,3123	5,3243	5,3361	5,3478	5,3593	5,3707	5,3819	5,393	5,4039	5,4147	5,4254
82,1	5,2389	5,2525	5,2659	5,279	5,292	5,3048	5,3174	5,3297	5,3419	5,354	5,3659	5,3776	5,3891	5,4005	5,4118	5,4229	5,4339	5,4447	5,4555
82,2	5,2683	5,282	5,2954	5,3086	5,3216	5,3345	5,3471	5,3595	5,3718	5,3839	5,3958	5,4075	5,4192	5,4306	5,4419	5,4531	5,4641	5,475	5,4857
82,3	5,2979	5,3117	5,3252	5,3384	5,3515	5,3643	5,377	5,3895	5,4018	5,4139	5,4259	5,4377	5,4493	5,4609	5,4722	5,4834	5,4944	5,5054	5,5162
82,4	5,3278	5,3415	5,3551	5,3684	5,3815	5,3944	5,4072	5,4197	5,4321	5,4442	5,4562	5,4681	5,4798	5,4913	5,5027	5,514	5,5251	5,536	5,5469
82,5	5,3578	5,3716	5,3852	5,3986	5,4117	5,4247	5,4375	5,4501	5,4625	5,4747	5,4868	5,4987	5,5104	5,522	5,5334	5,5447	5,5559	5,5669	5,5778
82,6	5,388	5,4019	5,4155	5,429	5,4422	5,4552	5,4681	5,4807	5,4931	5,5054	5,5175	5,5295	5,5412	5,5529	5,5643	5,5757	5,5869	5,598	5,6089
82,7	5,4185	5,4324	5,4461	5,4596	5,4729	5,486	5,4988	5,5115	5,524	5,5364	5,5485	5,5605	5,5723	5,584	5,5955	5,6069	5,6182	5,6293	5,6402
82,8	5,4491	5,4631	5,4769	5,4904	5,5037	5,5169	5,5298	5,5425	5,5551	5,5675	5,5797	5,5917	5,6036	5,6153	5,6269	5,6383	5,6496	5,6608	5,6717
82,9	5,48	5,4941	5,5079	5,5215	5,5348	5,548	5,561	5,5738	5,5864	5,5988	5,6111	5,6231	5,6351	5,6469	5,6585	5,6699	5,6813	5,6925	5,7035
83	5,5111	5,5252	5,5391	5,5527	5,5661	5,5794	5,5924	5,6053	5,6179	5,6304	5,6427	5,6548	5,6668	5,6786	5,6903	5,7018	5,7132	5,7244	5,7355
83,1	5,5424	5,5566	5,5705	5,5842	5,5977	5,611	5,6241	5,6369	5,6496	5,6622	5,6745	5,6867	5,6988	5,7106	5,7223	5,7339	5,7453	5,7566	5,7677
83,2	5,5739	5,5881	5,6021	5,6159	5,6294	5,6428	5,6559	5,6688	5,6816	5,6942	5,7066	5,7188	5,7309	5,7428	5,7546	5,7662	5,7777	5,789	5,8002
83,3	5,6057	5,62	5,634	5,6478	5,6614	5,6748	5,688	5,701	5,7138	5,7264	5,7389	5,7512	5,7633	5,7753	5,787	5,7987	5,8102	5,8216	5,8328
83,4	5,6376	5,652	5,6661	5,6799	5,6936	5,707	5,7203	5,7333	5,7462	5,7589	5,7714	5,7837	5,7959	5,8079	5,8198	5,8314	5,843	5,8544	5,8658
83,5	5,6698	5,6842	5,6984	5,7123	5,726	5,7395	5,7528	5,7659	5,7788	5,7916	5,8041	5,8165	5,8288	5,8408	5,8527	5,8645	5,876	5,8875	5,8989
83,6	5,7023	5,7168	5,731	5,7449	5,7587	5,7722	5,7856	5,7987	5,8117	5,8245	5,8371	5,8495	5,8618	5,8739	5,8859	5,8976	5,9093	5,9208	5,9322
83,7	5,735	5,7495	5,7637	5,7777	5,7916	5,8052	5,8186	5,8318	5,8448	5,8577	5,8703	5,8828	5,8951	5,9073	5,9193	5,9311	5,9428	5,9544	5,9658
83,8	5,7679	5,7824	5,7967	5,8108	5,8247	5,8383	5,8518	5,8651	5,8781	5,8911	5,9038	5,9163	5,9287	5,9409	5,9529	5,9648	5,9765	5,9882	5,9996
83,9	5,801	5,8156	5,83	5,8441	5,8581	5,8718	5,8853	5,8986	5,9117	5,9247	5,9374	5,95	5,9625	5,9747	5,9868	5,9987	6,0105	6,0222	6,0337
84	5,8343	5,849	5,8635	5,8777	5,8917	5,9054	5,919	5,9324	5,9455	5,9585	5,9714	5,984	5,9964	6,0088	6,0209	6,0329	6,0448	6,0565	6,068
84,1	5,868	5,8827	5,8972	5,9115	5,9255	5,9393	5,953	5,9664	5,9796	5,9927	6,0056	6,0182	6,0308	6,0431	6,0553	6,0674	6,0793	6,091	6,1026
84,2	5,9018	5,9166	5,9312	5,9455	5,9596	5,9734	5,9872	6,0006	6,0139	6,0271	6,0399	6,0527	6,0653	6,0777	6,0899	6,102	6,114	6,1257	6,1374
84,3	5,9359	5,9508	5,9654	5,9798	5,9939	6,0078	6,0216	6,0351	6,0485	6,0616	6,0746	6,0874	6,1	6,1125	6,1248	6,1369	6,149	6,1608	6,1725
84,4	5,9702	5,9852	5,9998	6,0143	6,0285	6,0425	6,0563	6,0699	6,0833	6,0965	6,1095	6,1224	6,135	6,1476	6,1599	6,1721	6,1841	6,196	6,2078
84,5	6,0048	6,0198	6,0346	6,049	6,0633	6,0774	6,0912	6,1049	6,1184	6,1316	6,1447	6,1576	6,1703	6,1829	6,1953	6,2075	6,2196	6,2316	6,2434
84,6	6,0397	6,0547	6,0695	6,084	6,0984	6,1125	6,1264	6,1401	6,1537	6,167	6,1801	6,1931	6,2058	6,2185	6,2309	6,2432	6,2553	6,2674	6,2792
84,7	6,0748	6,0899	6,1047	6,1193	6,1337	6,1479	6,1619	6,1757	6,1892	6,2026	6,2158	6,2288	6,2416	6,2543	6,2668	6,2791	6,2913	6,3034	6,3153
84,8	6,1101	6,1253	6,1402	6,1549	6,1693	6,1836	6,1976	6,2114	6,225	6,2385	6,2518	6,2648	6,2777	6,2904	6,303	6,3153	6,3276	6,3397	6,3516
84,9	6,1457	6,1609	6,176	6,1907	6,2052	6,2195	6,2336	6,2475	6,2612	6,2746	6,288	6,3011	6,314	6,3268	6,3394	6,3518	6,3641	6,3763	6,3883

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
81,5	5,2884	5,2986	5,3087	5,3187	5,3285	5,3383	5,348	5,3575	5,367	5,3763	5,3856	5,3948	5,4038	5,4128	5,4217	5,4305	5,4393	5,4479	5,4565
81,6	5,3175	5,3277	5,3379	5,3479	5,3578	5,3676	5,3773	5,3869	5,3964	5,4058	5,4151	5,4243	5,4334	5,4424	5,4513	5,4602	5,4689	5,4776	5,4862
81,7	5,3468	5,3571	5,3673	5,3773	5,3873	5,3971	5,4069	5,4165	5,426	5,4354	5,4448	5,454	5,4631	5,4722	5,4812	5,49	5,4989	5,5075	5,5162
81,8	5,3763	5,3867	5,3968	5,407	5,417	5,4268	5,4366	5,4463	5,4558	5,4653	5,4747	5,484	5,4931	5,5022	5,5112	5,5201	5,5289	5,5377	5,5463
81,9	5,406	5,4164	5,4266	5,4368	5,4468	5,4567	5,4666	5,4762	5,4858	5,4954	5,5048	5,514	5,5233	5,5324	5,5414	5,5504	5,5593	5,568	5,5767
82	5,4359	5,4464	5,4567	5,4668	5,4769	5,4868	5,4967	5,5064	5,5161	5,5256	5,535	5,5444	5,5536	5,5628	5,5719	5,5808	5,5898	5,5986	5,6073
82,1	5,466	5,4765	5,4868	5,497	5,5072	5,5171	5,527	5,5368	5,5465	5,5561	5,5655	5,5749	5,5842	5,5934	5,6025	5,6115	5,6205	5,6293	5,6381
82,2	5,4963	5,5068	5,5172	5,5275	5,5376	5,5476	5,5576	5,5674	5,5771	5,5868	5,5962	5,6057	5,615	5,6242	5,6334	5,6424	5,6514	5,6603	5,6691
82,3	5,5269	5,5374	5,5478	5,5581	5,5683	5,5784	5,5883	5,5982	5,608	5,6176	5,6272	5,6366	5,646	5,6553	5,6644	5,6735	5,6825	5,6915	5,7003
82,4	5,5576	5,5682	5,5786	5,589	5,5992	5,6093	5,6193	5,6292	5,639	5,6487	5,6583	5,6678	5,6772	5,6865	5,6957	5,7048	5,7139	5,7228	5,7317
82,5	5,5885	5,5992	5,6097	5,62	5,6303	5,6405	5,6505	5,6604	5,6703	5,68	5,6896	5,6991	5,7086	5,7179	5,7272	5,7364	5,7454	5,7544	5,7633
82,6	5,6197	5,6303	5,6409	5,6513	5,6616	5,6719	5,6819	5,6919	5,7017	5,7115	5,7212	5,7308	5,7403	5,7496	5,7589	5,7681	5,7772	5,7862	5,7952
82,7	5,6511	5,6618	5,6724	5,6828	5,6932	5,7034	5,7135	5,7235	5,7335	5,7432	5,753	5,7626	5,7721	5,7815	5,7909	5,8001	5,8092	5,8183	5,8273
82,8	5,6826	5,6934	5,7041	5,7146	5,7249	5,7352	5,7454	5,7555	5,7654	5,7752	5,785	5,7946	5,8042	5,8136	5,823	5,8322	5,8414	5,8506	5,8596
82,9	5,7145	5,7252	5,7359	5,7465	5,7569	5,7672	5,7774	5,7876	5,7975	5,8074	5,8172	5,8269	5,8365	5,846	5,8554	5,8647	5,8739	5,8831	5,8921
83	5,7465	5,7574	5,768	5,7786	5,7891	5,7995	5,8097	5,8198	5,8299	5,8398	5,8496	5,8594	5,869	5,8785	5,8879	5,8973	5,9066	5,9157	5,9248
83,1	5,7788	5,7897	5,8004	5,811	5,8216	5,832	5,8422	5,8524	5,8625	5,8724	5,8823	5,892	5,9017	5,9113	5,9208	5,9302	5,9395	5,9487	5,9578
83,2	5,8112	5,8221	5,8329	5,8436	5,8542	5,8646	5,875	5,8852	5,8953	5,9053	5,9152	5,925	5,9347	5,9443	5,9539	5,9633	5,9726	5,9818	5,991
83,3	5,8439	5,8549	5,8657	5,8765	5,8871	5,8976	5,908	5,9182	5,9283	5,9384	5,9483	5,9581	5,9679	5,9776	5,9871	5,9966	6,0059	6,0153	6,0244
83,4	5,8769	5,8879	5,8988	5,9095	5,9202	5,9307	5,9411	5,9515	5,9616	5,9717	5,9817	5,9916	6,0014	6,011	6,0207	6,0301	6,0395	6,0489	6,0581
83,5	5,9101	5,9211	5,9321	5,9429	5,9535	5,9641	5,9746	5,9849	5,9951	6,0052	6,0153	6,0252	6,0351	6,0448	6,0544	6,0639	6,0734	6,0827	6,092
83,6	5,9435	5,9545	5,9655	5,9764	5,9871	5,9977	6,0082	6,0186	6,0289	6,0391	6,0491	6,0591	6,0689	6,0787	6,0884	6,098	6,1074	6,1169	6,1261
83,7	5,9771	5,9882	5,9993	6,0101	6,021	6,0316	6,0421	6,0526	6,0629	6,0731	6,0832	6,0932	6,1031	6,1129	6,1226	6,1322	6,1418	6,1512	6,1606
83,8	6,011	6,0222	6,0332	6,0442	6,055	6,0657	6,0763	6,0868	6,0971	6,1074	6,1175	6,1276	6,1375	6,1473	6,1571	6,1667	6,1763	6,1858	6,1952
83,9	6,0451	6,0563	6,0675	6,0784	6,0893	6,1001	6,1107	6,1212	6,1316	6,1419	6,152	6,1621	6,1721	6,182	6,1918	6,2015	6,2111	6,2207	6,23
84	6,0795	6,0907	6,1019	6,1129	6,1238	6,1346	6,1453	6,1559	6,1663	6,1766	6,1868	6,197	6,207	6,2169	6,2268	6,2365	6,2461	6,2557	6,2652
84,1	6,114	6,1254	6,1366	6,1477	6,1587	6,1695	6,1802	6,1908	6,2013	6,2116	6,2219	6,2321	6,2422	6,2521	6,262	6,2718	6,2815	6,2911	6,3005
84,2	6,1489	6,1603	6,1716	6,1827	6,1937	6,2046	6,2153	6,226	6,2365	6,2469	6,2572	6,2674	6,2776	6,2875	6,2975	6,3073	6,317	6,3266	6,3362
84,3	6,184	6,1955	6,2068	6,2179	6,229	6,2399	6,2507	6,2614	6,272	6,2824	6,2928	6,303	6,3132	6,3232	6,3332	6,3431	6,3528	6,3625	6,3721
84,4	6,2194	6,2309	6,2422	6,2534	6,2645	6,2755	6,2863	6,2971	6,3077	6,3182	6,3286	6,3389	6,3491	6,3592	6,3691	6,3791	6,3888	6,3985	6,4082
84,5	6,255	6,2666	6,2779	6,2892	6,3003	6,3113	6,3222	6,333	6,3437	6,3543	6,3647	6,375	6,3852	6,3954	6,4054	6,4154	6,4252	6,4349	6,4446
84,6	6,2909	6,3024	6,3139	6,3252	6,3364	6,3474	6,3584	6,3692	6,3799	6,3905	6,401	6,4114	6,4216	6,4318	6,4419	6,4519	6,4618	6,4716	6,4813
84,7	6,3271	6,3386	6,3501	6,3615	6,3727	6,3838	6,3948	6,4057	6,4164	6,427	6,4376	6,448	6,4584	6,4685	6,4787	6,4887	6,4986	6,5084	6,5182
84,8	6,3634	6,3751	6,3866	6,398	6,4093	6,4204	6,4315	6,4424	6,4532	6,4639	6,4744	6,4849	6,4953	6,5056	6,5157	6,5258	6,5358	6,5456	6,5554
84,9	6,4001	6,4118	6,4234	6,4349	6,4462	6,4574	6,4685	6,4794	6,4903	6,501	6,5116	6,5221	6,5325	6,5428	6,553	6,5631	6,5732	6,5831	6,5929

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
81,5	5,4649	5,4734	5,4817	5,4899	5,4982	5,5063	5,5143	5,5223	5,5302	5,538	5,5458	5,5536	5,5612	5,5688	5,5764	5,5839	5,5913	5,5987	5,606
81,6	5,4947	5,5032	5,5115	5,5199	5,5281	5,5362	5,5443	5,5523	5,5602	5,5681	5,5759	5,5837	5,5914	5,5991	5,6066	5,6142	5,6216	5,629	5,6363
81,7	5,5248	5,5332	5,5416	5,55	5,5582	5,5664	5,5745	5,5825	5,5905	5,5984	5,6063	5,6141	5,6218	5,6295	5,6371	5,6446	5,6521	5,6595	5,6669
81,8	5,555	5,5635	5,5719	5,5802	5,5885	5,5968	5,6049	5,613	5,621	5,6289	5,6368	5,6446	5,6524	5,6601	5,6677	5,6753	5,6828	5,6903	5,6977
81,9	5,5854	5,5939	5,6024	5,6107	5,6191	5,6273	5,6355	5,6436	5,6516	5,6596	5,6675	5,6754	5,6831	5,6909	5,6986	5,7062	5,7137	5,7212	5,7286
82	5,6159	5,6246	5,633	5,6414	5,6498	5,6581	5,6663	5,6744	5,6825	5,6905	5,6984	5,7064	5,7141	5,7219	5,7296	5,7372	5,7448	5,7524	5,7598
82,1	5,6468	5,6554	5,6639	5,6724	5,6808	5,6891	5,6973	5,7055	5,7136	5,7217	5,7296	5,7375	5,7454	5,7531	5,7609	5,7685	5,7761	5,7837	5,7912
82,2	5,6778	5,6864	5,695	5,7035	5,7119	5,7203	5,7286	5,7367	5,7449	5,753	5,7609	5,7689	5,7768	5,7846	5,7924	5,8	5,8077	5,8153	5,8228
82,3	5,709	5,7177	5,7263	5,7349	5,7433	5,7517	5,76	5,7682	5,7764	5,7845	5,7926	5,8005	5,8084	5,8163	5,824	5,8318	5,8394	5,847	5,8546
82,4	5,7405	5,7492	5,7579	5,7664	5,7749	5,7833	5,7917	5,7999	5,8081	5,8162	5,8243	5,8323	5,8403	5,8482	5,856	5,8637	5,8714	5,8791	5,8866
82,5	5,7722	5,7809	5,7896	5,7982	5,8067	5,8152	5,8235	5,8318	5,8401	5,8482	5,8564	5,8644	5,8724	5,8803	5,8881	5,8959	5,9036	5,9112	5,9189
82,6	5,8041	5,8129	5,8216	5,8302	5,8387	5,8472	5,8556	5,8639	5,8722	5,8804	5,8886	5,8966	5,9046	5,9126	5,9204	5,9282	5,936	5,9437	5,9513
82,7	5,8362	5,845	5,8538	5,8624	5,871	5,8795	5,8879	5,8963	5,9046	5,9128	5,921	5,9291	5,9371	5,9451	5,953	5,9608	5,9686	5,9764	5,9841
82,8	5,8685	5,8773	5,8861	5,8948	5,9034	5,912	5,9205	5,9288	5,9372	5,9455	5,9537	5,9618	5,9699	5,9778	5,9858	5,9937	6,0015	6,0093	6,0169
82,9	5,9011	5,9099	5,9188	5,9275	5,9361	5,9448	5,9532	5,9616	5,97	5,9783	5,9865	5,9947	6,0028	6,0108	6,0189	6,0268	6,0346	6,0424	6,0501
83	5,9338	5,9427	5,9516	5,9604	5,969	5,9777	5,9862	5,9947	6,0031	6,0114	6,0197	6,0279	6,036	6,0441	6,0521	6,06	6,0679	6,0757	6,0835
83,1	5,9669	5,9758	5,9847	5,9935	6,0022	6,0108	6,0194	6,0279	6,0364	6,0447	6,053	6,0612	6,0694	6,0775	6,0856	6,0935	6,1015	6,1093	6,1171
83,2	6,0001	6,0091	6,018	6,0268	6,0356	6,0443	6,0529	6,0615	6,0699	6,0783	6,0866	6,0949	6,1031	6,1112	6,1193	6,1273	6,1353	6,1431	6,151
83,3	6,0335	6,0426	6,0516	6,0604	6,0692	6,0779	6,0866	6,0951	6,1036	6,1121	6,1204	6,1288	6,137	6,1451	6,1532	6,1613	6,1693	6,1772	6,185
83,4	6,0672	6,0763	6,0853	6,0942	6,103	6,1118	6,1205	6,1291	6,1377	6,1461	6,1545	6,1629	6,1711	6,1793	6,1875	6,1955	6,2035	6,2115	6,2194
83,5	6,1012	6,1103	6,1193	6,1283	6,1371	6,146	6,1547	6,1633	6,1719	6,1803	6,1888	6,1972	6,2055	6,2137	6,2219	6,23	6,238	6,246	6,2539
83,6	6,1354	6,1445	6,1536	6,1625	6,1715	6,1803	6,1891	6,1977	6,2064	6,2149	6,2233	6,2317	6,2401	6,2483	6,2565	6,2647	6,2728	6,2808	6,2887
83,7	6,1698	6,179	6,1881	6,1971	6,206	6,2149	6,2237	6,2324	6,241	6,2496	6,2581	6,2665	6,2749	6,2832	6,2915	6,2997	6,3078	6,3158	6,3238
83,8	6,2045	6,2137	6,2228	6,2319	6,2409	6,2498	6,2586	6,2673	6,276	6,2846	6,2931	6,3016	6,31	6,3183	6,3266	6,3349	6,3429	6,3511	6,359
83,9	6,2394	6,2486	6,2578	6,2669	6,2759	6,2848	6,2937	6,3025	6,3112	6,3199	6,3285	6,3369	6,3454	6,3537	6,362	6,3703	6,3784	6,3866	6,3946
84	6,2746	6,2838	6,293	6,3022	6,3112	6,3202	6,3291	6,3379	6,3467	6,3554	6,364	6,3725	6,381	6,3894	6,3977	6,406	6,4142	6,4223	6,4304
84,1	6,31	6,3193	6,3285	6,3377	6,3468	6,3558	6,3648	6,3736	6,3823	6,3911	6,3997	6,4083	6,4168	6,4253	6,4336	6,4419	6,4501	6,4583	6,4664
84,2	6,3457	6,355	6,3643	6,3735	6,3826	6,3916	6,4006	6,4095	6,4184	6,4271	6,4358	6,4444	6,4529	6,4614	6,4698	6,4781	6,4864	6,4946	6,5028
84,3	6,3815	6,391	6,4003	6,4095	6,4187	6,4278	6,4368	6,4457	6,4546	6,4634	6,4721	6,4807	6,4893	6,4978	6,5062	6,5146	6,5229	6,5312	6,5393
84,4	6,4177	6,4272	6,4365	6,4458	6,455	6,4641	6,4732	6,4821	6,491	6,4999	6,5086	6,5173	6,5259	6,5345	6,543	6,5513	6,5597	6,5679	6,5762
84,5	6,4541	6,4637	6,4731	6,4824	6,4916	6,5008	6,5099	6,5189	6,5278	6,5367	6,5454	6,5542	6,5628	6,5714	6,5799	6,5883	6,5967	6,605	6,6133
84,6	6,4909	6,5004	6,5098	6,5192	6,5285	6,5377	6,5468	6,5559	6,5648	6,5737	6,5825	6,5913	6,5999	6,6086	6,6171	6,6256	6,634	6,6424	6,6506
84,7	6,5279	6,5374	6,5469	6,5563	6,5656	6,5749	6,584	6,5931	6,6021	6,611	6,6199	6,6287	6,6374	6,646	6,6546	6,6631	6,6716	6,6799	6,6883
84,8	6,5651	6,5747	6,5842	6,5936	6,603	6,6123	6,6215	6,6306	6,6396	6,6486	6,6575	6,6663	6,6751	6,6837	6,6924	6,7009	6,7094	6,7179	6,7262
84,9	6,6026	6,6122	6,6218	6,6313	6,6407	6,65	6,6592	6,6684	6,6775	6,6865	6,6954	6,7043	6,713	6,7218	6,7304	6,739	6,7475	6,756	6,7644

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
81,5	5,6133	5,6204	5,6276	5,6347	5,6418	5,6488	5,6557	5,6627	5,6695	5,6763	5,6831	5,6898	5,6965	5,7032	5,7097	5,7163	5,7228	5,7292	5,7357
81,6	5,6436	5,6508	5,6581	5,6652	5,6723	5,6793	5,6863	5,6932	5,7001	5,707	5,7137	5,7205	5,7272	5,7339	5,7405	5,7471	5,7536	5,7601	5,7666
81,7	5,6742	5,6815	5,6887	5,6959	5,703	5,71	5,717	5,724	5,7309	5,7378	5,7446	5,7514	5,7581	5,7648	5,7714	5,778	5,7846	5,7911	5,7976
81,8	5,705	5,7123	5,7196	5,7267	5,7339	5,7409	5,748	5,755	5,7619	5,7688	5,7757	5,7825	5,7893	5,7959	5,8026	5,8093	5,8158	5,8224	5,8289
81,9	5,736	5,7433	5,7506	5,7578	5,765	5,7721	5,7792	5,7861	5,7932	5,8	5,8069	5,8138	5,8206	5,8273	5,834	5,8406	5,8473	5,8539	5,8604
82	5,7672	5,7745	5,7819	5,7891	5,7963	5,8035	5,8105	5,8176	5,8246	5,8315	5,8384	5,8453	5,8521	5,8589	5,8656	5,8723	5,8789	5,8855	5,8921
82,1	5,7986	5,806	5,8133	5,8206	5,8278	5,835	5,8421	5,8492	5,8562	5,8632	5,8701	5,877	5,8839	5,8907	5,8974	5,9041	5,9108	5,9174	5,924
82,2	5,8303	5,8377	5,845	5,8523	5,8596	5,8668	5,8739	5,8811	5,888	5,8951	5,9021	5,909	5,9158	5,9227	5,9294	5,9362	5,9428	5,9495	5,9561
82,3	5,8621	5,8695	5,8769	5,8843	5,8915	5,8988	5,9059	5,9131	5,9202	5,9272	5,9342	5,9411	5,948	5,9548	5,9617	5,9684	5,9751	5,9818	5,9884
82,4	5,8942	5,9016	5,9091	5,9164	5,9237	5,931	5,9382	5,9454	5,9524	5,9595	5,9665	5,9735	5,9804	5,9873	5,9941	6,0009	6,0077	6,0143	6,021
82,5	5,9264	5,934	5,9414	5,9487	5,9561	5,9634	5,9706	5,9779	5,985	5,9921	5,9991	6,0061	6,013	6,0199	6,0268	6,0336	6,0404	6,0471	6,0538
82,6	5,9589	5,9664	5,974	5,9814	5,9887	5,9961	6,0033	6,0105	6,0177	6,0248	6,0319	6,0389	6,0459	6,0528	6,0597	6,0666	6,0734	6,0801	6,0868
82,7	5,9916	5,9992	6,0067	6,0142	6,0216	6,0289	6,0362	6,0435	6,0507	6,0578	6,0649	6,0719	6,079	6,0859	6,0928	6,0997	6,1065	6,1133	6,1201
82,8	6,0246	6,0322	6,0398	6,0472	6,0546	6,0621	6,0694	6,0767	6,0839	6,091	6,0981	6,1052	6,1122	6,1192	6,1262	6,1331	6,1399	6,1467	6,1535
82,9	6,0578	6,0654	6,073	6,0805	6,0879	6,0954	6,1027	6,11	6,1173	6,1245	6,1316	6,1387	6,1458	6,1528	6,1598	6,1667	6,1736	6,1804	6,1872
83	6,0912	6,0989	6,1065	6,114	6,1215	6,1289	6,1363	6,1436	6,1509	6,1581	6,1653	6,1725	6,1796	6,1866	6,1936	6,2005	6,2075	6,2143	6,2211
83,1	6,1248	6,1325	6,1402	6,1478	6,1553	6,1627	6,1701	6,1775	6,1848	6,1921	6,1993	6,2064	6,2135	6,2206	6,2277	6,2346	6,2416	6,2485	6,2553
83,2	6,1587	6,1665	6,1741	6,1817	6,1892	6,1967	6,2042	6,2116	6,2189	6,2262	6,2334	6,2406	6,2478	6,2549	6,262	6,269	6,2759	6,2828	6,2897
83,3	6,1929	6,2006	6,2083	6,2159	6,2235	6,231	6,2385	6,2459	6,2532	6,2606	6,2678	6,2751	6,2823	6,2894	6,2965	6,3035	6,3105	6,3174	6,3244
83,4	6,2272	6,2349	6,2427	6,2503	6,258	6,2655	6,273	6,2804	6,2878	6,2952	6,3025	6,3098	6,3169	6,3242	6,3312	6,3383	6,3453	6,3523	6,3592
83,5	6,2618	6,2696	6,2773	6,2851	6,2927	6,3003	6,3078	6,3152	6,3227	6,3301	6,3374	6,3447	6,352	6,3591	6,3662	6,3734	6,3804	6,3874	6,3944
83,6	6,2966	6,3045	6,3123	6,32	6,3277	6,3353	6,3428	6,3503	6,3578	6,3652	6,3726	6,3798	6,3872	6,3943	6,4015	6,4087	6,4157	6,4228	6,4298
83,7	6,3317	6,3395	6,3474	6,3551	6,3628	6,3705	6,3781	6,3857	6,3931	6,4006	6,408	6,4153	6,4226	6,4298	6,437	6,4442	6,4513	6,4584	6,4654
83,8	6,367	6,3749	6,3828	6,3906	6,3983	6,406	6,4136	6,4212	6,4287	6,4362	6,4436	6,451	6,4583	6,4655	6,4728	6,48	6,4871	6,4942	6,5012
83,9	6,4026	6,4105	6,4184	6,4262	6,434	6,4417	6,4493	6,457	6,4645	6,472	6,4795	6,4869	6,4943	6,5015	6,5088	6,516	6,5232	6,5303	6,5373
84	6,4385	6,4464	6,4543	6,4622	6,47	6,4777	6,4854	6,493	6,5006	6,5082	6,5156	6,523	6,5305	6,5378	6,5451	6,5523	6,5595	6,5666	6,5738
84,1	6,4745	6,4825	6,4904	6,4984	6,5062	6,514	6,5217	6,5294	6,537	6,5445	6,552	6,5595	6,5669	6,5743	6,5816	6,5889	6,5961	6,6033	6,6104
84,2	6,5109	6,5189	6,5269	6,5348	6,5427	6,5504	6,5582	6,5659	6,5736	6,5812	6,5887	6,5962	6,6036	6,6111	6,6184	6,6257	6,6329	6,6402	6,6473
84,3	6,5475	6,5555	6,5635	6,5715	6,5794	6,5873	6,595	6,6028	6,6105	6,618	6,6256	6,6332	6,6406	6,6481	6,6554	6,6628	6,6701	6,6773	6,6845
84,4	6,5844	6,5924	6,6005	6,6084	6,6164	6,6243	6,6321	6,6399	6,6475	6,6552	6,6628	6,6704	6,6779	6,6854	6,6927	6,7001	6,7074	6,7147	6,7219
84,5	6,6215	6,6296	6,6377	6,6457	6,6537	6,6615	6,6694	6,6772	6,685	6,6926	6,7003	6,7079	6,7154	6,7229	6,7304	6,7377	6,7451	6,7524	6,7596
84,6	6,6589	6,6671	6,6751	6,6832	6,6912	6,6991	6,707	6,7148	6,7226	6,7303	6,738	6,7456	6,7532	6,7607	6,7682	6,7756	6,783	6,7903	6,7976
84,7	6,6966	6,7048	6,7129	6,721	6,729	6,7369	6,7449	6,7528	6,7606	6,7683	6,776	6,7836	6,7913	6,7988	6,8063	6,8138	6,8212	6,8285	6,8359
84,8	6,7345	6,7428	6,7509	6,759	6,767	6,7751	6,7831	6,7909	6,7987	6,8065	6,8143	6,822	6,8296	6,8372	6,8447	6,8522	6,8597	6,8671	6,8744
84,9	6,7727	6,781	6,7892	6,7973	6,8055	6,8135	6,8214	6,8294	6,8373	6,8451	6,8528	6,8606	6,8682	6,8758	6,8834	6,8909	6,8984	6,9058	6,9132

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
81,5	5,7421	5,7484	5,7547	5,761	5,7673	5,7734	5,7796	5,7857	5,7918	5,7979	5,8039	5,8099	5,8158	5,8217	5,8276	5,8335	5,8393	5,8451	5,8509
81,6	5,773	5,7794	5,7857	5,792	5,7982	5,8045	5,8106	5,8168	5,8229	5,829	5,835	5,841	5,847	5,853	5,8589	5,8647	5,8705	5,8764	5,8821
81,7	5,804	5,8105	5,8168	5,8231	5,8294	5,8356	5,8418	5,8481	5,8542	5,8603	5,8663	5,8724	5,8784	5,8844	5,8903	5,8962	5,902	5,9079	5,9137
81,8	5,8354	5,8418	5,8482	5,8545	5,8608	5,8671	5,8733	5,8795	5,8857	5,8918	5,8979	5,904	5,9099	5,916	5,9219	5,9278	5,9338	5,9396	5,9454
81,9	5,8669	5,8733	5,8797	5,8861	5,8924	5,8987	5,905	5,9112	5,9174	5,9235	5,9296	5,9357	5,9418	5,9478	5,9538	5,9597	5,9656	5,9715	5,9774
82	5,8986	5,9051	5,9115	5,9179	5,9242	5,9306	5,9369	5,9431	5,9493	5,9555	5,9616	5,9677	5,9738	5,9798	5,9858	5,9918	5,9978	6,0037	6,0095
82,1	5,9305	5,937	5,9435	5,9499	5,9563	5,9626	5,9689	5,9752	5,9814	5,9876	5,9938	5,9999	6,006	6,0121	6,0181	6,0241	6,0301	6,036	6,0419
82,2	5,9627	5,9692	5,9757	5,9821	5,9886	5,9949	6,0012	6,0075	6,0138	6,02	6,0262	6,0323	6,0385	6,0445	6,0506	6,0566	6,0626	6,0686	6,0745
82,3	5,995	6,0016	6,0081	6,0146	6,021	6,0274	6,0338	6,0401	6,0464	6,0526	6,0588	6,065	6,0712	6,0773	6,0833	6,0894	6,0954	6,1013	6,1073
82,4	6,0276	6,0342	6,0408	6,0472	6,0537	6,0601	6,0665	6,0729	6,0791	6,0854	6,0916	6,0979	6,1041	6,1101	6,1163	6,1223	6,1284	6,1344	6,1403
82,5	6,0604	6,0671	6,0736	6,0801	6,0866	6,0931	6,0995	6,1058	6,1122	6,1185	6,1247	6,131	6,1371	6,1433	6,1494	6,1556	6,1616	6,1676	6,1736
82,6	6,0935	6,1001	6,1067	6,1133	6,1198	6,1262	6,1327	6,1391	6,1454	6,1518	6,1581	6,1643	6,1705	6,1767	6,1828	6,1889	6,195	6,2011	6,2071
82,7	6,1268	6,1334	6,14	6,1466	6,1531	6,1596	6,1661	6,1725	6,1789	6,1852	6,1916	6,1978	6,2041	6,2103	6,2165	6,2226	6,2287	6,2348	6,2408
82,8	6,1603	6,1669	6,1735	6,1802	6,1867	6,1932	6,1997	6,2062	6,2126	6,219	6,2253	6,2316	6,2379	6,2441	6,2503	6,2565	6,2626	6,2687	6,2748
82,9	6,194	6,2007	6,2073	6,214	6,2206	6,2271	6,2336	6,2401	6,2465	6,2529	6,2593	6,2656	6,272	6,2781	6,2844	6,2906	6,2967	6,3028	6,3089
83	6,2279	6,2347	6,2413	6,248	6,2546	6,2612	6,2677	6,2743	6,2807	6,2871	6,2935	6,2998	6,3062	6,3124	6,3187	6,3249	6,3311	6,3373	6,3433
83,1	6,2621	6,2689	6,2756	6,2823	6,289	6,2955	6,3021	6,3086	6,3151	6,3215	6,328	6,3343	6,3407	6,347	6,3533	6,3595	6,3657	6,3719	6,378
83,2	6,2966	6,3033	6,3101	6,3168	6,3235	6,3301	6,3367	6,3432	6,3498	6,3562	6,3627	6,3691	6,3755	6,3818	6,388	6,3943	6,4006	6,4068	6,4129
83,3	6,3313	6,3381	6,3448	6,3515	6,3582	6,3649	6,3715	6,3781	6,3846	6,3912	6,3976	6,404	6,4104	6,4168	6,4231	6,4294	6,4357	6,4419	6,4481
83,4	6,3661	6,373	6,3798	6,3865	6,3932	6,3999	6,4066	6,4132	6,4198	6,4263	6,4328	6,4392	6,4457	6,4521	6,4584	6,4648	6,471	6,4772	6,4835
83,5	6,4013	6,4081	6,415	6,4218	6,4285	6,4353	6,4419	6,4486	6,4552	6,4617	6,4682	6,4747	6,4811	6,4876	6,4939	6,5003	6,5066	6,5128	6,5191
83,6	6,4367	6,4436	6,4504	6,4573	6,464	6,4708	6,4775	6,4842	6,4908	6,4974	6,5039	6,5104	6,5169	6,5233	6,5297	6,5361	6,5424	6,5487	6,555
83,7	6,4724	6,4793	6,4862	6,493	6,4999	6,5066	6,5133	6,52	6,5266	6,5332	6,5399	6,5464	6,5529	6,5594	6,5657	6,5722	6,5785	6,5849	6,5911
83,8	6,5082	6,5152	6,5221	6,529	6,5358	6,5426	6,5494	6,5561	6,5628	6,5694	6,576	6,5825	6,5891	6,5956	6,6021	6,6085	6,6148	6,6212	6,6275
83,9	6,5444	6,5514	6,5584	6,5653	6,5721	6,5789	6,5857	6,5924	6,5992	6,6059	6,6125	6,619	6,6256	6,6321	6,6386	6,645	6,6514	6,6578	6,6641
84	6,5808	6,5879	6,5948	6,6017	6,6086	6,6155	6,6223	6,6291	6,6358	6,6425	6,6491	6,6558	6,6624	6,6689	6,6754	6,6818	6,6883	6,6947	6,7011
84,1	6,6175	6,6245	6,6316	6,6385	6,6455	6,6523	6,6592	6,666	6,6727	6,6794	6,6861	6,6928	6,6994	6,7059	6,7124	6,719	6,7255	6,7318	6,7382
84,2	6,6544	6,6615	6,6685	6,6755	6,6824	6,6894	6,6962	6,703	6,7099	6,7166	6,7233	6,73	6,7367	6,7432	6,7498	6,7563	6,7628	6,7692	6,7757
84,3	6,6917	6,6988	6,7058	6,7128	6,7198	6,7267	6,7336	6,7405	6,7473	6,7541	6,7608	6,7675	6,7741	6,7808	6,7874	6,794	6,8004	6,8069	6,8133
84,4	6,7291	6,7362	6,7433	6,7504	6,7574	6,7643	6,7713	6,7782	6,785	6,7918	6,7985	6,8053	6,812	6,8186	6,8252	6,8318	6,8384	6,8449	6,8513
84,5	6,7668	6,774	6,7811	6,7882	6,7952	6,8022	6,8092	6,8161	6,8229	6,8298	6,8366	6,8434	6,8501	6,8567	6,8633	6,87	6,8766	6,8831	6,8896
84,6	6,8048	6,812	6,8192	6,8263	6,8334	6,8404	6,8474	6,8543	6,8612	6,8681	6,8749	6,8817	6,8884	6,8951	6,9018	6,9084	6,915	6,9216	6,9281
84,7	6,8431	6,8504	6,8575	6,8646	6,8718	6,8788	6,8858	6,8928	6,8997	6,9066	6,9134	6,9203	6,9271	6,9337	6,9405	6,9472	6,9538	6,9603	6,9669
84,8	6,8817	6,8889	6,8962	6,9033	6,9104	6,9175	6,9246	6,9316	6,9385	6,9454	6,9523	6,9591	6,9659	6,9727	6,9794	6,9861	6,9928	6,9994	7,006
84,9	6,9205	6,9278	6,935	6,9423	6,9494	6,9565	6,9636	6,9706	6,9776	6,9845	6,9915	6,9983	7,0052	7,0119	7,0187	7,0254	7,0321	7,0387	7,0454

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
81,5	5,8566	5,8623	5,868	5,8736	5,8792	5,8848	5,8904	5,8958
81,6	5,8879	5,8937	5,8993	5,905	5,9106	5,9162	5,9218	5,9273
81,7	5,9194	5,9252	5,9309	5,9366	5,9422	5,9479	5,9535	5,9591
81,8	5,9512	5,957	5,9627	5,9684	5,9741	5,9797	5,9854	5,9909
81,9	5,9832	5,9889	5,9947	6,0004	6,0061	6,0118	6,0175	6,0231
82	6,0154	6,0212	6,027	6,0327	6,0384	6,0441	6,0498	6,0554
82,1	6,0478	6,0536	6,0594	6,0652	6,0709	6,0767	6,0823	6,088
82,2	6,0804	6,0862	6,092	6,0978	6,1036	6,1094	6,1151	6,1208
82,3	6,1132	6,1191	6,1249	6,1307	6,1366	6,1423	6,148	6,1537
82,4	6,1463	6,1522	6,158	6,1639	6,1697	6,1755	6,1813	6,1869
82,5	6,1795	6,1855	6,1914	6,1972	6,2031	6,2089	6,2147	6,2204
82,6	6,2131	6,219	6,225	6,2308	6,2367	6,2425	6,2483	6,2541
82,7	6,2468	6,2528	6,2587	6,2646	6,2705	6,2764	6,2822	6,288
82,8	6,2808	6,2868	6,2928	6,2987	6,3046	6,3105	6,3163	6,3222
82,9	6,315	6,321	6,327	6,333	6,3389	6,3448	6,3507	6,3565
83	6,3494	6,3555	6,3615	6,3675	6,3735	6,3794	6,3853	6,3911
83,1	6,3841	6,3902	6,3963	6,4023	6,4082	6,4142	6,4201	6,426
83,2	6,4191	6,4251	6,4312	6,4373	6,4432	6,4492	6,4552	6,4611
83,3	6,4542	6,4603	6,4664	6,4725	6,4785	6,4845	6,4905	6,4964
83,4	6,4896	6,4958	6,5019	6,508	6,5141	6,52	6,526	6,532
83,5	6,5253	6,5315	6,5376	6,5437	6,5498	6,5558	6,5619	6,5678
83,6	6,5612	6,5674	6,5736	6,5797	6,5858	6,5919	6,5979	6,6039
83,7	6,5973	6,6036	6,6098	6,6159	6,6221	6,6282	6,6342	6,6402
83,8	6,6338	6,64	6,6462	6,6525	6,6586	6,6647	6,6708	6,6768
83,9	6,6705	6,6767	6,683	6,6892	6,6954	6,7015	6,7076	6,7137
84	6,7074	6,7137	6,72	6,7262	6,7324	6,7385	6,7447	6,7508
84,1	6,7446	6,7509	6,7572	6,7635	6,7697	6,7759	6,7821	6,7882
84,2	6,7821	6,7884	6,7947	6,801	6,8073	6,8135	6,8197	6,8259
84,3	6,8198	6,8262	6,8325	6,8388	6,8451	6,8514	6,8575	6,8638
84,4	6,8578	6,8641	6,8706	6,8769	6,8832	6,8895	6,8957	6,9019
84,5	6,8961	6,9025	6,9089	6,9152	6,9216	6,9278	6,9341	6,9404
84,6	6,9346	6,9411	6,9475	6,9538	6,9602	6,9666	6,9728	6,9791
84,7	6,9734	6,9799	6,9864	6,9928	6,9991	7,0055	7,0119	7,0182
84,8	7,0126	7,019	7,0255	7,0319	7,0384	7,0448	7,0511	7,0574
84,9	7,0519	7,0585	7,065	7,0715	7,0779	7,0843	7,0907	7,097

Table of external index of viability and vitality
(factor of environmental quality γ)

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
85	5,1749	5,2285	5,2782	5,3246	5,368	5,409	5,4477	5,4845	5,5196	5,5531	5,5851	5,6159	5,6455	5,6739	5,7015	5,728	5,7538	5,7787	5,8029

Table of external index of viabilityand vitality
(factor of environmental quality γ)

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
85	5,8264	5,8492	5,8714	5,8931	5,9142	5,9348	5,9549	5,9746	5,9938	6,0126	6,031	6,049	6,0667	6,084	6,1011	6,1178	6,1341	6,1502	6,166

Table of external index of viabilityand vitality
(factor of environmental quality γ)

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
85	6,1816	6,1969	6,2119	6,2267	6,2413	6,2557	6,2698	6,2838	6,2975	6,311	6,3244	6,3376	6,3505	6,3634	6,3761	6,3885	6,4009	6,4131	6,4251

Table of external index of viabilityand vitality
(factor of environmental quality γ)

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
85	6,437	6,4488	6,4604	6,472	6,4833	6,4946	6,5057	6,5167	6,5276	6,5383	6,549	6,5596	6,57	6,5804	6,5906	6,6007	6,6108	6,6207	6,6306

Table of external index of viabilityand vitality
(factor of environmental quality γ)

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
85	6,6404	6,6501	6,6597	6,6691	6,6786	6,688	6,6972	6,7064	6,7155	6,7246	6,7336	6,7425	6,7513	6,7601	6,7687	6,7774	6,7859	6,7944	6,8029

Table of external index of viabilityand vitality
(factor of environmental quality γ)

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
85	6,8112	6,8195	6,8277	6,8359	6,8441	6,8521	6,8601	6,8681	6,876	6,8839	6,8917	6,8995	6,9071	6,9147	6,9224	6,9299	6,9374	6,9449	6,9523

Table of external index of viabilityand vitality
(factor of environmental quality γ)

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
85	6,9596	6,9669	6,9742	6,9814	6,9886	6,9958	7,0029	7,0099	7,0169	7,0239	7,0308	7,0377	7,0446	7,0514	7,0582	7,065	7,0716	7,0784	7,085

Table of external index of viabilityand vitality
(factor of environmental quality γ)

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
85	7,0916	7,0981	7,1047	7,1112	7,1177	7,124	7,1304	7,1369

ADDENDUM

B

TAGOR TABLES
for the targeted medical programs
(RT TAGOR-B)

ADDENDUM

B_1

Parameters of internal viability and disease resistance of population

(α_h)

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
50	1,517	1,4928	1,4706	1,4501	1,4312	1,4136	1,3971	1,3816	1,3669	1,3531	1,34	1,3275	1,3156	1,3042	1,2933	1,2829	1,2728	1,2632	1,2538
50,1	1,5158	1,4915	1,4693	1,4488	1,4299	1,4123	1,3958	1,3803	1,3657	1,3518	1,3387	1,3262	1,3143	1,303	1,2921	1,2816	1,2716	1,2619	1,2526
50,2	1,5145	1,4902	1,468	1,4475	1,4286	1,411	1,3945	1,379	1,3644	1,3506	1,3375	1,325	1,3131	1,3017	1,2908	1,2804	1,2704	1,2607	1,2514
50,3	1,5131	1,4888	1,4666	1,4462	1,4273	1,4097	1,3932	1,3777	1,3631	1,3493	1,3362	1,3237	1,3118	1,3005	1,2896	1,2791	1,2691	1,2595	1,2502
50,4	1,5118	1,4875	1,4653	1,4449	1,426	1,4084	1,3919	1,3764	1,3619	1,348	1,3349	1,3225	1,3106	1,2992	1,2883	1,2779	1,2679	1,2582	1,2489
50,5	1,5105	1,4862	1,464	1,4436	1,4247	1,4071	1,3906	1,3752	1,3606	1,3468	1,3337	1,3212	1,3093	1,298	1,2871	1,2767	1,2666	1,257	1,2477
50,6	1,5092	1,4849	1,4627	1,4423	1,4234	1,4058	1,3894	1,3739	1,3593	1,3455	1,3324	1,32	1,3081	1,2967	1,2859	1,2754	1,2654	1,2558	1,2465
50,7	1,5078	1,4836	1,4614	1,441	1,4221	1,4045	1,3881	1,3726	1,358	1,3443	1,3312	1,3187	1,3068	1,2955	1,2846	1,2742	1,2642	1,2545	1,2453
50,8	1,5065	1,4822	1,4601	1,4397	1,4208	1,4033	1,3868	1,3714	1,3568	1,343	1,3299	1,3175	1,3056	1,2943	1,2834	1,273	1,263	1,2533	1,244
50,9	1,5052	1,4809	1,4588	1,4384	1,4195	1,402	1,3855	1,3701	1,3555	1,3417	1,3287	1,3162	1,3044	1,293	1,2822	1,2717	1,2617	1,2521	1,2428
51	1,5039	1,4796	1,4575	1,4371	1,4183	1,4007	1,3843	1,3688	1,3543	1,3405	1,3274	1,315	1,3031	1,2918	1,2809	1,2705	1,2605	1,2509	1,2416
51,1	1,5025	1,4783	1,4562	1,4358	1,417	1,3994	1,383	1,3675	1,353	1,3392	1,3262	1,3137	1,3019	1,2905	1,2797	1,2693	1,2593	1,2497	1,2404
51,2	1,5012	1,477	1,4549	1,4345	1,4157	1,3981	1,3817	1,3663	1,3517	1,338	1,3249	1,3125	1,3006	1,2893	1,2785	1,2681	1,2581	1,2484	1,2392
51,3	1,4999	1,4757	1,4536	1,4332	1,4144	1,3969	1,3804	1,365	1,3505	1,3367	1,3237	1,3112	1,2994	1,2881	1,2772	1,2668	1,2568	1,2472	1,2379
51,4	1,4986	1,4744	1,4523	1,432	1,4131	1,3956	1,3792	1,3638	1,3492	1,3355	1,3224	1,31	1,2982	1,2868	1,276	1,2656	1,2556	1,246	1,2367
51,5	1,4973	1,4731	1,451	1,4307	1,4118	1,3943	1,3779	1,3625	1,348	1,3342	1,3212	1,3088	1,2969	1,2856	1,2748	1,2644	1,2544	1,2448	1,2355
51,6	1,496	1,4718	1,4497	1,4294	1,4106	1,393	1,3766	1,3612	1,3467	1,333	1,3199	1,3075	1,2957	1,2844	1,2735	1,2632	1,2532	1,2436	1,2343
51,7	1,4947	1,4705	1,4484	1,4281	1,4093	1,3918	1,3754	1,36	1,3455	1,3317	1,3187	1,3063	1,2944	1,2831	1,2723	1,2619	1,252	1,2423	1,2331
51,8	1,4934	1,4692	1,4471	1,4268	1,408	1,3905	1,3741	1,3587	1,3442	1,3305	1,3174	1,305	1,2932	1,2819	1,2711	1,2607	1,2507	1,2411	1,2319
51,9	1,4921	1,4679	1,4458	1,4255	1,4067	1,3892	1,3729	1,3575	1,343	1,3292	1,3162	1,3038	1,292	1,2807	1,2699	1,2595	1,2495	1,2399	1,2307
52	1,4908	1,4666	1,4446	1,4243	1,4055	1,388	1,3716	1,3562	1,3417	1,328	1,315	1,3026	1,2908	1,2795	1,2687	1,2583	1,2483	1,2387	1,2295
52,1	1,4894	1,4653	1,4433	1,423	1,4042	1,3867	1,3703	1,355	1,3405	1,3267	1,3137	1,3013	1,2895	1,2782	1,2674	1,2571	1,2471	1,2375	1,2283
52,2	1,4881	1,464	1,442	1,4217	1,4029	1,3854	1,3691	1,3537	1,3392	1,3255	1,3125	1,3001	1,2883	1,277	1,2662	1,2559	1,2459	1,2363	1,2271
52,3	1,4868	1,4627	1,4407	1,4204	1,4017	1,3842	1,3678	1,3525	1,338	1,3243	1,3113	1,2989	1,2871	1,2758	1,265	1,2546	1,2447	1,2351	1,2259
52,4	1,4855	1,4614	1,4394	1,4192	1,4004	1,3829	1,3666	1,3512	1,3367	1,323	1,31	1,2977	1,2859	1,2746	1,2638	1,2534	1,2435	1,2339	1,2247
52,5	1,484	1,4601	1,4381	1,4179	1,3991	1,3817	1,3653	1,35	1,3355	1,3218	1,3088	1,2964	1,2846	1,2734	1,2626	1,2522	1,2423	1,2327	1,2235
52,6	1,483	1,4589	1,4369	1,4166	1,3979	1,3804	1,3641	1,3487	1,3343	1,3206	1,3076	1,2952	1,2834	1,2721	1,2614	1,251	1,2411	1,2315	1,2223
52,7	1,4817	1,4576	1,4356	1,4153	1,3966	1,3792	1,3628	1,3475	1,333	1,3193	1,3063	1,294	1,2822	1,2709	1,2601	1,2498	1,2399	1,2303	1,2211
52,8	1,4804	1,4563	1,4343	1,4141	1,3953	1,3779	1,3616	1,3462	1,3318	1,3181	1,3051	1,2928	1,281	1,2697	1,2589	1,2486	1,2386	1,2291	1,2199
52,9	1,4791	1,455	1,433	1,4128	1,3941	1,3766	1,3603	1,345	1,3305	1,3169	1,3039	1,2915	1,2798	1,2685	1,2577	1,2474	1,2374	1,2279	1,2187
53	1,4778	1,4537	1,4318	1,4115	1,3928	1,3754	1,3591	1,3438	1,3293	1,3156	1,3027	1,2903	1,2785	1,2673	1,2565	1,2462	1,2362	1,2267	1,2175
53,1	1,4765	1,4525	1,4305	1,4103	1,3916	1,3741	1,3578	1,3425	1,3281	1,3144	1,3014	1,2891	1,2773	1,2661	1,2553	1,245	1,235	1,2255	1,2163
53,2	1,4752	1,4512	1,4292	1,409	1,3903	1,3729	1,3566	1,3413	1,3268	1,3132	1,3002	1,2879	1,2761	1,2649	1,2541	1,2438	1,2338	1,2243	1,2151
53,3	1,4739	1,4499	1,428	1,4078	1,3891	1,3716	1,3554	1,34	1,3256	1,3119	1,299	1,2867	1,2749	1,2637	1,2529	1,2426	1,2326	1,2231	1,2139
53,4	1,4726	1,4486	1,4267	1,4065	1,3878	1,3704	1,3541	1,3388	1,3244	1,3107	1,2978	1,2854	1,2737	1,2624	1,2517	1,2414	1,2314	1,2219	1,2127

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
50	1,2449	1,2362	1,2278	1,2196	1,2117	1,2041	1,1966	1,1894	1,1824	1,1756	1,1689	1,1624	1,1561	1,1499	1,1438	1,1379	1,1322	1,1265	1,121
50,1	1,2436	1,2349	1,2265	1,2184	1,2105	1,2029	1,1954	1,1882	1,1812	1,1744	1,1677	1,1612	1,1549	1,1487	1,1426	1,1367	1,131	1,1253	1,1198
50,2	1,2424	1,2337	1,2253	1,2172	1,2093	1,2017	1,1942	1,187	1,18	1,1731	1,1665	1,16	1,1537	1,1475	1,1414	1,1355	1,1298	1,1241	1,1186
50,3	1,2412	1,2325	1,2241	1,216	1,2081	1,2004	1,193	1,1858	1,1788	1,172	1,1653	1,1588	1,1525	1,1463	1,1403	1,1344	1,1286	1,123	1,1174
50,4	1,24	1,2313	1,2229	1,2148	1,2069	1,1992	1,1918	1,1846	1,1776	1,1708	1,1641	1,1576	1,1513	1,1451	1,1391	1,1332	1,1274	1,1218	1,1163
50,5	1,2387	1,2301	1,2217	1,2135	1,2057	1,198	1,1906	1,1834	1,1764	1,1696	1,1629	1,1564	1,1501	1,1439	1,1379	1,132	1,1262	1,1206	1,1151
50,6	1,2375	1,2288	1,2205	1,2123	1,2045	1,1968	1,1894	1,1822	1,1752	1,1684	1,1617	1,1552	1,1489	1,1427	1,1367	1,1308	1,1251	1,1194	1,1139
50,7	1,2363	1,2276	1,2192	1,2111	1,2033	1,1956	1,1882	1,181	1,174	1,1672	1,1605	1,154	1,1477	1,1415	1,1355	1,1296	1,1239	1,1182	1,1127
50,8	1,2351	1,2264	1,218	1,2099	1,202	1,1944	1,187	1,1798	1,1728	1,166	1,1593	1,1529	1,1465	1,1404	1,1343	1,1285	1,1227	1,1171	1,1116
50,9	1,2338	1,2252	1,2168	1,2087	1,2008	1,1932	1,1858	1,1786	1,1716	1,1648	1,1581	1,1517	1,1453	1,1392	1,1332	1,1273	1,1215	1,1159	1,1104
51	1,2326	1,224	1,2156	1,2075	1,1996	1,192	1,1846	1,1774	1,1704	1,1636	1,157	1,1505	1,1442	1,138	1,132	1,1261	1,1204	1,1147	1,1092
51,1	1,2314	1,2228	1,2144	1,2063	1,1984	1,1908	1,1834	1,1762	1,1692	1,1624	1,1558	1,1493	1,143	1,1368	1,1308	1,1249	1,1192	1,1136	1,1081
51,2	1,2302	1,2216	1,2132	1,2051	1,1972	1,1896	1,1822	1,175	1,168	1,1612	1,1546	1,1481	1,1418	1,1356	1,1296	1,1238	1,118	1,1124	1,1069
51,3	1,229	1,2203	1,212	1,2039	1,196	1,1884	1,181	1,1738	1,1668	1,16	1,1534	1,1469	1,1406	1,1345	1,1285	1,1226	1,1168	1,1112	1,1057
51,4	1,2278	1,2191	1,2108	1,2027	1,1948	1,1872	1,1798	1,1726	1,1657	1,1588	1,1522	1,1458	1,1394	1,1333	1,1273	1,1214	1,1157	1,1101	1,1046
51,5	1,2266	1,2179	1,2096	1,2015	1,1936	1,186	1,1786	1,1715	1,1645	1,1577	1,151	1,1446	1,1383	1,1321	1,1261	1,1202	1,1145	1,1089	1,1034
51,6	1,2254	1,2167	1,2084	1,2003	1,1924	1,1848	1,1774	1,1703	1,1633	1,1565	1,1499	1,1434	1,1371	1,1309	1,1249	1,1191	1,1133	1,1077	1,1022
51,7	1,2242	1,2155	1,2072	1,1991	1,1913	1,1836	1,1763	1,1691	1,1621	1,1553	1,1487	1,1422	1,1359	1,1298	1,1238	1,1179	1,1122	1,1066	1,1011
51,8	1,223	1,2143	1,206	1,1979	1,1901	1,1825	1,1751	1,1679	1,1609	1,1541	1,1475	1,141	1,1347	1,1286	1,1226	1,1167	1,111	1,1054	1,0999
51,9	1,2217	1,2131	1,2048	1,1967	1,1889	1,1813	1,1739	1,1667	1,1597	1,1529	1,1463	1,1399	1,1336	1,1274	1,1214	1,1156	1,1098	1,1042	1,0987
52	1,2205	1,2119	1,2036	1,1955	1,1877	1,1801	1,1727	1,1655	1,1585	1,1518	1,1451	1,1387	1,1324	1,1263	1,1203	1,1144	1,1087	1,1031	1,0976
52,1	1,2193	1,2107	1,2024	1,1943	1,1865	1,1789	1,1715	1,1643	1,1574	1,1506	1,144	1,1375	1,1312	1,1251	1,1191	1,1132	1,1075	1,1019	1,0964
52,2	1,2181	1,2095	1,2012	1,1931	1,1853	1,1777	1,1703	1,1632	1,1562	1,1494	1,1428	1,1363	1,1301	1,1239	1,1179	1,1121	1,1064	1,1008	1,0953
52,3	1,2169	1,2083	1,2	1,1919	1,1841	1,1765	1,1691	1,162	1,155	1,1482	1,1416	1,1352	1,1289	1,1228	1,1168	1,1109	1,1052	1,0996	1,0941
52,4	1,2157	1,2071	1,1988	1,1907	1,1829	1,1753	1,168	1,1608	1,1538	1,1471	1,1405	1,134	1,1277	1,1216	1,1156	1,1098	1,104	1,0984	1,093
52,5	1,2145	1,2059	1,1976	1,1896	1,1817	1,1742	1,1668	1,1596	1,1527	1,1459	1,1393	1,1328	1,1266	1,1204	1,1144	1,1086	1,1029	1,0973	1,0918
52,6	1,2134	1,2047	1,1964	1,1884	1,1806	1,173	1,1656	1,1585	1,1515	1,1447	1,1381	1,1317	1,1254	1,1193	1,1133	1,1074	1,1017	1,0961	1,0907
52,7	1,2122	1,2036	1,1952	1,1872	1,1794	1,1718	1,1644	1,1573	1,1503	1,1435	1,1369	1,1305	1,1242	1,1181	1,1121	1,1063	1,1006	1,095	1,0895
52,8	1,211	1,2024	1,194	1,186	1,1782	1,1706	1,1633	1,1561	1,1491	1,1424	1,1358	1,1293	1,1231	1,1169	1,111	1,1051	1,0994	1,0938	1,0884
52,9	1,2098	1,2012	1,1929	1,1848	1,177	1,1694	1,1621	1,1549	1,148	1,1412	1,1346	1,1282	1,1219	1,1158	1,1098	1,104	1,0983	1,0927	1,0872
53	1,2086	1,2	1,1917	1,1836	1,1758	1,1683	1,1609	1,1538	1,1468	1,14	1,1334	1,127	1,1207	1,1146	1,1087	1,1028	1,0971	1,0915	1,0861
53,1	1,2074	1,1988	1,1905	1,1824	1,1746	1,1671	1,1597	1,1526	1,1456	1,1389	1,1323	1,1259	1,1196	1,1135	1,1075	1,1017	1,096	1,0904	1,0849
53,2	1,2062	1,1976	1,1893	1,1813	1,1735	1,1659	1,1586	1,1514	1,1445	1,1377	1,1311	1,1247	1,1184	1,1123	1,1063	1,1005	1,0948	1,0892	1,0838
53,3	1,205	1,1964	1,1881	1,1801	1,1723	1,1647	1,1574	1,1502	1,1433	1,1365	1,13	1,1235	1,1173	1,1112	1,1052	1,0994	1,0937	1,0881	1,0826
53,4	1,2038	1,1952	1,1869	1,1789	1,1711	1,1636	1,1562	1,1491	1,1421	1,1354	1,1288	1,1224	1,1161	1,11	1,104	1,0982	1,0925	1,0869	1,0815

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
50	1,1156	1,1103	1,1051	1,1	1,095	1,0901	1,0853	1,0806	1,0759	1,0714	1,0669	1,0625	1,0582	1,0539	1,0498	1,0456	1,0416	1,0376	1,0337
50,1	1,1144	1,1091	1,1039	1,0988	1,0938	1,0889	1,0841	1,0794	1,0748	1,0702	1,0658	1,0614	1,057	1,0528	1,0486	1,0445	1,0404	1,0365	1,0325
50,2	1,1132	1,1079	1,1027	1,0976	1,0927	1,0878	1,083	1,0783	1,0736	1,0691	1,0646	1,0602	1,0559	1,0516	1,0475	1,0433	1,0393	1,0353	1,0314
50,3	1,112	1,1067	1,1016	1,0965	1,0915	1,0866	1,0818	1,0771	1,0725	1,0679	1,0634	1,0591	1,0547	1,0505	1,0463	1,0422	1,0381	1,0342	1,0302
50,4	1,1109	1,1056	1,1004	1,0953	1,0903	1,0854	1,0806	1,0759	1,0713	1,0668	1,0623	1,0579	1,0536	1,0493	1,0452	1,041	1,037	1,033	1,0291
50,5	1,1097	1,1044	1,0992	1,0941	1,0892	1,0843	1,0795	1,0748	1,0701	1,0656	1,0611	1,0567	1,0524	1,0482	1,044	1,0399	1,0358	1,0319	1,0279
50,6	1,1085	1,1032	1,098	1,093	1,088	1,0831	1,0783	1,0736	1,069	1,0644	1,06	1,0556	1,0513	1,047	1,0429	1,0387	1,0347	1,0307	1,0268
50,7	1,1073	1,1021	1,0969	1,0918	1,0868	1,0819	1,0772	1,0724	1,0678	1,0633	1,0588	1,0544	1,0501	1,0459	1,0417	1,0376	1,0336	1,0296	1,0257
50,8	1,1062	1,1009	1,0957	1,0906	1,0857	1,0808	1,076	1,0713	1,0667	1,0621	1,0577	1,0533	1,049	1,0447	1,0406	1,0365	1,0324	1,0284	1,0245
50,9	1,105	1,0997	1,0946	1,0895	1,0845	1,0796	1,0748	1,0701	1,0655	1,061	1,0565	1,0521	1,0478	1,0436	1,0394	1,0353	1,0313	1,0273	1,0234
51	1,1038	1,0986	1,0934	1,0883	1,0833	1,0785	1,0737	1,069	1,0644	1,0598	1,0554	1,051	1,0467	1,0424	1,0383	1,0342	1,0301	1,0262	1,0222
51,1	1,1027	1,0974	1,0922	1,0872	1,0822	1,0773	1,0725	1,0678	1,0632	1,0587	1,0542	1,0498	1,0455	1,0413	1,0371	1,033	1,029	1,025	1,0211
51,2	1,1015	1,0962	1,0911	1,086	1,081	1,0761	1,0714	1,0667	1,0621	1,0575	1,0531	1,0487	1,0444	1,0402	1,036	1,0319	1,0278	1,0239	1,02
51,3	1,1003	1,0951	1,0899	1,0848	1,0799	1,075	1,0702	1,0655	1,0609	1,0564	1,0519	1,0475	1,0432	1,039	1,0348	1,0307	1,0267	1,0227	1,0188
51,4	1,0992	1,0939	1,0887	1,0837	1,0787	1,0738	1,0691	1,0644	1,0598	1,0552	1,0508	1,0464	1,0421	1,0379	1,0337	1,0296	1,0256	1,0216	1,0177
51,5	1,098	1,0927	1,0876	1,0825	1,0776	1,0727	1,0679	1,0632	1,0586	1,0541	1,0496	1,0453	1,041	1,0367	1,0326	1,0285	1,0244	1,0205	1,0166
51,6	1,0969	1,0916	1,0864	1,0814	1,0764	1,0715	1,0668	1,0621	1,0575	1,0529	1,0485	1,0441	1,0398	1,0356	1,0314	1,0273	1,0233	1,0193	1,0154
51,7	1,0957	1,0904	1,0853	1,0802	1,0753	1,0704	1,0656	1,0609	1,0563	1,0518	1,0473	1,043	1,0387	1,0344	1,0303	1,0262	1,0222	1,0182	1,0143
51,8	1,0945	1,0893	1,0841	1,0791	1,0741	1,0692	1,0645	1,0598	1,0552	1,0506	1,0462	1,0418	1,0375	1,0333	1,0292	1,0251	1,021	1,0171	1,0132
51,9	1,0934	1,0881	1,083	1,0779	1,0729	1,0681	1,0633	1,0586	1,054	1,0495	1,0451	1,0407	1,0364	1,0322	1,028	1,0239	1,0199	1,0159	1,012
52	1,0922	1,087	1,0818	1,0768	1,0718	1,0669	1,0622	1,0575	1,0529	1,0484	1,0439	1,0396	1,0353	1,031	1,0269	1,0228	1,0188	1,0148	1,0109
52,1	1,0911	1,0858	1,0807	1,0756	1,0706	1,0658	1,061	1,0563	1,0517	1,0472	1,0428	1,0384	1,0341	1,0299	1,0258	1,0217	1,0176	1,0137	1,0098
52,2	1,0899	1,0847	1,0795	1,0745	1,0695	1,0646	1,0599	1,0552	1,0506	1,0461	1,0416	1,0373	1,033	1,0288	1,0246	1,0205	1,0165	1,0126	1,0087
52,3	1,0888	1,0835	1,0784	1,0733	1,0684	1,0635	1,0587	1,0541	1,0495	1,0449	1,0405	1,0361	1,0319	1,0276	1,0235	1,0194	1,0154	1,0114	1,0075
52,4	1,0876	1,0823	1,0772	1,0722	1,0672	1,0624	1,0576	1,0529	1,0483	1,0438	1,0394	1,035	1,0307	1,0265	1,0224	1,0183	1,0143	1,0103	1,0064
52,5	1,0864	1,0812	1,0761	1,071	1,0661	1,0612	1,0564	1,0518	1,0472	1,0427	1,0382	1,0339	1,0296	1,0254	1,0212	1,0171	1,0131	1,0092	1,0053
52,6	1,0853	1,08	1,0749	1,0699	1,0649	1,0601	1,0553	1,0506	1,046	1,0415	1,0371	1,0327	1,0285	1,0242	1,0201	1,016	1,012	1,008	1,0042
52,7	1,0841	1,0789	1,0738	1,0687	1,0638	1,0589	1,0542	1,0495	1,0449	1,0404	1,036	1,0316	1,0273	1,0231	1,019	1,0149	1,0109	1,0069	1,003
52,8	1,083	1,0778	1,0726	1,0676	1,0626	1,0578	1,053	1,0484	1,0438	1,0393	1,0348	1,0305	1,0262	1,022	1,0178	1,0138	1,0098	1,0058	1,0019
52,9	1,0819	1,0766	1,0715	1,0664	1,0615	1,0566	1,0519	1,0472	1,0426	1,0381	1,0337	1,0294	1,0251	1,0209	1,0167	1,0126	1,0086	1,0047	1,0008
53	1,0807	1,0755	1,0703	1,0653	1,0604	1,0555	1,0508	1,0461	1,0415	1,037	1,0326	1,0282	1,0239	1,0197	1,0156	1,0115	1,0075	1,0036	0,9997
53,1	1,0796	1,0743	1,0692	1,0642	1,0592	1,0544	1,0496	1,045	1,0404	1,0359	1,0314	1,0271	1,0228	1,0186	1,0145	1,0104	1,0064	1,0024	0,9986
53,2	1,0784	1,0732	1,068	1,063	1,0581	1,0532	1,0485	1,0438	1,0392	1,0347	1,0303	1,026	1,0217	1,0175	1,0133	1,0093	1,0053	1,0013	0,9974
53,3	1,0773	1,072	1,0669	1,0619	1,0569	1,0521	1,0474	1,0427	1,0381	1,0336	1,0292	1,0248	1,0206	1,0164	1,0122	1,0082	1,0041	1,0002	0,9963
53,4	1,0761	1,0709	1,0658	1,0607	1,0558	1,051	1,0462	1,0416	1,037	1,0325	1,0281	1,0237	1,0194	1,0152	1,0111	1,007	1,003	0,9991	0,9952

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
50	1,0298	1,026	1,0222	1,0185	1,0149	1,0113	1,0077	1,0042	1,0007	0,9973	0,994	0,9906	0,9873	0,9841	0,9809	0,9777	0,9746	0,9715	0,9685
50,1	1,0286	1,0248	1,0211	1,0174	1,0137	1,0101	1,0066	1,0031	0,9996	0,9962	0,9928	0,9895	0,9862	0,983	0,9798	0,9766	0,9735	0,9704	0,9673
50,2	1,0275	1,0237	1,0199	1,0162	1,0126	1,009	1,0054	1,0019	0,9985	0,9951	0,9917	0,9884	0,9851	0,9818	0,9786	0,9755	0,9724	0,9693	0,9662
50,3	1,0264	1,0225	1,0188	1,0151	1,0114	1,0078	1,0043	1,0008	0,9973	0,9939	0,9906	0,9872	0,9839	0,9807	0,9775	0,9743	0,9712	0,9681	0,9651
50,4	1,0252	1,0214	1,0177	1,0139	1,0103	1,0067	1,0032	0,9997	0,9962	0,9928	0,9894	0,9861	0,9828	0,9796	0,9764	0,9732	0,9701	0,967	0,964
50,5	1,0241	1,0203	1,0165	1,0128	1,0092	1,0056	1,002	0,9985	0,9951	0,9917	0,9883	0,985	0,9817	0,9785	0,9753	0,9721	0,969	0,9659	0,9628
50,6	1,0229	1,0191	1,0154	1,0117	1,008	1,0044	1,0009	0,9974	0,9939	0,9905	0,9872	0,9838	0,9806	0,9773	0,9741	0,971	0,9679	0,9648	0,9617
50,7	1,0218	1,018	1,0142	1,0105	1,0069	1,0033	0,9998	0,9963	0,9928	0,9894	0,986	0,9827	0,9794	0,9762	0,973	0,9699	0,9667	0,9637	0,9606
50,8	1,0207	1,0168	1,0131	1,0094	1,0058	1,0022	0,9986	0,9951	0,9917	0,9883	0,9849	0,9816	0,9783	0,9751	0,9719	0,9687	0,9656	0,9625	0,9595
50,9	1,0195	1,0157	1,012	1,0083	1,0046	1,001	0,9975	0,994	0,9905	0,9871	0,9838	0,9805	0,9772	0,974	0,9708	0,9676	0,9645	0,9614	0,9584
51	1,0184	1,0146	1,0108	1,0071	1,0035	0,9999	0,9964	0,9929	0,9894	0,986	0,9827	0,9793	0,9761	0,9728	0,9696	0,9665	0,9634	0,9603	0,9573
51,1	1,0172	1,0134	1,0097	1,006	1,0024	0,9988	0,9952	0,9917	0,9883	0,9849	0,9815	0,9782	0,975	0,9717	0,9685	0,9654	0,9623	0,9592	0,9561
51,2	1,0161	1,0123	1,0086	1,0049	1,0012	0,9976	0,9941	0,9906	0,9872	0,9838	0,9804	0,9771	0,9738	0,9706	0,9674	0,9643	0,9611	0,9581	0,955
51,3	1,015	1,0112	1,0074	1,0037	1,0001	0,9965	0,993	0,9895	0,986	0,9826	0,9793	0,976	0,9727	0,9695	0,9663	0,9631	0,96	0,957	0,9539
51,4	1,0138	1,01	1,0063	1,0026	0,999	0,9954	0,9919	0,9884	0,9849	0,9815	0,9782	0,9749	0,9716	0,9684	0,9652	0,962	0,9589	0,9558	0,9528
51,5	1,0127	1,0089	1,0052	1,0015	0,9978	0,9943	0,9907	0,9872	0,9838	0,9804	0,9771	0,9737	0,9705	0,9673	0,9641	0,9609	0,9578	0,9547	0,9517
51,6	1,0116	1,0078	1,004	1,0004	0,9967	0,9931	0,9896	0,9861	0,9827	0,9793	0,9759	0,9726	0,9694	0,9661	0,963	0,9598	0,9567	0,9536	0,9506
51,7	1,0104	1,0067	1,0029	0,9992	0,9956	0,992	0,9885	0,985	0,9816	0,9782	0,9748	0,9715	0,9682	0,965	0,9618	0,9587	0,9556	0,9525	0,9495
51,8	1,0093	1,0055	1,0018	0,9981	0,9945	0,9909	0,9874	0,9839	0,9804	0,977	0,9737	0,9704	0,9671	0,9639	0,9607	0,9576	0,9545	0,9514	0,9484
51,9	1,0082	1,0044	1,0007	0,997	0,9934	0,9898	0,9862	0,9828	0,9793	0,9759	0,9726	0,9693	0,966	0,9628	0,9596	0,9565	0,9534	0,9503	0,9473
52	1,0071	1,0033	0,9995	0,9959	0,9922	0,9887	0,9851	0,9816	0,9782	0,9748	0,9715	0,9682	0,9649	0,9617	0,9585	0,9554	0,9523	0,9492	0,9462
52,1	1,0059	1,0021	0,9984	0,9947	0,9911	0,9875	0,984	0,9805	0,9771	0,9737	0,9704	0,9671	0,9638	0,9606	0,9574	0,9543	0,9511	0,9481	0,9451
52,2	1,0048	1,001	0,9973	0,9936	0,99	0,9864	0,9829	0,9794	0,976	0,9726	0,9692	0,9659	0,9627	0,9595	0,9563	0,9531	0,95	0,947	0,9439
52,3	1,0037	0,9999	0,9962	0,9925	0,9889	0,9853	0,9818	0,9783	0,9749	0,9715	0,9681	0,9648	0,9616	0,9584	0,9552	0,952	0,9489	0,9459	0,9428
52,4	1,0026	0,9988	0,995	0,9914	0,9878	0,9842	0,9807	0,9772	0,9737	0,9704	0,967	0,9637	0,9605	0,9572	0,9541	0,9509	0,9478	0,9448	0,9417
52,5	1,0014	0,9977	0,9939	0,9903	0,9866	0,9831	0,9795	0,9761	0,9726	0,9693	0,9659	0,9626	0,9594	0,9561	0,953	0,9498	0,9467	0,9437	0,9406
52,6	1,0003	0,9965	0,9928	0,9891	0,9855	0,9819	0,9784	0,975	0,9715	0,9681	0,9648	0,9615	0,9582	0,955	0,9519	0,9487	0,9456	0,9426	0,9395
52,7	0,9992	0,9954	0,9917	0,988	0,9844	0,9808	0,9773	0,9738	0,9704	0,967	0,9637	0,9604	0,9571	0,9539	0,9508	0,9476	0,9445	0,9415	0,9384
52,8	0,9981	0,9943	0,9906	0,9869	0,9833	0,9797	0,9762	0,9727	0,9693	0,9659	0,9626	0,9593	0,956	0,9528	0,9497	0,9465	0,9434	0,9404	0,9373
52,9	0,997	0,9932	0,9895	0,9858	0,9822	0,9786	0,9751	0,9716	0,9682	0,9648	0,9615	0,9582	0,9549	0,9517	0,9485	0,9454	0,9423	0,9393	0,9362
53	0,9958	0,9921	0,9883	0,9847	0,9811	0,9775	0,974	0,9705	0,9671	0,9637	0,9604	0,9571	0,9538	0,9506	0,9474	0,9443	0,9412	0,9382	0,9351
53,1	0,9947	0,9909	0,9872	0,9836	0,9799	0,9764	0,9729	0,9694	0,966	0,9626	0,9593	0,956	0,9527	0,9495	0,9463	0,9432	0,9401	0,9371	0,934
53,2	0,9936	0,9898	0,9861	0,9824	0,9788	0,9753	0,9718	0,9683	0,9649	0,9615	0,9582	0,9549	0,9516	0,9484	0,9452	0,9421	0,939	0,936	0,9329
53,3	0,9925	0,9887	0,985	0,9813	0,9777	0,9742	0,9706	0,9672	0,9638	0,9604	0,9571	0,9538	0,9505	0,9473	0,9441	0,941	0,9379	0,9349	0,9319
53,4	0,9914	0,9876	0,9839	0,9802	0,9766	0,9731	0,9695	0,9661	0,9627	0,9593	0,956	0,9527	0,9494	0,9462	0,943	0,9399	0,9368	0,9338	0,9308

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
50	0,9654	0,9625	0,9595	0,9566	0,9537	0,9509	0,948	0,9452	0,9425	0,9397	0,937	0,9344	0,9317	0,9291	0,9265	0,9239	0,9214	0,9189	0,9164
50,1	0,9643	0,9613	0,9584	0,9555	0,9526	0,9497	0,9469	0,9441	0,9414	0,9386	0,9359	0,9332	0,9306	0,928	0,9254	0,9228	0,9203	0,9177	0,9152
50,2	0,9632	0,9602	0,9573	0,9544	0,9515	0,9486	0,9458	0,943	0,9402	0,9375	0,9348	0,9321	0,9295	0,9269	0,9243	0,9217	0,9192	0,9166	0,9141
50,3	0,9621	0,9591	0,9561	0,9532	0,9504	0,9475	0,9447	0,9419	0,9391	0,9364	0,9337	0,931	0,9284	0,9258	0,9232	0,9206	0,9181	0,9155	0,913
50,4	0,961	0,958	0,955	0,9521	0,9492	0,9464	0,9436	0,9408	0,938	0,9353	0,9326	0,9299	0,9273	0,9247	0,9221	0,9195	0,9169	0,9144	0,9119
50,5	0,9598	0,9569	0,9539	0,951	0,9481	0,9453	0,9425	0,9397	0,9369	0,9342	0,9315	0,9288	0,9262	0,9235	0,921	0,9184	0,9158	0,9133	0,9108
50,6	0,9587	0,9557	0,9528	0,9499	0,947	0,9442	0,9413	0,9386	0,9358	0,9331	0,9304	0,9277	0,9251	0,9224	0,9198	0,9173	0,9147	0,9122	0,9097
50,7	0,9576	0,9546	0,9517	0,9488	0,9459	0,943	0,9402	0,9374	0,9347	0,932	0,9293	0,9266	0,924	0,9213	0,9187	0,9162	0,9136	0,9111	0,9086
50,8	0,9565	0,9535	0,9506	0,9477	0,9448	0,9419	0,9391	0,9363	0,9336	0,9309	0,9282	0,9255	0,9228	0,9202	0,9176	0,9151	0,9125	0,91	0,9075
50,9	0,9554	0,9524	0,9495	0,9465	0,9437	0,9408	0,938	0,9352	0,9325	0,9298	0,9271	0,9244	0,9217	0,9191	0,9165	0,914	0,9114	0,9089	0,9064
51	0,9543	0,9513	0,9483	0,9454	0,9426	0,9397	0,9369	0,9341	0,9314	0,9286	0,926	0,9233	0,9206	0,918	0,9154	0,9129	0,9103	0,9078	0,9053
51,1	0,9531	0,9502	0,9472	0,9443	0,9415	0,9386	0,9358	0,933	0,9303	0,9275	0,9248	0,9222	0,9195	0,9169	0,9143	0,9118	0,9092	0,9067	0,9042
51,2	0,952	0,9491	0,9461	0,9432	0,9403	0,9375	0,9347	0,9319	0,9292	0,9264	0,9237	0,9211	0,9184	0,9158	0,9132	0,9107	0,9081	0,9056	0,9031
51,3	0,9509	0,9479	0,945	0,9421	0,9392	0,9364	0,9336	0,9308	0,9281	0,9253	0,9226	0,92	0,9173	0,9147	0,9121	0,9096	0,907	0,9045	0,9021
51,4	0,9498	0,9468	0,9439	0,941	0,9381	0,9353	0,9325	0,9297	0,927	0,9242	0,9215	0,9189	0,9162	0,9136	0,911	0,9085	0,906	0,9034	0,901
51,5	0,9487	0,9457	0,9428	0,9399	0,937	0,9342	0,9314	0,9286	0,9259	0,9231	0,9204	0,9178	0,9151	0,9125	0,9099	0,9074	0,9049	0,9023	0,8999
51,6	0,9476	0,9446	0,9417	0,9388	0,9359	0,9331	0,9303	0,9275	0,9248	0,922	0,9193	0,9167	0,914	0,9114	0,9089	0,9063	0,9038	0,9013	0,8988
51,7	0,9465	0,9435	0,9406	0,9377	0,9348	0,932	0,9292	0,9264	0,9237	0,9209	0,9182	0,9156	0,9129	0,9103	0,9078	0,9052	0,9027	0,9002	0,8977
51,8	0,9454	0,9424	0,9395	0,9366	0,9337	0,9309	0,9281	0,9253	0,9226	0,9198	0,9171	0,9145	0,9119	0,9092	0,9067	0,9041	0,9016	0,8991	0,8966
51,9	0,9443	0,9413	0,9384	0,9355	0,9326	0,9298	0,927	0,9242	0,9215	0,9187	0,9161	0,9134	0,9108	0,9082	0,9056	0,903	0,9005	0,898	0,8955
52	0,9432	0,9402	0,9373	0,9344	0,9315	0,9287	0,9259	0,9231	0,9204	0,9176	0,915	0,9123	0,9097	0,9071	0,9045	0,9019	0,8994	0,8969	0,8944
52,1	0,9421	0,9391	0,9362	0,9333	0,9304	0,9276	0,9248	0,922	0,9193	0,9165	0,9139	0,9112	0,9086	0,906	0,9034	0,9008	0,8983	0,8958	0,8933
52,2	0,941	0,938	0,9351	0,9322	0,9293	0,9265	0,9237	0,9209	0,9182	0,9155	0,9128	0,9101	0,9075	0,9049	0,9023	0,8997	0,8972	0,8947	0,8922
52,3	0,9398	0,9369	0,934	0,9311	0,9282	0,9254	0,9226	0,9198	0,9171	0,9144	0,9117	0,909	0,9064	0,9038	0,9012	0,8987	0,8961	0,8936	0,8912
52,4	0,9387	0,9358	0,9329	0,93	0,9271	0,9243	0,9215	0,9187	0,916	0,9133	0,9106	0,9079	0,9053	0,9027	0,9001	0,8976	0,895	0,8925	0,8901
52,5	0,9376	0,9347	0,9318	0,9289	0,926	0,9232	0,9204	0,9176	0,9149	0,9122	0,9095	0,9068	0,9042	0,9016	0,899	0,8965	0,894	0,8915	0,889
52,6	0,9365	0,9336	0,9307	0,9278	0,9249	0,9221	0,9193	0,9165	0,9138	0,9111	0,9084	0,9057	0,9031	0,9005	0,8979	0,8954	0,8929	0,8904	0,8879
52,7	0,9354	0,9325	0,9296	0,9267	0,9238	0,921	0,9182	0,9154	0,9127	0,91	0,9073	0,9047	0,902	0,8994	0,8969	0,8943	0,8918	0,8893	0,8868
52,8	0,9343	0,9314	0,9285	0,9256	0,9227	0,9199	0,9171	0,9143	0,9116	0,9089	0,9062	0,9036	0,9009	0,8983	0,8958	0,8932	0,8907	0,8882	0,8857
52,9	0,9333	0,9303	0,9274	0,9245	0,9216	0,9188	0,916	0,9133	0,9105	0,9078	0,9051	0,9025	0,8999	0,8973	0,8947	0,8921	0,8896	0,8871	0,8847
53	0,9322	0,9292	0,9263	0,9234	0,9205	0,9177	0,9149	0,9122	0,9094	0,9067	0,904	0,9014	0,8988	0,8962	0,8936	0,8911	0,8885	0,886	0,8836
53,1	0,9311	0,9281	0,9252	0,9223	0,9194	0,9166	0,9138	0,9111	0,9083	0,9056	0,903	0,9003	0,8977	0,8951	0,8925	0,89	0,8875	0,885	0,8825
53,2	0,93	0,927	0,9241	0,9212	0,9184	0,9155	0,9127	0,91	0,9073	0,9046	0,9019	0,8992	0,8966	0,894	0,8914	0,8889	0,8864	0,8839	0,8814
53,3	0,9289	0,9259	0,923	0,9201	0,9173	0,9144	0,9117	0,9089	0,9062	0,9035	0,9008	0,8981	0,8955	0,8929	0,8904	0,8878	0,8853	0,8828	0,8803
53,4	0,9278	0,9248	0,9219	0,919	0,9162	0,9134	0,9106	0,9078	0,9051	0,9024	0,8997	0,8971	0,8944	0,8918	0,8893	0,8867	0,8842	0,8817	0,8793

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
50	0,9139	0,9114	0,909	0,9066	0,9042	0,9018	0,8995	0,8972	0,8949	0,8926	0,8903	0,8881	0,8859	0,8837	0,8815	0,8793	0,8772	0,875	0,8729
50,1	0,9128	0,9103	0,9079	0,9055	0,9031	0,9007	0,8984	0,8961	0,8938	0,8915	0,8892	0,887	0,8848	0,8826	0,8804	0,8782	0,8761	0,874	0,8718
50,2	0,9117	0,9092	0,9068	0,9044	0,902	0,8996	0,8973	0,895	0,8927	0,8904	0,8882	0,8859	0,8837	0,8815	0,8793	0,8771	0,875	0,8729	0,8708
50,3	0,9106	0,9081	0,9057	0,9033	0,9009	0,8985	0,8962	0,8939	0,8916	0,8893	0,8871	0,8848	0,8826	0,8804	0,8782	0,8761	0,8739	0,8718	0,8697
50,4	0,9095	0,907	0,9046	0,9022	0,8998	0,8975	0,8951	0,8928	0,8905	0,8882	0,886	0,8837	0,8815	0,8793	0,8771	0,875	0,8728	0,8707	0,8686
50,5	0,9084	0,9059	0,9035	0,9011	0,8987	0,8964	0,894	0,8917	0,8894	0,8871	0,8849	0,8826	0,8804	0,8782	0,876	0,8739	0,8717	0,8696	0,8675
50,6	0,9073	0,9048	0,9024	0,9	0,8976	0,8953	0,8929	0,8906	0,8883	0,886	0,8838	0,8815	0,8793	0,8771	0,8749	0,8728	0,8706	0,8685	0,8664
50,7	0,9062	0,9037	0,9013	0,8989	0,8965	0,8942	0,8918	0,8895	0,8872	0,8849	0,8827	0,8805	0,8782	0,876	0,8739	0,8717	0,8696	0,8674	0,8653
50,8	0,9051	0,9026	0,9002	0,8978	0,8954	0,8931	0,8907	0,8884	0,8861	0,8839	0,8816	0,8794	0,8771	0,875	0,8728	0,8706	0,8685	0,8663	0,8642
50,9	0,904	0,9015	0,8991	0,8967	0,8943	0,892	0,8896	0,8873	0,885	0,8828	0,8805	0,8783	0,8761	0,8739	0,8717	0,8695	0,8674	0,8653	0,8631
51	0,9029	0,9004	0,898	0,8956	0,8932	0,8909	0,8885	0,8862	0,8839	0,8817	0,8794	0,8772	0,875	0,8728	0,8706	0,8684	0,8663	0,8642	0,8621
51,1	0,9018	0,8993	0,8969	0,8945	0,8921	0,8898	0,8875	0,8851	0,8829	0,8806	0,8783	0,8761	0,8739	0,8717	0,8695	0,8674	0,8652	0,8631	0,861
51,2	0,9007	0,8982	0,8958	0,8934	0,8911	0,8887	0,8864	0,8841	0,8818	0,8795	0,8772	0,875	0,8728	0,8706	0,8684	0,8663	0,8641	0,862	0,8599
51,3	0,8996	0,8971	0,8947	0,8923	0,89	0,8876	0,8853	0,883	0,8807	0,8784	0,8762	0,8739	0,8717	0,8695	0,8673	0,8652	0,8631	0,8609	0,8588
51,4	0,8985	0,8961	0,8936	0,8912	0,8889	0,8865	0,8842	0,8819	0,8796	0,8773	0,8751	0,8728	0,8706	0,8684	0,8663	0,8641	0,862	0,8599	0,8577
51,5	0,8974	0,895	0,8925	0,8902	0,8878	0,8854	0,8831	0,8808	0,8785	0,8762	0,874	0,8718	0,8696	0,8674	0,8652	0,863	0,8609	0,8588	0,8567
51,6	0,8963	0,8939	0,8915	0,8891	0,8867	0,8843	0,882	0,8797	0,8774	0,8752	0,8729	0,8707	0,8685	0,8663	0,8641	0,862	0,8598	0,8577	0,8556
51,7	0,8952	0,8928	0,8904	0,888	0,8856	0,8833	0,8809	0,8786	0,8763	0,8741	0,8718	0,8696	0,8674	0,8652	0,863	0,8609	0,8587	0,8566	0,8545
51,8	0,8941	0,8917	0,8893	0,8869	0,8845	0,8822	0,8798	0,8775	0,8753	0,873	0,8707	0,8685	0,8663	0,8641	0,8619	0,8598	0,8577	0,8555	0,8534
51,9	0,893	0,8906	0,8882	0,8858	0,8834	0,8811	0,8788	0,8765	0,8742	0,8719	0,8697	0,8674	0,8652	0,863	0,8609	0,8587	0,8566	0,8545	0,8524
52	0,892	0,8895	0,8871	0,8847	0,8824	0,88	0,8777	0,8754	0,8731	0,8708	0,8686	0,8664	0,8642	0,862	0,8598	0,8576	0,8555	0,8534	0,8513
52,1	0,8909	0,8884	0,886	0,8836	0,8813	0,8789	0,8766	0,8743	0,872	0,8698	0,8675	0,8653	0,8631	0,8609	0,8587	0,8566	0,8544	0,8523	0,8502
52,2	0,8898	0,8874	0,8849	0,8826	0,8802	0,8778	0,8755	0,8732	0,8709	0,8687	0,8664	0,8642	0,862	0,8598	0,8576	0,8555	0,8534	0,8512	0,8491
52,3	0,8887	0,8863	0,8839	0,8815	0,8791	0,8768	0,8744	0,8721	0,8699	0,8676	0,8654	0,8631	0,8609	0,8587	0,8566	0,8544	0,8523	0,8502	0,8481
52,4	0,8876	0,8852	0,8828	0,8804	0,878	0,8757	0,8734	0,8711	0,8688	0,8665	0,8643	0,862	0,8598	0,8577	0,8555	0,8533	0,8512	0,8491	0,847
52,5	0,8865	0,8841	0,8817	0,8793	0,8769	0,8746	0,8723	0,87	0,8677	0,8654	0,8632	0,861	0,8588	0,8566	0,8544	0,8523	0,8501	0,848	0,8459
52,6	0,8854	0,883	0,8806	0,8782	0,8759	0,8735	0,8712	0,8689	0,8666	0,8644	0,8621	0,8599	0,8577	0,8555	0,8533	0,8512	0,8491	0,847	0,8449
52,7	0,8844	0,8819	0,8795	0,8771	0,8748	0,8724	0,8701	0,8678	0,8655	0,8633	0,861	0,8588	0,8566	0,8544	0,8523	0,8501	0,848	0,8459	0,8438
52,8	0,8833	0,8809	0,8785	0,8761	0,8737	0,8714	0,869	0,8668	0,8645	0,8622	0,86	0,8578	0,8556	0,8534	0,8512	0,8491	0,8469	0,8448	0,8427
52,9	0,8822	0,8798	0,8774	0,875	0,8726	0,8703	0,868	0,8657	0,8634	0,8611	0,8589	0,8567	0,8545	0,8523	0,8501	0,848	0,8459	0,8438	0,8417
53	0,8811	0,8787	0,8763	0,8739	0,8716	0,8692	0,8669	0,8646	0,8623	0,8601	0,8578	0,8556	0,8534	0,8512	0,8491	0,8469	0,8448	0,8427	0,8406
53,1	0,88	0,8776	0,8752	0,8728	0,8705	0,8681	0,8658	0,8635	0,8612	0,859	0,8568	0,8545	0,8523	0,8502	0,848	0,8459	0,8437	0,8416	0,8395
53,2	0,879	0,8765	0,8741	0,8718	0,8694	0,8671	0,8647	0,8625	0,8602	0,8579	0,8557	0,8535	0,8513	0,8491	0,8469	0,8448	0,8427	0,8406	0,8385
53,3	0,8779	0,8755	0,8731	0,8707	0,8683	0,866	0,8637	0,8614	0,8591	0,8569	0,8546	0,8524	0,8502	0,848	0,8459	0,8437	0,8416	0,8395	0,8374
53,4	0,8768	0,8744	0,872	0,8696	0,8673	0,8649	0,8626	0,8603	0,858	0,8558	0,8535	0,8513	0,8491	0,847	0,8448	0,8427	0,8405	0,8384	0,8363

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
50	0,8708	0,8688	0,8667	0,8646	0,8626	0,8606	0,8586	0,8566	0,8546	0,8527	0,8507	0,8488	0,8469	0,845	0,8431	0,8412	0,8394	0,8375	0,8357
50,1	0,8697	0,8677	0,8656	0,8636	0,8615	0,8595	0,8575	0,8555	0,8535	0,8516	0,8497	0,8477	0,8458	0,8439	0,842	0,8402	0,8383	0,8364	0,8346
50,2	0,8687	0,8666	0,8645	0,8625	0,8604	0,8584	0,8564	0,8544	0,8525	0,8505	0,8486	0,8466	0,8447	0,8428	0,8409	0,8391	0,8372	0,8354	0,8335
50,3	0,8676	0,8655	0,8634	0,8614	0,8594	0,8573	0,8553	0,8534	0,8514	0,8494	0,8475	0,8456	0,8436	0,8418	0,8399	0,838	0,8361	0,8343	0,8325
50,4	0,8665	0,8644	0,8623	0,8603	0,8583	0,8563	0,8543	0,8523	0,8503	0,8483	0,8464	0,8445	0,8426	0,8407	0,8388	0,8369	0,8351	0,8332	0,8314
50,5	0,8654	0,8633	0,8613	0,8592	0,8572	0,8552	0,8532	0,8512	0,8492	0,8473	0,8453	0,8434	0,8415	0,8396	0,8377	0,8358	0,834	0,8321	0,8303
50,6	0,8643	0,8622	0,8602	0,8581	0,8561	0,8541	0,8521	0,8501	0,8481	0,8462	0,8442	0,8423	0,8404	0,8385	0,8366	0,8348	0,8329	0,8311	0,8292
50,7	0,8632	0,8611	0,8591	0,857	0,855	0,853	0,851	0,849	0,8471	0,8451	0,8432	0,8412	0,8393	0,8374	0,8356	0,8337	0,8318	0,83	0,8282
50,8	0,8621	0,8601	0,858	0,856	0,8539	0,8519	0,8499	0,848	0,846	0,844	0,8421	0,8402	0,8383	0,8364	0,8345	0,8326	0,8308	0,8289	0,8271
50,9	0,8611	0,859	0,8569	0,8549	0,8529	0,8508	0,8489	0,8469	0,8449	0,843	0,841	0,8391	0,8372	0,8353	0,8334	0,8315	0,8297	0,8279	0,826
51	0,86	0,8579	0,8558	0,8538	0,8518	0,8498	0,8478	0,8458	0,8438	0,8419	0,8399	0,838	0,8361	0,8342	0,8323	0,8305	0,8286	0,8268	0,825
51,1	0,8589	0,8568	0,8548	0,8527	0,8507	0,8487	0,8467	0,8447	0,8428	0,8408	0,8389	0,837	0,835	0,8332	0,8313	0,8294	0,8276	0,8257	0,8239
51,2	0,8578	0,8557	0,8537	0,8516	0,8496	0,8476	0,8456	0,8436	0,8417	0,8397	0,8378	0,8359	0,834	0,8321	0,8302	0,8283	0,8265	0,8246	0,8228
51,3	0,8567	0,8547	0,8526	0,8506	0,8485	0,8465	0,8445	0,8426	0,8406	0,8387	0,8367	0,8348	0,8329	0,831	0,8291	0,8273	0,8254	0,8236	0,8218
51,4	0,8557	0,8536	0,8515	0,8495	0,8475	0,8455	0,8435	0,8415	0,8395	0,8376	0,8357	0,8337	0,8318	0,8299	0,8281	0,8262	0,8243	0,8225	0,8207
51,5	0,8546	0,8525	0,8505	0,8484	0,8464	0,8444	0,8424	0,8404	0,8385	0,8365	0,8346	0,8327	0,8308	0,8289	0,827	0,8251	0,8233	0,8214	0,8196
51,6	0,8535	0,8514	0,8494	0,8473	0,8453	0,8433	0,8413	0,8394	0,8374	0,8354	0,8335	0,8316	0,8297	0,8278	0,8259	0,8241	0,8222	0,8204	0,8186
51,7	0,8524	0,8504	0,8483	0,8463	0,8443	0,8422	0,8403	0,8383	0,8363	0,8344	0,8324	0,8305	0,8286	0,8267	0,8249	0,823	0,8211	0,8193	0,8175
51,8	0,8514	0,8493	0,8472	0,8452	0,8432	0,8412	0,8392	0,8372	0,8353	0,8333	0,8314	0,8295	0,8276	0,8257	0,8238	0,8219	0,8201	0,8182	0,8164
51,9	0,8503	0,8482	0,8462	0,8441	0,8421	0,8401	0,8381	0,8361	0,8342	0,8322	0,8303	0,8284	0,8265	0,8246	0,8227	0,8209	0,819	0,8172	0,8154
52	0,8492	0,8471	0,8451	0,8431	0,841	0,839	0,837	0,8351	0,8331	0,8312	0,8292	0,8273	0,8254	0,8235	0,8217	0,8198	0,818	0,8161	0,8143
52,1	0,8481	0,8461	0,844	0,842	0,84	0,838	0,836	0,834	0,832	0,8301	0,8282	0,8263	0,8244	0,8225	0,8206	0,8187	0,8169	0,8151	0,8132
52,2	0,8471	0,845	0,8429	0,8409	0,8389	0,8369	0,8349	0,8329	0,831	0,829	0,8271	0,8252	0,8233	0,8214	0,8195	0,8177	0,8158	0,814	0,8122
52,3	0,846	0,8439	0,8419	0,8398	0,8378	0,8358	0,8338	0,8319	0,8299	0,828	0,826	0,8241	0,8222	0,8203	0,8185	0,8166	0,8148	0,8129	0,8111
52,4	0,8449	0,8429	0,8408	0,8388	0,8368	0,8348	0,8328	0,8308	0,8288	0,8269	0,825	0,8231	0,8212	0,8193	0,8174	0,8156	0,8137	0,8119	0,8101
52,5	0,8439	0,8418	0,8397	0,8377	0,8357	0,8337	0,8317	0,8297	0,8278	0,8258	0,8239	0,822	0,8201	0,8182	0,8164	0,8145	0,8127	0,8108	0,809
52,6	0,8428	0,8407	0,8387	0,8366	0,8346	0,8326	0,8306	0,8287	0,8267	0,8248	0,8229	0,8209	0,819	0,8172	0,8153	0,8134	0,8116	0,8098	0,8079
52,7	0,8417	0,8397	0,8376	0,8356	0,8336	0,8316	0,8296	0,8276	0,8257	0,8237	0,8218	0,8199	0,818	0,8161	0,8142	0,8124	0,8105	0,8087	0,8069
52,8	0,8406	0,8386	0,8365	0,8345	0,8325	0,8305	0,8285	0,8266	0,8246	0,8227	0,8207	0,8188	0,8169	0,815	0,8132	0,8113	0,8095	0,8077	0,8058
52,9	0,8396	0,8375	0,8355	0,8334	0,8314	0,8294	0,8275	0,8255	0,8235	0,8216	0,8197	0,8178	0,8159	0,814	0,8121	0,8103	0,8084	0,8066	0,8048
53	0,8385	0,8365	0,8344	0,8324	0,8304	0,8284	0,8264	0,8244	0,8225	0,8205	0,8186	0,8167	0,8148	0,8129	0,8111	0,8092	0,8074	0,8055	0,8037
53,1	0,8374	0,8354	0,8333	0,8313	0,8293	0,8273	0,8253	0,8234	0,8214	0,8195	0,8176	0,8156	0,8138	0,8119	0,81	0,8082	0,8063	0,8045	0,8027
53,2	0,8364	0,8343	0,8323	0,8303	0,8282	0,8263	0,8243	0,8223	0,8204	0,8184	0,8165	0,8146	0,8127	0,8108	0,8089	0,8071	0,8053	0,8034	0,8016
53,3	0,8353	0,8333	0,8312	0,8292	0,8272	0,8252	0,8232	0,8212	0,8193	0,8174	0,8154	0,8135	0,8116	0,8098	0,8079	0,806	0,8042	0,8024	0,8006
53,4	0,8343	0,8322	0,8302	0,8281	0,8261	0,8241	0,8222	0,8202	0,8182	0,8163	0,8144	0,8125	0,8106	0,8087	0,8068	0,805	0,8031	0,8013	0,7995

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
50	0,8339	0,8321	0,8303	0,8285	0,8267	0,8249	0,8232	0,8215
50,1	0,8328	0,831	0,8292	0,8274	0,8256	0,8239	0,8221	0,8204
50,2	0,8317	0,8299	0,8281	0,8263	0,8246	0,8228	0,8211	0,8193
50,3	0,8306	0,8288	0,827	0,8253	0,8235	0,8217	0,82	0,8182
50,4	0,8296	0,8278	0,826	0,8242	0,8224	0,8207	0,8189	0,8172
50,5	0,8285	0,8267	0,8249	0,8231	0,8213	0,8196	0,8178	0,8161
50,6	0,8274	0,8256	0,8238	0,822	0,8203	0,8185	0,8168	0,815
50,7	0,8263	0,8245	0,8228	0,821	0,8192	0,8174	0,8157	0,814
50,8	0,8253	0,8235	0,8217	0,8199	0,8181	0,8164	0,8146	0,8129
50,9	0,8242	0,8224	0,8206	0,8188	0,8171	0,8153	0,8136	0,8118
51	0,8231	0,8213	0,8195	0,8178	0,816	0,8142	0,8125	0,8108
51,1	0,8221	0,8203	0,8185	0,8167	0,8149	0,8132	0,8114	0,8097
51,2	0,821	0,8192	0,8174	0,8156	0,8139	0,8121	0,8104	0,8086
51,3	0,8199	0,8181	0,8163	0,8146	0,8128	0,8111	0,8093	0,8076
51,4	0,8189	0,8171	0,8153	0,8135	0,8117	0,81	0,8083	0,8065
51,5	0,8178	0,816	0,8142	0,8124	0,8107	0,8089	0,8072	0,8055
51,6	0,8167	0,8149	0,8132	0,8114	0,8096	0,8079	0,8061	0,8044
51,7	0,8157	0,8139	0,8121	0,8103	0,8086	0,8068	0,8051	0,8033
51,8	0,8146	0,8128	0,811	0,8093	0,8075	0,8057	0,804	0,8023
51,9	0,8136	0,8118	0,81	0,8082	0,8064	0,8047	0,803	0,8012
52	0,8125	0,8107	0,8089	0,8071	0,8054	0,8036	0,8019	0,8002
52,1	0,8114	0,8096	0,8079	0,8061	0,8043	0,8026	0,8008	0,7991
52,2	0,8104	0,8086	0,8068	0,805	0,8033	0,8015	0,7998	0,7981
52,3	0,8093	0,8075	0,8057	0,804	0,8022	0,8005	0,7987	0,797
52,4	0,8083	0,8065	0,8047	0,8029	0,8012	0,7994	0,7977	0,7959
52,5	0,8072	0,8054	0,8036	0,8019	0,8001	0,7984	0,7966	0,7949
52,6	0,8061	0,8043	0,8026	0,8008	0,799	0,7973	0,7956	0,7938
52,7	0,8051	0,8033	0,8015	0,7997	0,798	0,7962	0,7945	0,7928
52,8	0,804	0,8022	0,8005	0,7987	0,7969	0,7952	0,7935	0,7917
52,9	0,803	0,8012	0,7994	0,7976	0,7959	0,7941	0,7924	0,7907
53	0,8019	0,8001	0,7984	0,7966	0,7948	0,7931	0,7914	0,7896
53,1	0,8009	0,7991	0,7973	0,7955	0,7938	0,792	0,7903	0,7886
53,2	0,7998	0,798	0,7962	0,7945	0,7927	0,791	0,7893	0,7875
53,3	0,7988	0,797	0,7952	0,7934	0,7917	0,7899	0,7882	0,7865
53,4	0,7977	0,7959	0,7941	0,7924	0,7906	0,7889	0,7872	0,7854

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
53,5	1,4714	1,4473	1,4254	1,4052	1,3866	1,3692	1,3529	1,3376	1,3231	1,3095	1,2965	1,2842	1,2725	1,2612	1,2505	1,2402	1,2303	1,2207	1,2115
53,6	1,4701	1,4461	1,4242	1,404	1,3853	1,3679	1,3516	1,3363	1,3219	1,3083	1,2953	1,283	1,2713	1,26	1,2493	1,239	1,2291	1,2195	1,2103
53,7	1,4688	1,4448	1,4229	1,4027	1,3841	1,3667	1,3504	1,3351	1,3207	1,3071	1,2941	1,2818	1,2701	1,2588	1,2481	1,2378	1,2279	1,2183	1,2091
53,8	1,4675	1,4435	1,4216	1,4015	1,3828	1,3654	1,3492	1,3339	1,3195	1,3058	1,2929	1,2806	1,2688	1,2576	1,2469	1,2366	1,2267	1,2171	1,2079
53,9	1,4662	1,4423	1,4204	1,4002	1,3816	1,3642	1,3479	1,3326	1,3182	1,3046	1,2917	1,2794	1,2676	1,2564	1,2457	1,2354	1,2255	1,2159	1,2068
54	1,465	1,441	1,4191	1,399	1,3803	1,3629	1,3467	1,3314	1,317	1,3034	1,2905	1,2782	1,2664	1,2552	1,2445	1,2342	1,2243	1,2148	1,2056
54,1	1,4637	1,4397	1,4178	1,3977	1,3791	1,3617	1,3455	1,3302	1,3158	1,3022	1,2893	1,277	1,2652	1,254	1,2433	1,233	1,2231	1,2136	1,2044
54,2	1,4624	1,4385	1,4166	1,3965	1,3778	1,3605	1,3442	1,329	1,3146	1,301	1,288	1,2757	1,264	1,2528	1,2421	1,2318	1,2219	1,2124	1,2032
54,3	1,4611	1,4372	1,4153	1,3952	1,3766	1,3592	1,343	1,3277	1,3134	1,2997	1,2868	1,2745	1,2628	1,2516	1,2409	1,2306	1,2207	1,2112	1,202
54,4	1,4599	1,4359	1,4141	1,394	1,3753	1,358	1,3418	1,3265	1,3121	1,2985	1,2856	1,2733	1,2616	1,2504	1,2397	1,2294	1,2195	1,21	1,2009
54,5	1,4586	1,4347	1,4128	1,3927	1,3741	1,3568	1,3405	1,3253	1,3109	1,2973	1,2844	1,2721	1,2604	1,2492	1,2385	1,2282	1,2183	1,2088	1,1997
54,6	1,4573	1,4334	1,4116	1,3915	1,3729	1,3555	1,3393	1,3241	1,3097	1,2961	1,2832	1,2709	1,2592	1,248	1,2373	1,227	1,2172	1,2077	1,1985
54,7	1,4561	1,4322	1,4103	1,3902	1,3716	1,3543	1,3381	1,3229	1,3085	1,2949	1,282	1,2697	1,258	1,2468	1,2361	1,2259	1,216	1,2065	1,1973
54,8	1,4548	1,4309	1,4091	1,389	1,3704	1,3531	1,3369	1,3216	1,3073	1,2937	1,2808	1,2685	1,2568	1,2456	1,2349	1,2247	1,2148	1,2053	1,1961
54,9	1,4535	1,4296	1,4078	1,3877	1,3692	1,3518	1,3356	1,3204	1,3061	1,2925	1,2796	1,2673	1,2556	1,2445	1,2338	1,2235	1,2136	1,2041	1,195
55	1,4523	1,4284	1,4066	1,3865	1,3679	1,3506	1,3344	1,3192	1,3048	1,2913	1,2784	1,2661	1,2544	1,2433	1,2326	1,2223	1,2124	1,2029	1,1938
55,1	1,451	1,4271	1,4053	1,3853	1,3667	1,3494	1,3332	1,318	1,3036	1,2901	1,2772	1,2649	1,2532	1,2421	1,2314	1,2211	1,2113	1,2018	1,1926
55,2	1,4498	1,4259	1,4041	1,384	1,3655	1,3482	1,332	1,3168	1,3024	1,2889	1,276	1,2637	1,252	1,2409	1,2302	1,2199	1,2101	1,2006	1,1914
55,3	1,4485	1,4246	1,4028	1,3828	1,3642	1,3469	1,3308	1,3156	1,3012	1,2877	1,2748	1,2625	1,2509	1,2397	1,229	1,2188	1,2089	1,1994	1,1903
55,4	1,4472	1,4234	1,4016	1,3816	1,363	1,3457	1,3295	1,3143	1,3	1,2864	1,2736	1,2613	1,2497	1,2385	1,2278	1,2176	1,2077	1,1982	1,1891
55,5	1,446	1,4221	1,4004	1,3803	1,3618	1,3445	1,3283	1,3131	1,2988	1,2852	1,2724	1,2601	1,2485	1,2373	1,2266	1,2164	1,2065	1,1971	1,1879
55,6	1,4447	1,4209	1,3991	1,3791	1,3605	1,3433	1,3271	1,3119	1,2976	1,284	1,2712	1,259	1,2473	1,2361	1,2255	1,2152	1,2054	1,1959	1,1868
55,7	1,4435	1,4196	1,3979	1,3779	1,3593	1,342	1,3259	1,3107	1,2964	1,2828	1,27	1,2578	1,2461	1,2349	1,2243	1,214	1,2042	1,1947	1,1856
55,8	1,4422	1,4184	1,3966	1,3766	1,3581	1,3408	1,3247	1,3095	1,2952	1,2816	1,2688	1,2566	1,2449	1,2338	1,2231	1,2129	1,203	1,1935	1,1844
55,9	1,441	1,4171	1,3954	1,3754	1,3569	1,3396	1,3235	1,3083	1,294	1,2804	1,2676	1,2554	1,2437	1,2326	1,2219	1,2117	1,2018	1,1924	1,1833
56	1,4397	1,4159	1,3942	1,3742	1,3556	1,3384	1,3222	1,3071	1,2928	1,2792	1,2664	1,2542	1,2425	1,2314	1,2207	1,2105	1,2007	1,1912	1,1821
56,1	1,4385	1,4147	1,3929	1,3729	1,3544	1,3372	1,321	1,3059	1,2916	1,278	1,2652	1,253	1,2413	1,2302	1,2196	1,2093	1,1995	1,19	1,1809
56,2	1,4372	1,4134	1,3917	1,3717	1,3532	1,336	1,3198	1,3047	1,2904	1,2768	1,264	1,2518	1,2402	1,229	1,2184	1,2082	1,1983	1,1889	1,1798
56,3	1,436	1,4122	1,3905	1,3705	1,352	1,3347	1,3186	1,3035	1,2892	1,2757	1,2628	1,2506	1,239	1,2279	1,2172	1,207	1,1972	1,1877	1,1786
56,4	1,4347	1,4109	1,3892	1,3692	1,3507	1,3335	1,3174	1,3023	1,288	1,2745	1,2616	1,2494	1,2378	1,2267	1,216	1,2058	1,196	1,1865	1,1774
56,5	1,4335	1,4097	1,388	1,368	1,3495	1,3323	1,3162	1,3011	1,2868	1,2733	1,2604	1,2482	1,2366	1,2255	1,2149	1,2046	1,1948	1,1854	1,1763
56,6	1,4322	1,4085	1,3868	1,3668	1,3483	1,3311	1,315	1,2999	1,2856	1,2721	1,2593	1,2471	1,2354	1,2243	1,2137	1,2035	1,1937	1,1842	1,1751
56,7	1,431	1,4072	1,3855	1,3656	1,3471	1,3299	1,3138	1,2987	1,2844	1,2709	1,2581	1,2459	1,2343	1,2231	1,2125	1,2023	1,1925	1,183	1,1739
56,8	1,4297	1,406	1,3843	1,3644	1,3459	1,3287	1,3126	1,2974	1,2832	1,2697	1,2569	1,2447	1,2331	1,222	1,2113	1,2011	1,1913	1,1819	1,1728
56,9	1,4285	1,4047	1,3831	1,3631	1,3447	1,3275	1,3114	1,2962	1,282	1,2685	1,2557	1,2435	1,2319	1,2208	1,2102	1,2	1,1902	1,1807	1,1716

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
53,5	1,2026	1,1941	1,1858	1,1777	1,1699	1,1624	1,155	1,1479	1,141	1,1342	1,1276	1,1212	1,115	1,1088	1,1029	1,0971	1,0914	1,0858	1,0803
53,6	1,2015	1,1929	1,1846	1,1766	1,1688	1,1612	1,1539	1,1467	1,1398	1,1331	1,1265	1,1201	1,1138	1,1077	1,1017	1,0959	1,0902	1,0846	1,0792
53,7	1,2003	1,1917	1,1834	1,1754	1,1676	1,16	1,1527	1,1456	1,1386	1,1319	1,1253	1,1189	1,1126	1,1065	1,1006	1,0948	1,0891	1,0835	1,078
53,8	1,1991	1,1905	1,1822	1,1742	1,1664	1,1589	1,1515	1,1444	1,1375	1,1307	1,1242	1,1177	1,1115	1,1054	1,0994	1,0936	1,0879	1,0823	1,0769
53,9	1,1979	1,1893	1,1811	1,173	1,1652	1,1577	1,1504	1,1432	1,1363	1,1296	1,123	1,1166	1,1103	1,1042	1,0983	1,0925	1,0868	1,0812	1,0758
54	1,1967	1,1882	1,1799	1,1719	1,1641	1,1565	1,1492	1,1421	1,1352	1,1284	1,1218	1,1154	1,1092	1,1031	1,0971	1,0913	1,0856	1,0801	1,0746
54,1	1,1955	1,187	1,1787	1,1707	1,1629	1,1554	1,148	1,1409	1,134	1,1273	1,1207	1,1143	1,108	1,1019	1,096	1,0902	1,0845	1,0789	1,0735
54,2	1,1944	1,1858	1,1775	1,1695	1,1617	1,1542	1,1469	1,1398	1,1328	1,1261	1,1195	1,1131	1,1069	1,1008	1,0948	1,089	1,0833	1,0778	1,0723
54,3	1,1932	1,1846	1,1764	1,1683	1,1606	1,153	1,1457	1,1386	1,1317	1,1249	1,1184	1,112	1,1057	1,0997	1,0937	1,0879	1,0822	1,0766	1,0712
54,4	1,192	1,1835	1,1752	1,1672	1,1594	1,1519	1,1446	1,1374	1,1305	1,1238	1,1172	1,1108	1,1046	1,0985	1,0926	1,0867	1,0811	1,0755	1,0701
54,5	1,1908	1,1823	1,174	1,166	1,1582	1,1507	1,1434	1,1363	1,1294	1,1226	1,1161	1,1097	1,1034	1,0974	1,0914	1,0856	1,0799	1,0744	1,0689
54,6	1,1897	1,1811	1,1728	1,1648	1,1571	1,1495	1,1422	1,1351	1,1282	1,1215	1,1149	1,1085	1,1023	1,0962	1,0903	1,0845	1,0788	1,0732	1,0678
54,7	1,1885	1,1799	1,1717	1,1637	1,1559	1,1484	1,1411	1,134	1,1271	1,1203	1,1138	1,1074	1,1012	1,0951	1,0891	1,0833	1,0776	1,0721	1,0667
54,8	1,1873	1,1788	1,1705	1,1625	1,1548	1,1472	1,1399	1,1328	1,1259	1,1192	1,1126	1,1062	1,1	1,0939	1,088	1,0822	1,0765	1,071	1,0655
54,9	1,1861	1,1776	1,1693	1,1613	1,1536	1,1461	1,1388	1,1317	1,1248	1,118	1,1115	1,1051	1,0989	1,0928	1,0868	1,081	1,0754	1,0698	1,0644
55	1,185	1,1764	1,1682	1,1602	1,1524	1,1449	1,1376	1,1305	1,1236	1,1169	1,1103	1,104	1,0977	1,0916	1,0857	1,0799	1,0742	1,0687	1,0633
55,1	1,1838	1,1753	1,167	1,159	1,1513	1,1438	1,1365	1,1294	1,1225	1,1157	1,1092	1,1028	1,0966	1,0905	1,0846	1,0788	1,0731	1,0676	1,0621
55,2	1,1826	1,1741	1,1658	1,1579	1,1501	1,1426	1,1353	1,1282	1,1213	1,1146	1,108	1,1017	1,0954	1,0894	1,0834	1,0776	1,072	1,0664	1,061
55,3	1,1814	1,1729	1,1647	1,1567	1,149	1,1414	1,1341	1,1271	1,1202	1,1134	1,1069	1,1005	1,0943	1,0882	1,0823	1,0765	1,0708	1,0653	1,0599
55,4	1,1803	1,1718	1,1635	1,1555	1,1478	1,1403	1,133	1,1259	1,119	1,1123	1,1058	1,0994	1,0932	1,0871	1,0812	1,0754	1,0697	1,0642	1,0587
55,5	1,1791	1,1706	1,1624	1,1544	1,1466	1,1391	1,1318	1,1248	1,1179	1,1111	1,1046	1,0982	1,092	1,086	1,08	1,0742	1,0686	1,063	1,0576
55,6	1,1779	1,1694	1,1612	1,1532	1,1455	1,138	1,1307	1,1236	1,1167	1,11	1,1035	1,0971	1,0909	1,0848	1,0789	1,0731	1,0674	1,0619	1,0565
55,7	1,1768	1,1683	1,16	1,1521	1,1443	1,1368	1,1295	1,1225	1,1156	1,1089	1,1023	1,096	1,0897	1,0837	1,0778	1,072	1,0663	1,0608	1,0554
55,8	1,1756	1,1671	1,1589	1,1509	1,1432	1,1357	1,1284	1,1213	1,1144	1,1077	1,1012	1,0948	1,0886	1,0825	1,0766	1,0708	1,0652	1,0597	1,0542
55,9	1,1745	1,1659	1,1577	1,1497	1,142	1,1345	1,1272	1,1202	1,1133	1,1066	1,1	1,0937	1,0875	1,0814	1,0755	1,0697	1,0641	1,0585	1,0531
56	1,1733	1,1648	1,1566	1,1486	1,1409	1,1334	1,1261	1,119	1,1121	1,1054	1,0989	1,0925	1,0863	1,0803	1,0744	1,0686	1,0629	1,0574	1,052
56,1	1,1721	1,1636	1,1554	1,1474	1,1397	1,1322	1,1249	1,1179	1,111	1,1043	1,0978	1,0914	1,0852	1,0791	1,0732	1,0675	1,0618	1,0563	1,0509
56,2	1,171	1,1625	1,1542	1,1463	1,1386	1,1311	1,1238	1,1167	1,1098	1,1032	1,0966	1,0903	1,0841	1,078	1,0721	1,0663	1,0607	1,0551	1,0497
56,3	1,1698	1,1613	1,1531	1,1451	1,1374	1,1299	1,1227	1,1156	1,1087	1,102	1,0955	1,0891	1,0829	1,0769	1,071	1,0652	1,0595	1,054	1,0486
56,4	1,1686	1,1601	1,1519	1,144	1,1363	1,1288	1,1215	1,1144	1,1076	1,1009	1,0944	1,088	1,0818	1,0758	1,0698	1,0641	1,0584	1,0529	1,0475
56,5	1,1675	1,159	1,1508	1,1428	1,1351	1,1276	1,1204	1,1133	1,1064	1,0997	1,0932	1,0869	1,0807	1,0746	1,0687	1,0629	1,0573	1,0518	1,0464
56,6	1,1663	1,1578	1,1496	1,1417	1,134	1,1265	1,1192	1,1122	1,1053	1,0986	1,0921	1,0857	1,0795	1,0735	1,0676	1,0618	1,0562	1,0507	1,0453
56,7	1,1652	1,1567	1,1485	1,1405	1,1328	1,1253	1,1181	1,111	1,1041	1,0975	1,0909	1,0846	1,0784	1,0724	1,0665	1,0607	1,0551	1,0495	1,0441
56,8	1,164	1,1555	1,1473	1,1394	1,1317	1,1242	1,1169	1,1099	1,103	1,0963	1,0898	1,0835	1,0773	1,0712	1,0653	1,0596	1,0539	1,0484	1,043
56,9	1,1629	1,1544	1,1462	1,1382	1,1305	1,123	1,1158	1,1087	1,1019	1,0952	1,0887	1,0823	1,0761	1,0701	1,0642	1,0584	1,0528	1,0473	1,0419

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
53,5	1,075	1,0698	1,0646	1,0596	1,0547	1,0498	1,0451	1,0404	1,0358	1,0314	1,0269	1,0226	1,0183	1,0141	1,01	1,0059	1,0019	0,998	0,9941
53,6	1,0738	1,0686	1,0635	1,0585	1,0535	1,0487	1,044	1,0393	1,0347	1,0302	1,0258	1,0215	1,0172	1,013	1,0089	1,0048	1,0008	0,9969	0,993
53,7	1,0727	1,0675	1,0623	1,0573	1,0524	1,0476	1,0428	1,0382	1,0336	1,0291	1,0247	1,0203	1,0161	1,0119	1,0077	1,0037	0,9997	0,9957	0,9919
53,8	1,0716	1,0663	1,0612	1,0562	1,0513	1,0464	1,0417	1,037	1,0325	1,028	1,0236	1,0192	1,015	1,0108	1,0066	1,0026	0,9986	0,9946	0,9907
53,9	1,0704	1,0652	1,0601	1,0551	1,0501	1,0453	1,0406	1,0359	1,0313	1,0268	1,0224	1,0181	1,0138	1,0096	1,0055	1,0014	0,9974	0,9935	0,9896
54	1,0693	1,0641	1,0589	1,0539	1,049	1,0442	1,0394	1,0348	1,0302	1,0257	1,0213	1,017	1,0127	1,0085	1,0044	1,0003	0,9963	0,9924	0,9885
54,1	1,0681	1,0629	1,0578	1,0528	1,0479	1,043	1,0383	1,0337	1,0291	1,0246	1,0202	1,0159	1,0116	1,0074	1,0033	0,9992	0,9952	0,9913	0,9874
54,2	1,067	1,0618	1,0567	1,0517	1,0467	1,0419	1,0372	1,0325	1,028	1,0235	1,0191	1,0147	1,0105	1,0063	1,0022	0,9981	0,9941	0,9902	0,9863
54,3	1,0659	1,0607	1,0555	1,0505	1,0456	1,0408	1,0361	1,0314	1,0268	1,0224	1,018	1,0136	1,0094	1,0052	1,001	0,997	0,993	0,9891	0,9852
54,4	1,0647	1,0595	1,0544	1,0494	1,0445	1,0397	1,0349	1,0303	1,0257	1,0212	1,0168	1,0125	1,0082	1,0041	0,9999	0,9959	0,9919	0,988	0,9841
54,5	1,0636	1,0584	1,0533	1,0483	1,0434	1,0385	1,0338	1,0292	1,0246	1,0201	1,0157	1,0114	1,0071	1,0029	0,9988	0,9948	0,9908	0,9868	0,983
54,6	1,0625	1,0573	1,0522	1,0471	1,0422	1,0374	1,0327	1,028	1,0235	1,019	1,0146	1,0103	1,006	1,0018	0,9977	0,9937	0,9897	0,9857	0,9819
54,7	1,0613	1,0561	1,051	1,046	1,0411	1,0363	1,0316	1,0269	1,0224	1,0179	1,0135	1,0092	1,0049	1,0007	0,9966	0,9925	0,9886	0,9846	0,9808
54,8	1,0602	1,055	1,0499	1,0449	1,04	1,0352	1,0304	1,0258	1,0212	1,0168	1,0124	1,008	1,0038	0,9996	0,9955	0,9914	0,9875	0,9835	0,9797
54,9	1,0591	1,0539	1,0488	1,0438	1,0389	1,034	1,0293	1,0247	1,0201	1,0157	1,0113	1,0069	1,0027	0,9985	0,9944	0,9903	0,9863	0,9824	0,9786
55	1,0579	1,0527	1,0476	1,0426	1,0377	1,0329	1,0282	1,0236	1,019	1,0145	1,0101	1,0058	1,0016	0,9974	0,9933	0,9892	0,9852	0,9813	0,9775
55,1	1,0568	1,0516	1,0465	1,0415	1,0366	1,0318	1,0271	1,0224	1,0179	1,0134	1,009	1,0047	1,0005	0,9963	0,9922	0,9881	0,9841	0,9802	0,9763
55,2	1,0557	1,0505	1,0454	1,0404	1,0355	1,0307	1,026	1,0213	1,0168	1,0123	1,0079	1,0036	0,9993	0,9952	0,9911	0,987	0,983	0,9791	0,9752
55,3	1,0546	1,0494	1,0443	1,0393	1,0344	1,0296	1,0248	1,0202	1,0157	1,0112	1,0068	1,0025	0,9982	0,9941	0,9899	0,9859	0,9819	0,978	0,9741
55,4	1,0534	1,0482	1,0431	1,0381	1,0332	1,0284	1,0237	1,0191	1,0145	1,0101	1,0057	1,0014	0,9971	0,9929	0,9888	0,9848	0,9808	0,9769	0,973
55,5	1,0523	1,0471	1,042	1,037	1,0321	1,0273	1,0226	1,018	1,0134	1,009	1,0046	1,0003	0,996	0,9918	0,9877	0,9837	0,9797	0,9758	0,9719
55,6	1,0512	1,046	1,0409	1,0359	1,031	1,0262	1,0215	1,0169	1,0123	1,0079	1,0035	0,9992	0,9949	0,9907	0,9866	0,9826	0,9786	0,9747	0,9708
55,7	1,0501	1,0449	1,0398	1,0348	1,0299	1,0251	1,0204	1,0158	1,0112	1,0067	1,0024	0,998	0,9938	0,9896	0,9855	0,9815	0,9775	0,9736	0,9697
55,8	1,0489	1,0437	1,0387	1,0337	1,0288	1,024	1,0193	1,0146	1,0101	1,0056	1,0012	0,9969	0,9927	0,9885	0,9844	0,9804	0,9764	0,9725	0,9686
55,9	1,0478	1,0426	1,0375	1,0325	1,0277	1,0229	1,0181	1,0135	1,009	1,0045	1,0001	0,9958	0,9916	0,9874	0,9833	0,9793	0,9753	0,9714	0,9675
56	1,0467	1,0415	1,0364	1,0314	1,0265	1,0217	1,017	1,0124	1,0079	1,0034	0,999	0,9947	0,9905	0,9863	0,9822	0,9782	0,9742	0,9703	0,9664
56,1	1,0456	1,0404	1,0353	1,0303	1,0254	1,0206	1,0159	1,0113	1,0068	1,0023	0,9979	0,9936	0,9894	0,9852	0,9811	0,9771	0,9731	0,9692	0,9654
56,2	1,0444	1,0393	1,0342	1,0292	1,0243	1,0195	1,0148	1,0102	1,0057	1,0012	0,9968	0,9925	0,9883	0,9841	0,98	0,976	0,972	0,9681	0,9643
56,3	1,0433	1,0381	1,0331	1,0281	1,0232	1,0184	1,0137	1,0091	1,0045	1,0001	0,9957	0,9914	0,9872	0,983	0,9789	0,9749	0,9709	0,967	0,9632
56,4	1,0422	1,037	1,0319	1,027	1,0221	1,0173	1,0126	1,008	1,0034	0,999	0,9946	0,9903	0,9861	0,9819	0,9778	0,9738	0,9698	0,9659	0,9621
56,5	1,0411	1,0359	1,0308	1,0258	1,021	1,0162	1,0115	1,0069	1,0023	0,9979	0,9935	0,9892	0,985	0,9808	0,9767	0,9727	0,9687	0,9648	0,961
56,6	1,04	1,0348	1,0297	1,0247	1,0199	1,0151	1,0104	1,0058	1,0012	0,9968	0,9924	0,9881	0,9839	0,9797	0,9756	0,9716	0,9676	0,9637	0,9599
56,7	1,0388	1,0337	1,0286	1,0236	1,0187	1,014	1,0093	1,0046	1,0001	0,9957	0,9913	0,987	0,9828	0,9786	0,9745	0,9705	0,9665	0,9626	0,9588
56,8	1,0377	1,0326	1,0275	1,0225	1,0176	1,0128	1,0081	1,0035	0,999	0,9946	0,9902	0,9859	0,9817	0,9775	0,9734	0,9694	0,9654	0,9615	0,9577
56,9	1,0366	1,0314	1,0264	1,0214	1,0165	1,0117	1,007	1,0024	0,9979	0,9935	0,9891	0,9848	0,9806	0,9764	0,9723	0,9683	0,9643	0,9604	0,9566

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
53,5	0,9903	0,9865	0,9828	0,9791	0,9755	0,9719	0,9684	0,965	0,9616	0,9582	0,9549	0,9516	0,9483	0,9451	0,942	0,9388	0,9357	0,9327	0,9297
53,6	0,9891	0,9854	0,9817	0,978	0,9744	0,9708	0,9673	0,9639	0,9605	0,9571	0,9538	0,9505	0,9472	0,944	0,9409	0,9377	0,9346	0,9316	0,9286
53,7	0,988	0,9843	0,9806	0,9769	0,9733	0,9697	0,9662	0,9628	0,9593	0,956	0,9526	0,9494	0,9461	0,9429	0,9398	0,9366	0,9335	0,9305	0,9275
53,8	0,9869	0,9832	0,9794	0,9758	0,9722	0,9686	0,9651	0,9617	0,9582	0,9549	0,9516	0,9483	0,945	0,9418	0,9387	0,9355	0,9325	0,9294	0,9264
53,9	0,9858	0,982	0,9783	0,9747	0,9711	0,9675	0,964	0,9606	0,9571	0,9538	0,9505	0,9472	0,9439	0,9407	0,9376	0,9344	0,9314	0,9283	0,9253
54	0,9847	0,9809	0,9772	0,9736	0,97	0,9664	0,9629	0,9595	0,956	0,9527	0,9494	0,9461	0,9428	0,9396	0,9365	0,9333	0,9303	0,9272	0,9242
54,1	0,9836	0,9798	0,9761	0,9725	0,9689	0,9653	0,9618	0,9584	0,9549	0,9516	0,9483	0,945	0,9417	0,9385	0,9354	0,9323	0,9292	0,9261	0,9231
54,2	0,9825	0,9787	0,975	0,9714	0,9678	0,9642	0,9607	0,9573	0,9538	0,9505	0,9472	0,9439	0,9406	0,9374	0,9343	0,9312	0,9281	0,925	0,922
54,3	0,9814	0,9776	0,9739	0,9703	0,9667	0,9631	0,9596	0,9562	0,9527	0,9494	0,9461	0,9428	0,9395	0,9363	0,9332	0,9301	0,927	0,9239	0,9209
54,4	0,9803	0,9765	0,9728	0,9692	0,9656	0,962	0,9585	0,9551	0,9516	0,9483	0,945	0,9417	0,9385	0,9353	0,9321	0,929	0,9259	0,9229	0,9199
54,5	0,9792	0,9754	0,9717	0,9681	0,9645	0,9609	0,9574	0,954	0,9506	0,9472	0,9439	0,9406	0,9374	0,9342	0,931	0,9279	0,9248	0,9218	0,9188
54,6	0,9781	0,9743	0,9706	0,967	0,9634	0,9598	0,9563	0,9529	0,9495	0,9461	0,9428	0,9395	0,9363	0,9331	0,9299	0,9268	0,9237	0,9207	0,9177
54,7	0,977	0,9732	0,9695	0,9659	0,9623	0,9587	0,9552	0,9518	0,9484	0,945	0,9417	0,9384	0,9352	0,932	0,9288	0,9257	0,9226	0,9196	0,9166
54,8	0,9759	0,9721	0,9684	0,9648	0,9612	0,9576	0,9541	0,9507	0,9473	0,9439	0,9406	0,9373	0,9341	0,9309	0,9277	0,9246	0,9216	0,9185	0,9155
54,9	0,9747	0,971	0,9673	0,9637	0,9601	0,9565	0,953	0,9496	0,9462	0,9428	0,9395	0,9362	0,933	0,9298	0,9267	0,9235	0,9205	0,9174	0,9144
55	0,9736	0,9699	0,9662	0,9626	0,959	0,9554	0,9519	0,9485	0,9451	0,9417	0,9384	0,9351	0,9319	0,9287	0,9256	0,9225	0,9194	0,9163	0,9133
55,1	0,9725	0,9688	0,9651	0,9615	0,9579	0,9543	0,9508	0,9474	0,944	0,9406	0,9373	0,934	0,9308	0,9276	0,9245	0,9214	0,9183	0,9153	0,9123
55,2	0,9714	0,9677	0,964	0,9604	0,9568	0,9532	0,9497	0,9463	0,9429	0,9395	0,9362	0,933	0,9297	0,9265	0,9234	0,9203	0,9172	0,9142	0,9112
55,3	0,9703	0,9666	0,9629	0,9593	0,9557	0,9521	0,9486	0,9452	0,9418	0,9384	0,9351	0,9319	0,9286	0,9255	0,9223	0,9192	0,9161	0,9131	0,9101
55,4	0,9692	0,9655	0,9618	0,9582	0,9546	0,951	0,9475	0,9441	0,9407	0,9374	0,934	0,9308	0,9276	0,9244	0,9212	0,9181	0,915	0,912	0,909
55,5	0,9681	0,9644	0,9607	0,9571	0,9535	0,9499	0,9465	0,943	0,9396	0,9363	0,933	0,9297	0,9265	0,9233	0,9201	0,917	0,914	0,9109	0,9079
55,6	0,967	0,9633	0,9596	0,956	0,9524	0,9489	0,9454	0,9419	0,9385	0,9352	0,9319	0,9286	0,9254	0,9222	0,9191	0,9159	0,9129	0,9098	0,9069
55,7	0,9659	0,9622	0,9585	0,9549	0,9513	0,9478	0,9443	0,9408	0,9374	0,9341	0,9308	0,9275	0,9243	0,9211	0,918	0,9149	0,9118	0,9088	0,9058
55,8	0,9648	0,9611	0,9574	0,9538	0,9502	0,9467	0,9432	0,9397	0,9363	0,933	0,9297	0,9264	0,9232	0,92	0,9169	0,9138	0,9107	0,9077	0,9047
55,9	0,9637	0,96	0,9563	0,9527	0,9491	0,9456	0,9421	0,9387	0,9353	0,9319	0,9286	0,9253	0,9221	0,9189	0,9158	0,9127	0,9096	0,9066	0,9036
56	0,9627	0,9589	0,9552	0,9516	0,948	0,9445	0,941	0,9376	0,9342	0,9308	0,9275	0,9243	0,921	0,9179	0,9147	0,9116	0,9086	0,9055	0,9025
56,1	0,9616	0,9578	0,9541	0,9505	0,9469	0,9434	0,9399	0,9365	0,9331	0,9297	0,9264	0,9232	0,92	0,9168	0,9136	0,9105	0,9075	0,9044	0,9015
56,2	0,9605	0,9567	0,953	0,9494	0,9458	0,9423	0,9388	0,9354	0,932	0,9287	0,9254	0,9221	0,9189	0,9157	0,9126	0,9095	0,9064	0,9034	0,9004
56,3	0,9594	0,9556	0,9519	0,9483	0,9447	0,9412	0,9377	0,9343	0,9309	0,9276	0,9243	0,921	0,9178	0,9146	0,9115	0,9084	0,9053	0,9023	0,8993
56,4	0,9583	0,9545	0,9509	0,9472	0,9437	0,9401	0,9366	0,9332	0,9298	0,9265	0,9232	0,9199	0,9167	0,9135	0,9104	0,9073	0,9042	0,9012	0,8982
56,5	0,9572	0,9534	0,9498	0,9461	0,9426	0,939	0,9356	0,9321	0,9287	0,9254	0,9221	0,9188	0,9156	0,9125	0,9093	0,9062	0,9032	0,9001	0,8972
56,6	0,9561	0,9524	0,9487	0,945	0,9415	0,938	0,9345	0,931	0,9277	0,9243	0,921	0,9178	0,9146	0,9114	0,9082	0,9051	0,9021	0,8991	0,8961
56,7	0,955	0,9513	0,9476	0,944	0,9404	0,9369	0,9334	0,93	0,9266	0,9232	0,9199	0,9167	0,9135	0,9103	0,9072	0,9041	0,901	0,898	0,895
56,8	0,9539	0,9502	0,9465	0,9429	0,9393	0,9358	0,9323	0,9289	0,9255	0,9222	0,9189	0,9156	0,9124	0,9092	0,9061	0,903	0,8999	0,8969	0,8939
56,9	0,9528	0,9491	0,9454	0,9418	0,9382	0,9347	0,9312	0,9278	0,9244	0,9211	0,9178	0,9145	0,9113	0,9081	0,905	0,9019	0,8989	0,8958	0,8929

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
53,5	0,9267	0,9237	0,9208	0,9179	0,9151	0,9123	0,9095	0,9067	0,904	0,9013	0,8986	0,896	0,8934	0,8908	0,8882	0,8857	0,8831	0,8806	0,8782
53,6	0,9256	0,9226	0,9197	0,9168	0,914	0,9112	0,9084	0,9056	0,9029	0,9002	0,8975	0,8949	0,8923	0,8897	0,8871	0,8846	0,8821	0,8796	0,8771
53,7	0,9245	0,9216	0,9186	0,9158	0,9129	0,9101	0,9073	0,9046	0,9018	0,8991	0,8965	0,8938	0,8912	0,8886	0,886	0,8835	0,881	0,8785	0,876
53,8	0,9234	0,9205	0,9176	0,9147	0,9118	0,909	0,9062	0,9035	0,9007	0,898	0,8954	0,8927	0,8901	0,8875	0,885	0,8824	0,8799	0,8774	0,875
53,9	0,9223	0,9194	0,9165	0,9136	0,9107	0,9079	0,9051	0,9024	0,8997	0,897	0,8943	0,8917	0,889	0,8864	0,8839	0,8813	0,8788	0,8763	0,8739
54	0,9212	0,9183	0,9154	0,9125	0,9097	0,9068	0,9041	0,9013	0,8986	0,8959	0,8932	0,8906	0,888	0,8854	0,8828	0,8803	0,8778	0,8753	0,8728
54,1	0,9201	0,9172	0,9143	0,9114	0,9086	0,9058	0,903	0,9002	0,8975	0,8948	0,8921	0,8895	0,8869	0,8843	0,8817	0,8792	0,8767	0,8742	0,8717
54,2	0,9191	0,9161	0,9132	0,9103	0,9075	0,9047	0,9019	0,8991	0,8964	0,8937	0,8911	0,8884	0,8858	0,8832	0,8807	0,8781	0,8756	0,8731	0,8707
54,3	0,918	0,915	0,9121	0,9092	0,9064	0,9036	0,9008	0,8981	0,8953	0,8926	0,89	0,8873	0,8847	0,8821	0,8796	0,877	0,8745	0,872	0,8696
54,4	0,9169	0,9139	0,911	0,9082	0,9053	0,9025	0,8997	0,897	0,8943	0,8916	0,8889	0,8863	0,8836	0,8811	0,8785	0,876	0,8735	0,871	0,8685
54,5	0,9158	0,9129	0,9099	0,9071	0,9042	0,9014	0,8986	0,8959	0,8932	0,8905	0,8878	0,8852	0,8826	0,88	0,8774	0,8749	0,8724	0,8699	0,8674
54,6	0,9147	0,9118	0,9089	0,906	0,9032	0,9003	0,8976	0,8948	0,8921	0,8894	0,8867	0,8841	0,8815	0,8789	0,8764	0,8738	0,8713	0,8688	0,8664
54,7	0,9136	0,9107	0,9078	0,9049	0,9021	0,8993	0,8965	0,8937	0,891	0,8883	0,8857	0,883	0,8804	0,8778	0,8753	0,8728	0,8702	0,8678	0,8653
54,8	0,9125	0,9096	0,9067	0,9038	0,901	0,8982	0,8954	0,8927	0,8899	0,8873	0,8846	0,882	0,8794	0,8768	0,8742	0,8717	0,8692	0,8667	0,8642
54,9	0,9115	0,9085	0,9056	0,9028	0,8999	0,8971	0,8943	0,8916	0,8889	0,8862	0,8835	0,8809	0,8783	0,8757	0,8731	0,8706	0,8681	0,8656	0,8632
55	0,9104	0,9074	0,9045	0,9017	0,8988	0,896	0,8933	0,8905	0,8878	0,8851	0,8824	0,8798	0,8772	0,8746	0,8721	0,8695	0,867	0,8646	0,8621
55,1	0,9093	0,9064	0,9035	0,9006	0,8978	0,895	0,8922	0,8894	0,8867	0,884	0,8814	0,8787	0,8761	0,8736	0,871	0,8685	0,866	0,8635	0,861
55,2	0,9082	0,9053	0,9024	0,8995	0,8967	0,8939	0,8911	0,8884	0,8856	0,883	0,8803	0,8777	0,8751	0,8725	0,8699	0,8674	0,8649	0,8624	0,86
55,3	0,9071	0,9042	0,9013	0,8984	0,8956	0,8928	0,89	0,8873	0,8846	0,8819	0,8792	0,8766	0,874	0,8714	0,8689	0,8663	0,8638	0,8614	0,8589
55,4	0,906	0,9031	0,9002	0,8974	0,8945	0,8917	0,8889	0,8862	0,8835	0,8808	0,8782	0,8755	0,8729	0,8703	0,8678	0,8653	0,8628	0,8603	0,8578
55,5	0,905	0,902	0,8991	0,8963	0,8934	0,8906	0,8879	0,8851	0,8824	0,8797	0,8771	0,8745	0,8719	0,8693	0,8667	0,8642	0,8617	0,8592	0,8568
55,6	0,9039	0,901	0,8981	0,8952	0,8924	0,8896	0,8868	0,8841	0,8814	0,8787	0,876	0,8734	0,8708	0,8682	0,8657	0,8631	0,8606	0,8582	0,8557
55,7	0,9028	0,8999	0,897	0,8941	0,8913	0,8885	0,8857	0,883	0,8803	0,8776	0,8749	0,8723	0,8697	0,8671	0,8646	0,8621	0,8596	0,8571	0,8546
55,8	0,9017	0,8988	0,8959	0,8931	0,8902	0,8874	0,8847	0,8819	0,8792	0,8765	0,8739	0,8712	0,8686	0,8661	0,8635	0,861	0,8585	0,856	0,8536
55,9	0,9007	0,8977	0,8948	0,892	0,8891	0,8864	0,8836	0,8808	0,8781	0,8755	0,8728	0,8702	0,8676	0,865	0,8625	0,8599	0,8574	0,855	0,8525
56	0,8996	0,8967	0,8938	0,8909	0,8881	0,8853	0,8825	0,8798	0,8771	0,8744	0,8717	0,8691	0,8665	0,8639	0,8614	0,8589	0,8564	0,8539	0,8515
56,1	0,8985	0,8956	0,8927	0,8898	0,887	0,8842	0,8814	0,8787	0,876	0,8733	0,8707	0,868	0,8654	0,8629	0,8603	0,8578	0,8553	0,8528	0,8504
56,2	0,8974	0,8945	0,8916	0,8888	0,8859	0,8831	0,8804	0,8776	0,8749	0,8722	0,8696	0,867	0,8644	0,8618	0,8593	0,8567	0,8542	0,8518	0,8493
56,3	0,8963	0,8934	0,8905	0,8877	0,8849	0,8821	0,8793	0,8766	0,8739	0,8712	0,8685	0,8659	0,8633	0,8607	0,8582	0,8557	0,8532	0,8507	0,8483
56,4	0,8953	0,8924	0,8895	0,8866	0,8838	0,881	0,8782	0,8755	0,8728	0,8701	0,8675	0,8648	0,8622	0,8597	0,8571	0,8546	0,8521	0,8497	0,8472
56,5	0,8942	0,8913	0,8884	0,8855	0,8827	0,8799	0,8772	0,8744	0,8717	0,869	0,8664	0,8638	0,8612	0,8586	0,8561	0,8536	0,8511	0,8486	0,8461
56,6	0,8931	0,8902	0,8873	0,8845	0,8816	0,8789	0,8761	0,8734	0,8707	0,868	0,8653	0,8627	0,8601	0,8576	0,855	0,8525	0,85	0,8475	0,8451
56,7	0,8921	0,8891	0,8862	0,8834	0,8806	0,8778	0,875	0,8723	0,8696	0,8669	0,8643	0,8616	0,8591	0,8565	0,8539	0,8514	0,8489	0,8465	0,844
56,8	0,891	0,8881	0,8852	0,8823	0,8795	0,8767	0,874	0,8712	0,8685	0,8658	0,8632	0,8606	0,858	0,8554	0,8529	0,8504	0,8479	0,8454	0,843
56,9	0,8899	0,887	0,8841	0,8813	0,8784	0,8756	0,8729	0,8702	0,8675	0,8648	0,8621	0,8595	0,8569	0,8544	0,8518	0,8493	0,8468	0,8444	0,8419

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
53,5	0,8757	0,8733	0,8709	0,8685	0,8662	0,8638	0,8615	0,8592	0,857	0,8547	0,8525	0,8503	0,8481	0,8459	0,8437	0,8416	0,8395	0,8374	0,8353
53,6	0,8747	0,8722	0,8698	0,8675	0,8651	0,8628	0,8605	0,8582	0,8559	0,8536	0,8514	0,8492	0,847	0,8448	0,8427	0,8405	0,8384	0,8363	0,8342
53,7	0,8736	0,8712	0,8688	0,8664	0,864	0,8617	0,8594	0,8571	0,8548	0,8526	0,8503	0,8481	0,8459	0,8438	0,8416	0,8395	0,8373	0,8352	0,8331
53,8	0,8725	0,8701	0,8677	0,8653	0,863	0,8606	0,8583	0,856	0,8538	0,8515	0,8493	0,8471	0,8449	0,8427	0,8405	0,8384	0,8363	0,8342	0,8321
53,9	0,8714	0,869	0,8666	0,8642	0,8619	0,8596	0,8572	0,855	0,8527	0,8504	0,8482	0,846	0,8438	0,8416	0,8395	0,8373	0,8352	0,8331	0,831
54	0,8704	0,8679	0,8655	0,8632	0,8608	0,8585	0,8562	0,8539	0,8516	0,8494	0,8471	0,8449	0,8427	0,8406	0,8384	0,8363	0,8341	0,832	0,83
54,1	0,8693	0,8669	0,8645	0,8621	0,8598	0,8574	0,8551	0,8528	0,8506	0,8483	0,8461	0,8439	0,8417	0,8395	0,8373	0,8352	0,8331	0,831	0,8289
54,2	0,8682	0,8658	0,8634	0,861	0,8587	0,8564	0,854	0,8518	0,8495	0,8472	0,845	0,8428	0,8406	0,8384	0,8363	0,8341	0,832	0,8299	0,8278
54,3	0,8671	0,8647	0,8623	0,86	0,8576	0,8553	0,853	0,8507	0,8484	0,8462	0,8439	0,8417	0,8395	0,8374	0,8352	0,8331	0,831	0,8289	0,8268
54,4	0,8661	0,8637	0,8613	0,8589	0,8565	0,8542	0,8519	0,8496	0,8474	0,8451	0,8429	0,8407	0,8385	0,8363	0,8342	0,832	0,8299	0,8278	0,8257
54,5	0,865	0,8626	0,8602	0,8578	0,8555	0,8532	0,8508	0,8486	0,8463	0,8441	0,8418	0,8396	0,8374	0,8353	0,8331	0,831	0,8289	0,8268	0,8247
54,6	0,8639	0,8615	0,8591	0,8568	0,8544	0,8521	0,8498	0,8475	0,8452	0,843	0,8408	0,8386	0,8364	0,8342	0,832	0,8299	0,8278	0,8257	0,8236
54,7	0,8629	0,8605	0,8581	0,8557	0,8534	0,851	0,8487	0,8464	0,8442	0,8419	0,8397	0,8375	0,8353	0,8331	0,831	0,8289	0,8267	0,8246	0,8226
54,8	0,8618	0,8594	0,857	0,8546	0,8523	0,85	0,8477	0,8454	0,8431	0,8409	0,8386	0,8364	0,8342	0,8321	0,8299	0,8278	0,8257	0,8236	0,8215
54,9	0,8607	0,8583	0,8559	0,8536	0,8512	0,8489	0,8466	0,8443	0,842	0,8398	0,8376	0,8354	0,8332	0,831	0,8289	0,8267	0,8246	0,8225	0,8204
55	0,8597	0,8573	0,8549	0,8525	0,8502	0,8478	0,8455	0,8432	0,841	0,8387	0,8365	0,8343	0,8321	0,83	0,8278	0,8257	0,8236	0,8215	0,8194
55,1	0,8586	0,8562	0,8538	0,8514	0,8491	0,8468	0,8445	0,8422	0,8399	0,8377	0,8355	0,8333	0,8311	0,8289	0,8268	0,8246	0,8225	0,8204	0,8183
55,2	0,8575	0,8551	0,8527	0,8504	0,848	0,8457	0,8434	0,8411	0,8389	0,8366	0,8344	0,8322	0,83	0,8278	0,8257	0,8236	0,8215	0,8194	0,8173
55,3	0,8565	0,8541	0,8517	0,8493	0,847	0,8446	0,8423	0,8401	0,8378	0,8356	0,8333	0,8311	0,829	0,8268	0,8246	0,8225	0,8204	0,8183	0,8162
55,4	0,8554	0,853	0,8506	0,8482	0,8459	0,8436	0,8413	0,839	0,8367	0,8345	0,8323	0,8301	0,8279	0,8257	0,8236	0,8215	0,8193	0,8173	0,8152
55,5	0,8543	0,8519	0,8495	0,8472	0,8448	0,8425	0,8402	0,8379	0,8357	0,8334	0,8312	0,829	0,8268	0,8247	0,8225	0,8204	0,8183	0,8162	0,8141
55,6	0,8533	0,8509	0,8485	0,8461	0,8438	0,8415	0,8392	0,8369	0,8346	0,8324	0,8302	0,828	0,8258	0,8236	0,8215	0,8194	0,8172	0,8151	0,8131
55,7	0,8522	0,8498	0,8474	0,8451	0,8427	0,8404	0,8381	0,8358	0,8336	0,8313	0,8291	0,8269	0,8247	0,8226	0,8204	0,8183	0,8162	0,8141	0,812
55,8	0,8511	0,8487	0,8464	0,844	0,8417	0,8393	0,837	0,8348	0,8325	0,8303	0,8281	0,8259	0,8237	0,8215	0,8194	0,8172	0,8151	0,813	0,811
55,9	0,8501	0,8477	0,8453	0,8429	0,8406	0,8383	0,836	0,8337	0,8315	0,8292	0,827	0,8248	0,8226	0,8205	0,8183	0,8162	0,8141	0,812	0,8099
56	0,849	0,8466	0,8442	0,8419	0,8395	0,8372	0,8349	0,8327	0,8304	0,8282	0,8259	0,8238	0,8216	0,8194	0,8173	0,8151	0,813	0,8109	0,8089
56,1	0,848	0,8456	0,8432	0,8408	0,8385	0,8362	0,8339	0,8316	0,8293	0,8271	0,8249	0,8227	0,8205	0,8184	0,8162	0,8141	0,812	0,8099	0,8078
56,2	0,8469	0,8445	0,8421	0,8398	0,8374	0,8351	0,8328	0,8305	0,8283	0,8261	0,8238	0,8216	0,8195	0,8173	0,8152	0,813	0,8109	0,8088	0,8068
56,3	0,8458	0,8434	0,8411	0,8387	0,8364	0,8341	0,8318	0,8295	0,8272	0,825	0,8228	0,8206	0,8184	0,8163	0,8141	0,812	0,8099	0,8078	0,8057
56,4	0,8448	0,8424	0,84	0,8376	0,8353	0,833	0,8307	0,8284	0,8262	0,8239	0,8217	0,8195	0,8174	0,8152	0,8131	0,8109	0,8088	0,8067	0,8047
56,5	0,8437	0,8413	0,8389	0,8366	0,8343	0,8319	0,8297	0,8274	0,8251	0,8229	0,8207	0,8185	0,8163	0,8142	0,812	0,8099	0,8078	0,8057	0,8036
56,6	0,8427	0,8403	0,8379	0,8355	0,8332	0,8309	0,8286	0,8263	0,8241	0,8218	0,8196	0,8174	0,8153	0,8131	0,811	0,8088	0,8067	0,8047	0,8026
56,7	0,8416	0,8392	0,8368	0,8345	0,8321	0,8298	0,8275	0,8253	0,823	0,8208	0,8186	0,8164	0,8142	0,8121	0,8099	0,8078	0,8057	0,8036	0,8015
56,8	0,8405	0,8382	0,8358	0,8334	0,8311	0,8288	0,8265	0,8242	0,822	0,8197	0,8175	0,8153	0,8132	0,811	0,8089	0,8067	0,8046	0,8026	0,8005
56,9	0,8395	0,8371	0,8347	0,8324	0,83	0,8277	0,8254	0,8232	0,8209	0,8187	0,8165	0,8143	0,8121	0,81	0,8078	0,8057	0,8036	0,8015	0,7994

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
53,5	0,8332	0,8311	0,8291	0,8271	0,8251	0,8231	0,8211	0,8191	0,8172	0,8152	0,8133	0,8114	0,8095	0,8077	0,8058	0,8039	0,8021	0,8003	0,7985
53,6	0,8321	0,8301	0,828	0,826	0,824	0,822	0,82	0,8181	0,8161	0,8142	0,8123	0,8104	0,8085	0,8066	0,8047	0,8029	0,801	0,7992	0,7974
53,7	0,8311	0,829	0,827	0,825	0,8229	0,821	0,819	0,817	0,8151	0,8131	0,8112	0,8093	0,8074	0,8055	0,8037	0,8018	0,8	0,7982	0,7964
53,8	0,83	0,828	0,8259	0,8239	0,8219	0,8199	0,8179	0,816	0,814	0,8121	0,8102	0,8083	0,8064	0,8045	0,8026	0,8008	0,7989	0,7971	0,7953
53,9	0,829	0,8269	0,8249	0,8228	0,8208	0,8188	0,8169	0,8149	0,813	0,811	0,8091	0,8072	0,8053	0,8034	0,8016	0,7997	0,7979	0,7961	0,7943
54	0,8279	0,8258	0,8238	0,8218	0,8198	0,8178	0,8158	0,8138	0,8119	0,81	0,8081	0,8062	0,8043	0,8024	0,8005	0,7987	0,7968	0,795	0,7932
54,1	0,8268	0,8248	0,8227	0,8207	0,8187	0,8167	0,8148	0,8128	0,8108	0,8089	0,807	0,8051	0,8032	0,8013	0,7995	0,7976	0,7958	0,794	0,7922
54,2	0,8258	0,8237	0,8217	0,8197	0,8177	0,8157	0,8137	0,8117	0,8098	0,8079	0,8059	0,804	0,8022	0,8003	0,7984	0,7966	0,7947	0,7929	0,7911
54,3	0,8247	0,8227	0,8206	0,8186	0,8166	0,8146	0,8126	0,8107	0,8087	0,8068	0,8049	0,803	0,8011	0,7992	0,7974	0,7955	0,7937	0,7919	0,7901
54,4	0,8237	0,8216	0,8196	0,8176	0,8156	0,8136	0,8116	0,8096	0,8077	0,8058	0,8038	0,8019	0,8001	0,7982	0,7963	0,7945	0,7926	0,7908	0,789
54,5	0,8226	0,8206	0,8185	0,8165	0,8145	0,8125	0,8105	0,8086	0,8066	0,8047	0,8028	0,8009	0,799	0,7971	0,7953	0,7934	0,7916	0,7898	0,788
54,6	0,8215	0,8195	0,8175	0,8154	0,8134	0,8115	0,8095	0,8075	0,8056	0,8037	0,8017	0,7998	0,798	0,7961	0,7942	0,7924	0,7906	0,7887	0,7869
54,7	0,8205	0,8184	0,8164	0,8144	0,8124	0,8104	0,8084	0,8065	0,8045	0,8026	0,8007	0,7988	0,7969	0,795	0,7932	0,7913	0,7895	0,7877	0,7859
54,8	0,8194	0,8174	0,8154	0,8133	0,8113	0,8094	0,8074	0,8054	0,8035	0,8016	0,7996	0,7977	0,7959	0,794	0,7921	0,7903	0,7885	0,7866	0,7848
54,9	0,8184	0,8163	0,8143	0,8123	0,8103	0,8083	0,8063	0,8044	0,8024	0,8005	0,7986	0,7967	0,7948	0,7929	0,7911	0,7892	0,7874	0,7856	0,7838
55	0,8173	0,8153	0,8132	0,8112	0,8092	0,8072	0,8053	0,8033	0,8014	0,7995	0,7975	0,7957	0,7938	0,7919	0,79	0,7882	0,7864	0,7846	0,7828
55,1	0,8163	0,8142	0,8122	0,8102	0,8082	0,8062	0,8042	0,8023	0,8003	0,7984	0,7965	0,7946	0,7927	0,7909	0,789	0,7872	0,7853	0,7835	0,7817
55,2	0,8152	0,8132	0,8111	0,8091	0,8071	0,8051	0,8032	0,8012	0,7993	0,7974	0,7955	0,7936	0,7917	0,7898	0,788	0,7861	0,7843	0,7825	0,7807
55,3	0,8142	0,8121	0,8101	0,8081	0,8061	0,8041	0,8021	0,8002	0,7982	0,7963	0,7944	0,7925	0,7906	0,7888	0,7869	0,7851	0,7832	0,7814	0,7796
55,4	0,8131	0,8111	0,809	0,807	0,805	0,8031	0,8011	0,7991	0,7972	0,7953	0,7934	0,7915	0,7896	0,7877	0,7859	0,784	0,7822	0,7804	0,7786
55,5	0,8121	0,81	0,808	0,806	0,804	0,802	0,8	0,7981	0,7961	0,7942	0,7923	0,7904	0,7885	0,7867	0,7848	0,783	0,7812	0,7793	0,7775
55,6	0,811	0,809	0,8069	0,8049	0,8029	0,801	0,799	0,797	0,7951	0,7932	0,7913	0,7894	0,7875	0,7856	0,7838	0,7819	0,7801	0,7783	0,7765
55,7	0,81	0,8079	0,8059	0,8039	0,8019	0,7999	0,7979	0,796	0,7941	0,7921	0,7902	0,7883	0,7865	0,7846	0,7827	0,7809	0,7791	0,7773	0,7755
55,8	0,8089	0,8069	0,8048	0,8028	0,8008	0,7989	0,7969	0,7949	0,793	0,7911	0,7892	0,7873	0,7854	0,7835	0,7817	0,7799	0,778	0,7762	0,7744
55,9	0,8079	0,8058	0,8038	0,8018	0,7998	0,7978	0,7958	0,7939	0,792	0,79	0,7881	0,7862	0,7844	0,7825	0,7807	0,7788	0,777	0,7752	0,7734
56	0,8068	0,8048	0,8027	0,8007	0,7987	0,7968	0,7948	0,7929	0,7909	0,789	0,7871	0,7852	0,7833	0,7815	0,7796	0,7778	0,776	0,7741	0,7723
56,1	0,8058	0,8037	0,8017	0,7997	0,7977	0,7957	0,7938	0,7918	0,7899	0,788	0,7861	0,7842	0,7823	0,7804	0,7786	0,7767	0,7749	0,7731	0,7713
56,2	0,8047	0,8027	0,8007	0,7986	0,7967	0,7947	0,7927	0,7908	0,7888	0,7869	0,785	0,7831	0,7812	0,7794	0,7775	0,7757	0,7739	0,7721	0,7703
56,3	0,8037	0,8016	0,7996	0,7976	0,7956	0,7936	0,7917	0,7897	0,7878	0,7859	0,784	0,7821	0,7802	0,7783	0,7765	0,7747	0,7728	0,771	0,7692
56,4	0,8026	0,8006	0,7986	0,7966	0,7946	0,7926	0,7906	0,7887	0,7867	0,7848	0,7829	0,781	0,7792	0,7773	0,7755	0,7736	0,7718	0,77	0,7682
56,5	0,8016	0,7995	0,7975	0,7955	0,7935	0,7915	0,7896	0,7876	0,7857	0,7838	0,7819	0,78	0,7781	0,7763	0,7744	0,7726	0,7708	0,769	0,7672
56,6	0,8005	0,7985	0,7965	0,7945	0,7925	0,7905	0,7885	0,7866	0,7847	0,7827	0,7808	0,779	0,7771	0,7752	0,7734	0,7715	0,7697	0,7679	0,7661
56,7	0,7995	0,7974	0,7954	0,7934	0,7914	0,7895	0,7875	0,7856	0,7836	0,7817	0,7798	0,7779	0,776	0,7742	0,7723	0,7705	0,7687	0,7669	0,7651
56,8	0,7984	0,7964	0,7944	0,7924	0,7904	0,7884	0,7865	0,7845	0,7826	0,7807	0,7788	0,7769	0,775	0,7731	0,7713	0,7695	0,7676	0,7658	0,764
56,9	0,7974	0,7954	0,7933	0,7913	0,7893	0,7874	0,7854	0,7835	0,7815	0,7796	0,7777	0,7758	0,774	0,7721	0,7703	0,7684	0,7666	0,7648	0,763

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
53,5	0,7967	0,7949	0,7931	0,7913	0,7896	0,7878	0,7861	0,7844
53,6	0,7956	0,7938	0,792	0,7903	0,7885	0,7868	0,7851	0,7833
53,7	0,7946	0,7928	0,791	0,7892	0,7875	0,7857	0,784	0,7823
53,8	0,7935	0,7917	0,7899	0,7882	0,7864	0,7847	0,783	0,7813
53,9	0,7925	0,7907	0,7889	0,7871	0,7854	0,7837	0,7819	0,7802
54	0,7914	0,7896	0,7879	0,7861	0,7843	0,7826	0,7809	0,7792
54,1	0,7904	0,7886	0,7868	0,785	0,7833	0,7816	0,7798	0,7781
54,2	0,7893	0,7875	0,7858	0,784	0,7823	0,7805	0,7788	0,7771
54,3	0,7883	0,7865	0,7847	0,783	0,7812	0,7795	0,7778	0,776
54,4	0,7872	0,7854	0,7837	0,7819	0,7802	0,7784	0,7767	0,775
54,5	0,7862	0,7844	0,7826	0,7809	0,7791	0,7774	0,7757	0,774
54,6	0,7851	0,7834	0,7816	0,7798	0,7781	0,7763	0,7746	0,7729
54,7	0,7841	0,7823	0,7805	0,7788	0,777	0,7753	0,7736	0,7719
54,8	0,783	0,7813	0,7795	0,7777	0,776	0,7743	0,7725	0,7708
54,9	0,782	0,7802	0,7785	0,7767	0,775	0,7732	0,7715	0,7698
55	0,781	0,7792	0,7774	0,7757	0,7739	0,7722	0,7705	0,7688
55,1	0,7799	0,7781	0,7764	0,7746	0,7729	0,7711	0,7694	0,7677
55,2	0,7789	0,7771	0,7753	0,7736	0,7718	0,7701	0,7684	0,7667
55,3	0,7778	0,7761	0,7743	0,7725	0,7708	0,7691	0,7673	0,7656
55,4	0,7768	0,775	0,7733	0,7715	0,7698	0,768	0,7663	0,7646
55,5	0,7758	0,774	0,7722	0,7705	0,7687	0,767	0,7653	0,7636
55,6	0,7747	0,7729	0,7712	0,7694	0,7677	0,7659	0,7642	0,7625
55,7	0,7737	0,7719	0,7701	0,7684	0,7666	0,7649	0,7632	0,7615
55,8	0,7726	0,7709	0,7691	0,7673	0,7656	0,7639	0,7622	0,7605
55,9	0,7716	0,7698	0,7681	0,7663	0,7646	0,7628	0,7611	0,7594
56	0,7706	0,7688	0,767	0,7653	0,7635	0,7618	0,7601	0,7584
56,1	0,7695	0,7677	0,766	0,7642	0,7625	0,7608	0,7591	0,7574
56,2	0,7685	0,7667	0,7649	0,7632	0,7615	0,7597	0,758	0,7563
56,3	0,7674	0,7657	0,7639	0,7622	0,7604	0,7587	0,757	0,7553
56,4	0,7664	0,7646	0,7629	0,7611	0,7594	0,7577	0,756	0,7542
56,5	0,7654	0,7636	0,7618	0,7601	0,7584	0,7566	0,7549	0,7532
56,6	0,7643	0,7626	0,7608	0,7591	0,7573	0,7556	0,7539	0,7522
56,7	0,7633	0,7615	0,7598	0,758	0,7563	0,7546	0,7529	0,7512
56,8	0,7623	0,7605	0,7587	0,757	0,7553	0,7535	0,7518	0,7501
56,9	0,7612	0,7595	0,7577	0,756	0,7542	0,7525	0,7508	0,7491

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
57	1,4272	1,4035	1,3818	1,3619	1,3434	1,3263	1,3102	1,295	1,2808	1,2673	1,2545	1,2423	1,2307	1,2196	1,209	1,1988	1,189	1,1796	1,1705
57,1	1,426	1,4023	1,3806	1,3607	1,3422	1,325	1,309	1,2939	1,2796	1,2661	1,2533	1,2411	1,2295	1,2184	1,2078	1,1976	1,1878	1,1784	1,1693
57,2	1,4247	1,401	1,3794	1,3595	1,341	1,3238	1,3078	1,2927	1,2784	1,2649	1,2521	1,24	1,2284	1,2173	1,2066	1,1965	1,1867	1,1772	1,1682
57,3	1,4235	1,3998	1,3782	1,3583	1,3398	1,3226	1,3066	1,2915	1,2772	1,2637	1,251	1,2388	1,2272	1,2161	1,2055	1,1953	1,1855	1,1761	1,167
57,4	1,4223	1,3986	1,3769	1,357	1,3386	1,3214	1,3054	1,2903	1,276	1,2626	1,2498	1,2376	1,226	1,2149	1,2043	1,1941	1,1843	1,1749	1,1658
57,5	1,421	1,3973	1,3757	1,3558	1,3374	1,3202	1,3042	1,2891	1,2748	1,2614	1,2486	1,2364	1,2248	1,2138	1,2031	1,193	1,1832	1,1738	1,1647
57,6	1,4198	1,3961	1,3745	1,3546	1,3362	1,319	1,303	1,2879	1,2736	1,2602	1,2474	1,2353	1,2237	1,2126	1,202	1,1918	1,182	1,1726	1,1635
57,7	1,4186	1,3949	1,3733	1,3534	1,335	1,3178	1,3018	1,2867	1,2725	1,259	1,2462	1,2341	1,2225	1,2114	1,2008	1,1906	1,1809	1,1714	1,1624
57,8	1,4173	1,3937	1,3721	1,3522	1,3338	1,3166	1,3006	1,2855	1,2713	1,2578	1,245	1,2329	1,2213	1,2102	1,1996	1,1895	1,1797	1,1703	1,1612
57,9	1,4161	1,3924	1,3708	1,351	1,3326	1,3154	1,2994	1,2843	1,2701	1,2566	1,2439	1,2317	1,2201	1,2091	1,1985	1,1883	1,1785	1,1691	1,1601
58	1,4149	1,3912	1,3696	1,3497	1,3313	1,3142	1,2982	1,2831	1,2689	1,2554	1,2427	1,2306	1,219	1,2079	1,1973	1,1871	1,1774	1,168	1,1589
58,1	1,4136	1,39	1,3684	1,3485	1,3301	1,313	1,297	1,2819	1,2677	1,2543	1,2415	1,2294	1,2178	1,2067	1,1962	1,186	1,1762	1,1668	1,1578
58,2	1,4124	1,3888	1,3672	1,3473	1,3289	1,3118	1,2958	1,2807	1,2665	1,2531	1,2403	1,2282	1,2166	1,2056	1,195	1,1848	1,1751	1,1657	1,1566
58,3	1,4112	1,3875	1,366	1,3461	1,3277	1,3106	1,2946	1,2795	1,2653	1,2519	1,2392	1,227	1,2155	1,2044	1,1938	1,1837	1,1739	1,1645	1,1555
58,4	1,4099	1,3863	1,3648	1,3449	1,3265	1,3094	1,2934	1,2783	1,2642	1,2507	1,238	1,2259	1,2143	1,2032	1,1927	1,1825	1,1728	1,1634	1,1543
58,5	1,4087	1,3851	1,3635	1,3437	1,3253	1,3082	1,2922	1,2772	1,263	1,2495	1,2368	1,2247	1,2131	1,2021	1,1915	1,1814	1,1716	1,1622	1,1532
58,6	1,4075	1,3839	1,3623	1,3425	1,3241	1,307	1,291	1,276	1,2618	1,2484	1,2356	1,2235	1,212	1,2009	1,1903	1,1802	1,1704	1,1611	1,152
58,7	1,4062	1,3827	1,3611	1,3413	1,3229	1,3058	1,2898	1,2748	1,2606	1,2472	1,2345	1,2223	1,2108	1,1998	1,1892	1,179	1,1693	1,1599	1,1509
58,8	1,405	1,3814	1,3599	1,3401	1,3217	1,3046	1,2886	1,2736	1,2594	1,246	1,2333	1,2212	1,2096	1,1986	1,188	1,1779	1,1681	1,1588	1,1497
58,9	1,4038	1,3802	1,3587	1,3389	1,3205	1,3034	1,2874	1,2724	1,2582	1,2448	1,2321	1,22	1,2085	1,1974	1,1869	1,1767	1,167	1,1576	1,1486
59	1,4026	1,379	1,3575	1,3377	1,3193	1,3022	1,2863	1,2712	1,2571	1,2437	1,2309	1,2188	1,2073	1,1963	1,1857	1,1756	1,1658	1,1565	1,1474
59,1	1,4013	1,3778	1,3563	1,3365	1,3181	1,301	1,2851	1,27	1,2559	1,2425	1,2298	1,2177	1,2061	1,1951	1,1845	1,1744	1,1647	1,1553	1,1463
59,2	1,4001	1,3766	1,3551	1,3353	1,3169	1,2998	1,2839	1,2689	1,2547	1,2413	1,2286	1,2165	1,205	1,1939	1,1834	1,1733	1,1635	1,1542	1,1451
59,3	1,3989	1,3753	1,3538	1,3341	1,3157	1,2987	1,2827	1,2677	1,2535	1,2401	1,2274	1,2153	1,2038	1,1928	1,1822	1,1721	1,1624	1,153	1,144
59,4	1,3977	1,3741	1,3526	1,3329	1,3145	1,2975	1,2815	1,2665	1,2524	1,239	1,2263	1,2142	1,2026	1,1916	1,1811	1,171	1,1612	1,1519	1,1428
59,5	1,3965	1,3729	1,3514	1,3316	1,3133	1,2963	1,2803	1,2653	1,2512	1,2378	1,2251	1,213	1,2015	1,1905	1,1799	1,1698	1,1601	1,1507	1,1417
59,6	1,3952	1,3717	1,3502	1,3304	1,3121	1,2951	1,2791	1,2641	1,25	1,2366	1,2239	1,2118	1,2003	1,1893	1,1788	1,1687	1,1589	1,1496	1,1406
59,7	1,394	1,3705	1,349	1,3292	1,3109	1,2939	1,2779	1,263	1,2488	1,2354	1,2228	1,2107	1,1992	1,1882	1,1776	1,1675	1,1578	1,1484	1,1394
59,8	1,3928	1,3693	1,3478	1,328	1,3097	1,2927	1,2768	1,2618	1,2476	1,2343	1,2216	1,2095	1,198	1,187	1,1765	1,1663	1,1566	1,1473	1,1383
59,9	1,3916	1,3681	1,3466	1,3268	1,3086	1,2915	1,2756	1,2606	1,2465	1,2331	1,2204	1,2083	1,1968	1,1858	1,1753	1,1652	1,1555	1,1461	1,1371
60	1,3904	1,3669	1,3454	1,3257	1,3074	1,2903	1,2744	1,2594	1,2453	1,2319	1,2193	1,2072	1,1957	1,1847	1,1742	1,164	1,1543	1,145	1,136
60,1	1,3891	1,3656	1,3442	1,3245	1,3062	1,2891	1,2732	1,2582	1,2441	1,2308	1,2181	1,206	1,1945	1,1835	1,173	1,1629	1,1532	1,1438	1,1348
60,2	1,3879	1,3644	1,343	1,3233	1,305	1,288	1,272	1,2571	1,2429	1,2296	1,2169	1,2049	1,1934	1,1824	1,1718	1,1617	1,152	1,1427	1,1337
60,3	1,3867	1,3632	1,3418	1,3221	1,3038	1,2868	1,2708	1,2559	1,2418	1,2284	1,2158	1,2037	1,1922	1,1812	1,1707	1,1606	1,1509	1,1416	1,1326
60,4	1,3855	1,362	1,3406	1,3209	1,3026	1,2856	1,2697	1,2547	1,2406	1,2273	1,2146	1,2025	1,191	1,1801	1,1695	1,1595	1,1498	1,1404	1,1314

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
57	1,1617	1,1532	1,145	1,1371	1,1294	1,1219	1,1146	1,1076	1,1007	1,0941	1,0875	1,0812	1,075	1,069	1,0631	1,0573	1,0517	1,0462	1,0408
57,1	1,1605	1,1521	1,1439	1,1359	1,1282	1,1208	1,1135	1,1065	1,0996	1,0929	1,0864	1,0801	1,0739	1,0679	1,062	1,0562	1,0506	1,0451	1,0397
57,2	1,1594	1,1509	1,1427	1,1348	1,1271	1,1196	1,1124	1,1053	1,0985	1,0918	1,0853	1,0789	1,0728	1,0667	1,0608	1,0551	1,0494	1,0439	1,0385
57,3	1,1582	1,1498	1,1416	1,1336	1,1259	1,1185	1,1112	1,1042	1,0973	1,0907	1,0842	1,0778	1,0716	1,0656	1,0597	1,054	1,0483	1,0428	1,0374
57,4	1,1571	1,1486	1,1404	1,1325	1,1248	1,1173	1,1101	1,103	1,0962	1,0895	1,083	1,0767	1,0705	1,0645	1,0586	1,0528	1,0472	1,0417	1,0363
57,5	1,1559	1,1475	1,1393	1,1313	1,1237	1,1162	1,1089	1,1019	1,0951	1,0884	1,0819	1,0756	1,0694	1,0634	1,0575	1,0517	1,0461	1,0406	1,0352
57,6	1,1548	1,1463	1,1381	1,1302	1,1225	1,1151	1,1078	1,1008	1,0939	1,0873	1,0808	1,0744	1,0683	1,0622	1,0563	1,0506	1,045	1,0395	1,0341
57,7	1,1536	1,1452	1,137	1,1291	1,1214	1,1139	1,1067	1,0996	1,0928	1,0861	1,0796	1,0733	1,0671	1,0611	1,0552	1,0495	1,0438	1,0383	1,033
57,8	1,1525	1,144	1,1358	1,1279	1,1202	1,1128	1,1055	1,0985	1,0917	1,085	1,0785	1,0722	1,066	1,06	1,0541	1,0484	1,0427	1,0372	1,0319
57,9	1,1513	1,1429	1,1347	1,1268	1,1191	1,1116	1,1044	1,0974	1,0905	1,0839	1,0774	1,0711	1,0649	1,0589	1,053	1,0472	1,0416	1,0361	1,0307
58	1,1502	1,1417	1,1335	1,1256	1,1179	1,1105	1,1033	1,0962	1,0894	1,0827	1,0763	1,0699	1,0638	1,0577	1,0519	1,0461	1,0405	1,035	1,0296
58,1	1,149	1,1406	1,1324	1,1245	1,1168	1,1094	1,1021	1,0951	1,0883	1,0816	1,0751	1,0688	1,0626	1,0566	1,0507	1,045	1,0394	1,0339	1,0285
58,2	1,1479	1,1394	1,1313	1,1233	1,1157	1,1082	1,101	1,094	1,0871	1,0805	1,074	1,0677	1,0615	1,0555	1,0496	1,0439	1,0383	1,0328	1,0274
58,3	1,1467	1,1383	1,1301	1,1222	1,1145	1,1071	1,0999	1,0928	1,086	1,0794	1,0729	1,0666	1,0604	1,0544	1,0485	1,0428	1,0372	1,0317	1,0263
58,4	1,1456	1,1371	1,129	1,1211	1,1134	1,106	1,0987	1,0917	1,0849	1,0782	1,0718	1,0654	1,0593	1,0533	1,0474	1,0416	1,036	1,0305	1,0252
58,5	1,1444	1,136	1,1278	1,1199	1,1123	1,1048	1,0976	1,0906	1,0838	1,0771	1,0706	1,0643	1,0582	1,0521	1,0463	1,0405	1,0349	1,0294	1,0241
58,6	1,1433	1,1348	1,1267	1,1188	1,1111	1,1037	1,0965	1,0894	1,0826	1,076	1,0695	1,0632	1,057	1,051	1,0452	1,0394	1,0338	1,0283	1,023
58,7	1,1421	1,1337	1,1255	1,1176	1,11	1,1026	1,0953	1,0883	1,0815	1,0749	1,0684	1,0621	1,0559	1,0499	1,044	1,0383	1,0327	1,0272	1,0218
58,8	1,141	1,1326	1,1244	1,1165	1,1089	1,1014	1,0942	1,0872	1,0804	1,0737	1,0673	1,0609	1,0548	1,0488	1,0429	1,0372	1,0316	1,0261	1,0207
58,9	1,1398	1,1314	1,1233	1,1154	1,1077	1,1003	1,0931	1,0861	1,0792	1,0726	1,0661	1,0598	1,0537	1,0477	1,0418	1,0361	1,0305	1,025	1,0196
59	1,1387	1,1303	1,1221	1,1142	1,1066	1,0992	1,0919	1,0849	1,0781	1,0715	1,065	1,0587	1,0526	1,0466	1,0407	1,035	1,0294	1,0239	1,0185
59,1	1,1376	1,1291	1,121	1,1131	1,1054	1,098	1,0908	1,0838	1,077	1,0704	1,0639	1,0576	1,0514	1,0454	1,0396	1,0338	1,0282	1,0228	1,0174
59,2	1,1364	1,128	1,1199	1,112	1,1043	1,0969	1,0897	1,0827	1,0759	1,0692	1,0628	1,0565	1,0503	1,0443	1,0385	1,0327	1,0271	1,0217	1,0163
59,3	1,1353	1,1269	1,1187	1,1108	1,1032	1,0958	1,0886	1,0816	1,0747	1,0681	1,0616	1,0553	1,0492	1,0432	1,0373	1,0316	1,026	1,0206	1,0152
59,4	1,1341	1,1257	1,1176	1,1097	1,102	1,0946	1,0874	1,0804	1,0736	1,067	1,0605	1,0542	1,0481	1,0421	1,0362	1,0305	1,0249	1,0194	1,0141
59,5	1,133	1,1246	1,1164	1,1086	1,1009	1,0935	1,0863	1,0793	1,0725	1,0659	1,0594	1,0531	1,047	1,041	1,0351	1,0294	1,0238	1,0183	1,013
59,6	1,1318	1,1234	1,1153	1,1074	1,0998	1,0924	1,0852	1,0782	1,0714	1,0647	1,0583	1,052	1,0459	1,0399	1,034	1,0283	1,0227	1,0172	1,0119
59,7	1,1307	1,1223	1,1142	1,1063	1,0987	1,0912	1,084	1,0771	1,0702	1,0636	1,0572	1,0509	1,0447	1,0387	1,0329	1,0272	1,0216	1,0161	1,0108
59,8	1,1296	1,1212	1,113	1,1052	1,0975	1,0901	1,0829	1,0759	1,0691	1,0625	1,056	1,0498	1,0436	1,0376	1,0318	1,0261	1,0205	1,015	1,0097
59,9	1,1284	1,12	1,1119	1,104	1,0964	1,089	1,0818	1,0748	1,068	1,0614	1,0549	1,0486	1,0425	1,0365	1,0307	1,025	1,0194	1,0139	1,0086
60	1,1273	1,1189	1,1108	1,1029	1,0953	1,0879	1,0807	1,0737	1,0669	1,0603	1,0538	1,0475	1,0414	1,0354	1,0296	1,0239	1,0183	1,0128	1,0075
60,1	1,1262	1,1178	1,1096	1,1018	1,0941	1,0867	1,0795	1,0726	1,0658	1,0591	1,0527	1,0464	1,0403	1,0343	1,0285	1,0227	1,0172	1,0117	1,0064
60,2	1,125	1,1166	1,1085	1,1006	1,093	1,0856	1,0784	1,0714	1,0646	1,058	1,0516	1,0453	1,0392	1,0332	1,0273	1,0216	1,0161	1,0106	1,0052
60,3	1,1239	1,1155	1,1074	1,0995	1,0919	1,0845	1,0773	1,0703	1,0635	1,0569	1,0505	1,0442	1,0381	1,0321	1,0262	1,0205	1,0149	1,0095	1,0041
60,4	1,1227	1,1143	1,1062	1,0984	1,0907	1,0834	1,0762	1,0692	1,0624	1,0558	1,0493	1,0431	1,0369	1,031	1,0251	1,0194	1,0138	1,0084	1,003

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
57	1,0355	1,0303	1,0253	1,0203	1,0154	1,0106	1,0059	1,0013	0,9968	0,9924	0,988	0,9837	0,9795	0,9753	0,9712	0,9672	0,9632	0,9593	0,9555
57,1	1,0344	1,0292	1,0241	1,0192	1,0143	1,0095	1,0048	1,0002	0,9957	0,9913	0,9869	0,9826	0,9784	0,9742	0,9701	0,9661	0,9621	0,9582	0,9544
57,2	1,0333	1,0281	1,023	1,0181	1,0132	1,0084	1,0037	0,9991	0,9946	0,9901	0,9858	0,9815	0,9773	0,9731	0,969	0,965	0,9611	0,9572	0,9533
57,3	1,0321	1,027	1,0219	1,0169	1,0121	1,0073	1,0026	0,998	0,9935	0,989	0,9847	0,9804	0,9762	0,972	0,9679	0,9639	0,96	0,9561	0,9522
57,4	1,031	1,0259	1,0208	1,0158	1,011	1,0062	1,0015	0,9969	0,9924	0,9879	0,9836	0,9793	0,9751	0,9709	0,9668	0,9628	0,9589	0,955	0,9511
57,5	1,0299	1,0248	1,0197	1,0147	1,0099	1,0051	1,0004	0,9958	0,9913	0,9868	0,9825	0,9782	0,974	0,9698	0,9657	0,9617	0,9578	0,9539	0,95
57,6	1,0288	1,0236	1,0186	1,0136	1,0088	1,004	0,9993	0,9947	0,9902	0,9857	0,9814	0,9771	0,9729	0,9687	0,9647	0,9606	0,9567	0,9528	0,949
57,7	1,0277	1,0225	1,0175	1,0125	1,0077	1,0029	0,9982	0,9936	0,9891	0,9846	0,9803	0,976	0,9718	0,9676	0,9636	0,9595	0,9556	0,9517	0,9479
57,8	1,0266	1,0214	1,0164	1,0114	1,0065	1,0018	0,9971	0,9925	0,988	0,9835	0,9792	0,9749	0,9707	0,9665	0,9625	0,9585	0,9545	0,9506	0,9468
57,9	1,0255	1,0203	1,0153	1,0103	1,0054	1,0007	0,996	0,9914	0,9869	0,9824	0,9781	0,9738	0,9696	0,9654	0,9614	0,9574	0,9534	0,9495	0,9457
58	1,0244	1,0192	1,0141	1,0092	1,0043	0,9996	0,9949	0,9903	0,9858	0,9813	0,977	0,9727	0,9685	0,9644	0,9603	0,9563	0,9523	0,9484	0,9446
58,1	1,0232	1,0181	1,013	1,0081	1,0032	0,9985	0,9938	0,9892	0,9847	0,9802	0,9759	0,9716	0,9674	0,9633	0,9592	0,9552	0,9512	0,9473	0,9435
58,2	1,0221	1,017	1,0119	1,007	1,0021	0,9974	0,9927	0,9881	0,9836	0,9792	0,9748	0,9705	0,9663	0,9622	0,9581	0,9541	0,9501	0,9463	0,9424
58,3	1,021	1,0159	1,0108	1,0059	1,001	0,9963	0,9916	0,987	0,9825	0,9781	0,9737	0,9694	0,9652	0,9611	0,957	0,953	0,9491	0,9452	0,9413
58,4	1,0199	1,0148	1,0097	1,0048	0,9999	0,9952	0,9905	0,9859	0,9814	0,977	0,9726	0,9683	0,9641	0,96	0,9559	0,9519	0,948	0,9441	0,9403
58,5	1,0188	1,0137	1,0086	1,0037	0,9988	0,9941	0,9894	0,9848	0,9803	0,9759	0,9715	0,9672	0,963	0,9589	0,9548	0,9508	0,9469	0,943	0,9392
58,6	1,0177	1,0126	1,0075	1,0026	0,9977	0,993	0,9883	0,9837	0,9792	0,9748	0,9704	0,9661	0,9619	0,9578	0,9537	0,9497	0,9458	0,9419	0,9381
58,7	1,0166	1,0114	1,0064	1,0015	0,9966	0,9919	0,9872	0,9826	0,9781	0,9737	0,9693	0,965	0,9608	0,9567	0,9526	0,9486	0,9447	0,9408	0,937
58,8	1,0155	1,0103	1,0053	1,0004	0,9955	0,9908	0,9861	0,9815	0,977	0,9726	0,9682	0,964	0,9598	0,9556	0,9516	0,9476	0,9436	0,9397	0,9359
58,9	1,0144	1,0092	1,0042	0,9993	0,9944	0,9897	0,985	0,9804	0,9759	0,9715	0,9671	0,9629	0,9587	0,9545	0,9505	0,9465	0,9425	0,9387	0,9348
59	1,0133	1,0081	1,0031	0,9981	0,9933	0,9885	0,9839	0,9793	0,9748	0,9704	0,966	0,9618	0,9576	0,9534	0,9494	0,9454	0,9414	0,9376	0,9337
59,1	1,0122	1,007	1,002	0,997	0,9922	0,9875	0,9828	0,9782	0,9737	0,9693	0,9649	0,9607	0,9565	0,9524	0,9483	0,9443	0,9404	0,9365	0,9327
59,2	1,0111	1,0059	1,0009	0,9959	0,9911	0,9864	0,9817	0,9771	0,9726	0,9682	0,9639	0,9596	0,9554	0,9513	0,9472	0,9432	0,9393	0,9354	0,9316
59,3	1,01	1,0048	0,9998	0,9948	0,99	0,9853	0,9806	0,976	0,9715	0,9671	0,9628	0,9585	0,9543	0,9502	0,9461	0,9421	0,9382	0,9343	0,9305
59,4	1,0088	1,0037	0,9987	0,9937	0,9889	0,9842	0,9795	0,9749	0,9704	0,966	0,9617	0,9574	0,9532	0,9491	0,945	0,941	0,9371	0,9332	0,9294
59,5	1,0077	1,0026	0,9976	0,9926	0,9878	0,9831	0,9784	0,9738	0,9693	0,9649	0,9606	0,9563	0,9521	0,948	0,9439	0,94	0,936	0,9321	0,9283
59,6	1,0066	1,0015	0,9965	0,9915	0,9867	0,982	0,9773	0,9727	0,9682	0,9638	0,9595	0,9552	0,951	0,9469	0,9429	0,9389	0,9349	0,9311	0,9273
59,7	1,0055	1,0004	0,9954	0,9904	0,9856	0,9809	0,9762	0,9716	0,9671	0,9627	0,9584	0,9541	0,9499	0,9458	0,9418	0,9378	0,9338	0,93	0,9262
59,8	1,0044	0,9993	0,9943	0,9893	0,9845	0,9798	0,9751	0,9705	0,9661	0,9616	0,9573	0,953	0,9489	0,9447	0,9407	0,9367	0,9328	0,9289	0,9251
59,9	1,0033	0,9982	0,9932	0,9882	0,9834	0,9787	0,974	0,9694	0,965	0,9606	0,9562	0,952	0,9478	0,9437	0,9396	0,9356	0,9317	0,9278	0,924
60	1,0022	0,9971	0,9921	0,9871	0,9823	0,9776	0,9729	0,9684	0,9639	0,9595	0,9551	0,9509	0,9467	0,9426	0,9385	0,9345	0,9306	0,9267	0,9229
60,1	1,0011	0,996	0,991	0,986	0,9812	0,9765	0,9718	0,9673	0,9628	0,9584	0,954	0,9498	0,9456	0,9415	0,9374	0,9334	0,9295	0,9257	0,9218
60,2	1	0,9949	0,9899	0,9849	0,9801	0,9754	0,9707	0,9662	0,9617	0,9573	0,953	0,9487	0,9445	0,9404	0,9363	0,9324	0,9284	0,9246	0,9208
60,3	0,9989	0,9938	0,9888	0,9838	0,979	0,9743	0,9696	0,9651	0,9606	0,9562	0,9519	0,9476	0,9434	0,9393	0,9353	0,9313	0,9274	0,9235	0,9197
60,4	0,9978	0,9927	0,9877	0,9828	0,9779	0,9732	0,9685	0,964	0,9595	0,9551	0,9508	0,9465	0,9423	0,9382	0,9342	0,9302	0,9263	0,9224	0,9186

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
57	0,9517	0,948	0,9443	0,9407	0,9371	0,9336	0,9301	0,9267	0,9233	0,92	0,9167	0,9134	0,9102	0,9071	0,9039	0,9008	0,8978	0,8948	0,8918
57,1	0,9506	0,9469	0,9432	0,9396	0,936	0,9325	0,929	0,9256	0,9222	0,9189	0,9156	0,9124	0,9092	0,906	0,9029	0,8998	0,8967	0,8937	0,8907
57,2	0,9495	0,9458	0,9421	0,9385	0,935	0,9314	0,928	0,9245	0,9212	0,9178	0,9145	0,9113	0,9081	0,9049	0,9018	0,8987	0,8956	0,8926	0,8896
57,3	0,9484	0,9447	0,9411	0,9374	0,9339	0,9303	0,9269	0,9235	0,9201	0,9167	0,9135	0,9102	0,907	0,9038	0,9007	0,8976	0,8946	0,8915	0,8886
57,4	0,9474	0,9436	0,94	0,9363	0,9328	0,9293	0,9258	0,9224	0,919	0,9157	0,9124	0,9091	0,9059	0,9028	0,8996	0,8965	0,8935	0,8905	0,8875
57,5	0,9463	0,9425	0,9389	0,9353	0,9317	0,9282	0,9247	0,9213	0,9179	0,9146	0,9113	0,9081	0,9048	0,9017	0,8986	0,8955	0,8924	0,8894	0,8864
57,6	0,9452	0,9415	0,9378	0,9342	0,9306	0,9271	0,9236	0,9202	0,9168	0,9135	0,9102	0,907	0,9038	0,9006	0,8975	0,8944	0,8913	0,8883	0,8854
57,7	0,9441	0,9404	0,9367	0,9331	0,9295	0,926	0,9226	0,9191	0,9158	0,9124	0,9091	0,9059	0,9027	0,8995	0,8964	0,8933	0,8903	0,8873	0,8843
57,8	0,943	0,9393	0,9356	0,932	0,9284	0,9249	0,9215	0,9181	0,9147	0,9114	0,9081	0,9048	0,9016	0,8985	0,8953	0,8923	0,8892	0,8862	0,8832
57,9	0,9419	0,9382	0,9345	0,9309	0,9274	0,9239	0,9204	0,917	0,9136	0,9103	0,907	0,9037	0,9005	0,8974	0,8943	0,8912	0,8881	0,8851	0,8821
58	0,9408	0,9371	0,9335	0,9298	0,9263	0,9228	0,9193	0,9159	0,9125	0,9092	0,9059	0,9027	0,8995	0,8963	0,8932	0,8901	0,8871	0,884	0,8811
58,1	0,9397	0,936	0,9324	0,9288	0,9252	0,9217	0,9182	0,9148	0,9114	0,9081	0,9048	0,9016	0,8984	0,8952	0,8921	0,889	0,886	0,883	0,88
58,2	0,9387	0,9349	0,9313	0,9277	0,9241	0,9206	0,9172	0,9137	0,9104	0,907	0,9038	0,9005	0,8973	0,8942	0,891	0,888	0,8849	0,8819	0,8789
58,3	0,9376	0,9339	0,9302	0,9266	0,923	0,9195	0,9161	0,9127	0,9093	0,906	0,9027	0,8994	0,8963	0,8931	0,89	0,8869	0,8839	0,8808	0,8779
58,4	0,9365	0,9328	0,9291	0,9255	0,922	0,9185	0,915	0,9116	0,9082	0,9049	0,9016	0,8984	0,8952	0,892	0,8889	0,8858	0,8828	0,8798	0,8768
58,5	0,9354	0,9317	0,928	0,9244	0,9209	0,9174	0,9139	0,9105	0,9071	0,9038	0,9005	0,8973	0,8941	0,891	0,8878	0,8848	0,8817	0,8787	0,8757
58,6	0,9343	0,9306	0,927	0,9234	0,9198	0,9163	0,9128	0,9094	0,9061	0,9027	0,8995	0,8962	0,893	0,8899	0,8868	0,8837	0,8806	0,8776	0,8747
58,7	0,9332	0,9295	0,9259	0,9223	0,9187	0,9152	0,9118	0,9084	0,905	0,9017	0,8984	0,8952	0,892	0,8888	0,8857	0,8826	0,8796	0,8766	0,8736
58,8	0,9322	0,9284	0,9248	0,9212	0,9176	0,9141	0,9107	0,9073	0,9039	0,9006	0,8973	0,8941	0,8909	0,8877	0,8846	0,8815	0,8785	0,8755	0,8725
58,9	0,9311	0,9274	0,9237	0,9201	0,9166	0,9131	0,9096	0,9062	0,9028	0,8995	0,8962	0,893	0,8898	0,8867	0,8836	0,8805	0,8774	0,8744	0,8715
59	0,93	0,9263	0,9226	0,919	0,9155	0,912	0,9085	0,9051	0,9018	0,8984	0,8952	0,8919	0,8887	0,8856	0,8825	0,8794	0,8764	0,8734	0,8704
59,1	0,9289	0,9252	0,9216	0,918	0,9144	0,9109	0,9075	0,904	0,9007	0,8974	0,8941	0,8909	0,8877	0,8845	0,8814	0,8783	0,8753	0,8723	0,8693
59,2	0,9278	0,9241	0,9205	0,9169	0,9133	0,9098	0,9064	0,903	0,8996	0,8963	0,893	0,8898	0,8866	0,8835	0,8803	0,8773	0,8742	0,8712	0,8683
59,3	0,9267	0,923	0,9194	0,9158	0,9122	0,9088	0,9053	0,9019	0,8985	0,8952	0,892	0,8887	0,8855	0,8824	0,8793	0,8762	0,8732	0,8702	0,8672
59,4	0,9257	0,922	0,9183	0,9147	0,9112	0,9077	0,9042	0,9008	0,8975	0,8942	0,8909	0,8877	0,8845	0,8813	0,8782	0,8751	0,8721	0,8691	0,8661
59,5	0,9246	0,9209	0,9172	0,9136	0,9101	0,9066	0,9032	0,8997	0,8964	0,8931	0,8898	0,8866	0,8834	0,8803	0,8771	0,8741	0,871	0,868	0,8651
59,6	0,9235	0,9198	0,9162	0,9126	0,909	0,9055	0,9021	0,8987	0,8953	0,892	0,8887	0,8855	0,8823	0,8792	0,8761	0,873	0,87	0,867	0,864
59,7	0,9224	0,9187	0,9151	0,9115	0,9079	0,9044	0,901	0,8976	0,8942	0,8909	0,8877	0,8844	0,8813	0,8781	0,875	0,8719	0,8689	0,8659	0,863
59,8	0,9213	0,9176	0,914	0,9104	0,9069	0,9034	0,8999	0,8965	0,8932	0,8899	0,8866	0,8834	0,8802	0,877	0,8739	0,8709	0,8678	0,8648	0,8619
59,9	0,9203	0,9166	0,9129	0,9093	0,9058	0,9023	0,8989	0,8955	0,8921	0,8888	0,8855	0,8823	0,8791	0,876	0,8729	0,8698	0,8668	0,8638	0,8608
60	0,9192	0,9155	0,9118	0,9083	0,9047	0,9012	0,8978	0,8944	0,891	0,8877	0,8845	0,8812	0,8781	0,8749	0,8718	0,8687	0,8657	0,8627	0,8598
60,1	0,9181	0,9144	0,9108	0,9072	0,9036	0,9001	0,8967	0,8933	0,89	0,8867	0,8834	0,8802	0,877	0,8738	0,8707	0,8677	0,8646	0,8617	0,8587
60,2	0,917	0,9133	0,9097	0,9061	0,9026	0,8991	0,8956	0,8922	0,8889	0,8856	0,8823	0,8791	0,8759	0,8728	0,8697	0,8666	0,8636	0,8606	0,8576
60,3	0,9159	0,9122	0,9086	0,905	0,9015	0,898	0,8946	0,8912	0,8878	0,8845	0,8813	0,878	0,8749	0,8717	0,8686	0,8655	0,8625	0,8595	0,8566
60,4	0,9149	0,9112	0,9075	0,9039	0,9004	0,8969	0,8935	0,8901	0,8867	0,8834	0,8802	0,877	0,8738	0,8706	0,8675	0,8645	0,8615	0,8585	0,8555

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
57	0,8888	0,8859	0,883	0,8802	0,8774	0,8746	0,8718	0,8691	0,8664	0,8637	0,8611	0,8585	0,8559	0,8533	0,8508	0,8482	0,8458	0,8433	0,8409
57,1	0,8878	0,8848	0,882	0,8791	0,8763	0,8735	0,8708	0,868	0,8653	0,8627	0,86	0,8574	0,8548	0,8522	0,8497	0,8472	0,8447	0,8422	0,8398
57,2	0,8867	0,8838	0,8809	0,878	0,8752	0,8724	0,8697	0,867	0,8643	0,8616	0,8589	0,8563	0,8537	0,8512	0,8486	0,8461	0,8436	0,8412	0,8387
57,3	0,8856	0,8827	0,8798	0,877	0,8742	0,8714	0,8686	0,8659	0,8632	0,8605	0,8579	0,8553	0,8527	0,8501	0,8476	0,8451	0,8426	0,8401	0,8377
57,4	0,8845	0,8816	0,8788	0,8759	0,8731	0,8703	0,8676	0,8648	0,8621	0,8595	0,8568	0,8542	0,8516	0,8491	0,8465	0,844	0,8415	0,8391	0,8366
57,5	0,8835	0,8806	0,8777	0,8748	0,872	0,8692	0,8665	0,8638	0,8611	0,8584	0,8558	0,8531	0,8506	0,848	0,8455	0,843	0,8405	0,838	0,8356
57,6	0,8824	0,8795	0,8766	0,8738	0,871	0,8682	0,8654	0,8627	0,86	0,8573	0,8547	0,8521	0,8495	0,8469	0,8444	0,8419	0,8394	0,837	0,8345
57,7	0,8813	0,8784	0,8756	0,8727	0,8699	0,8671	0,8644	0,8616	0,8589	0,8563	0,8536	0,851	0,8484	0,8459	0,8433	0,8408	0,8384	0,8359	0,8335
57,8	0,8803	0,8774	0,8745	0,8716	0,8688	0,866	0,8633	0,8606	0,8579	0,8552	0,8526	0,85	0,8474	0,8448	0,8423	0,8398	0,8373	0,8348	0,8324
57,9	0,8792	0,8763	0,8734	0,8706	0,8678	0,865	0,8622	0,8595	0,8568	0,8542	0,8515	0,8489	0,8463	0,8438	0,8412	0,8387	0,8362	0,8338	0,8313
58	0,8781	0,8752	0,8724	0,8695	0,8667	0,8639	0,8612	0,8584	0,8558	0,8531	0,8505	0,8478	0,8453	0,8427	0,8402	0,8377	0,8352	0,8327	0,8303
58,1	0,8771	0,8742	0,8713	0,8684	0,8656	0,8629	0,8601	0,8574	0,8547	0,852	0,8494	0,8468	0,8442	0,8416	0,8391	0,8366	0,8341	0,8317	0,8292
58,2	0,876	0,8731	0,8702	0,8674	0,8646	0,8618	0,859	0,8563	0,8536	0,851	0,8483	0,8457	0,8431	0,8406	0,8381	0,8356	0,8331	0,8306	0,8282
58,3	0,8749	0,872	0,8692	0,8663	0,8635	0,8607	0,858	0,8553	0,8526	0,8499	0,8473	0,8447	0,8421	0,8395	0,837	0,8345	0,832	0,8296	0,8271
58,4	0,8739	0,871	0,8681	0,8653	0,8624	0,8597	0,8569	0,8542	0,8515	0,8489	0,8462	0,8436	0,841	0,8385	0,8359	0,8334	0,831	0,8285	0,8261
58,5	0,8728	0,8699	0,867	0,8642	0,8614	0,8586	0,8559	0,8531	0,8505	0,8478	0,8452	0,8426	0,84	0,8374	0,8349	0,8324	0,8299	0,8275	0,825
58,6	0,8717	0,8688	0,866	0,8631	0,8603	0,8575	0,8548	0,8521	0,8494	0,8467	0,8441	0,8415	0,8389	0,8364	0,8338	0,8313	0,8289	0,8264	0,824
58,7	0,8707	0,8678	0,8649	0,8621	0,8593	0,8565	0,8537	0,851	0,8483	0,8457	0,843	0,8404	0,8379	0,8353	0,8328	0,8303	0,8278	0,8253	0,8229
58,8	0,8696	0,8667	0,8638	0,861	0,8582	0,8554	0,8527	0,85	0,8473	0,8446	0,842	0,8394	0,8368	0,8343	0,8317	0,8292	0,8267	0,8243	0,8219
58,9	0,8685	0,8656	0,8628	0,8599	0,8571	0,8544	0,8516	0,8489	0,8462	0,8436	0,8409	0,8383	0,8357	0,8332	0,8307	0,8282	0,8257	0,8232	0,8208
59	0,8675	0,8646	0,8617	0,8589	0,8561	0,8533	0,8506	0,8478	0,8452	0,8425	0,8399	0,8373	0,8347	0,8321	0,8296	0,8271	0,8246	0,8222	0,8198
59,1	0,8664	0,8635	0,8606	0,8578	0,855	0,8522	0,8495	0,8468	0,8441	0,8414	0,8388	0,8362	0,8336	0,8311	0,8286	0,8261	0,8236	0,8211	0,8187
59,2	0,8653	0,8624	0,8596	0,8567	0,8539	0,8512	0,8484	0,8457	0,843	0,8404	0,8378	0,8352	0,8326	0,83	0,8275	0,825	0,8225	0,8201	0,8177
59,3	0,8643	0,8614	0,8585	0,8557	0,8529	0,8501	0,8474	0,8447	0,842	0,8393	0,8367	0,8341	0,8315	0,829	0,8265	0,824	0,8215	0,819	0,8166
59,4	0,8632	0,8603	0,8575	0,8546	0,8518	0,8491	0,8463	0,8436	0,8409	0,8383	0,8356	0,833	0,8305	0,8279	0,8254	0,8229	0,8204	0,818	0,8156
59,5	0,8621	0,8593	0,8564	0,8536	0,8508	0,848	0,8453	0,8425	0,8399	0,8372	0,8346	0,832	0,8294	0,8269	0,8244	0,8219	0,8194	0,8169	0,8145
59,6	0,8611	0,8582	0,8553	0,8525	0,8497	0,8469	0,8442	0,8415	0,8388	0,8362	0,8335	0,8309	0,8284	0,8258	0,8233	0,8208	0,8183	0,8159	0,8135
59,7	0,86	0,8571	0,8543	0,8514	0,8486	0,8459	0,8431	0,8404	0,8378	0,8351	0,8325	0,8299	0,8273	0,8248	0,8222	0,8198	0,8173	0,8148	0,8124
59,8	0,859	0,8561	0,8532	0,8504	0,8476	0,8448	0,8421	0,8394	0,8367	0,834	0,8314	0,8288	0,8263	0,8237	0,8212	0,8187	0,8162	0,8138	0,8114
59,9	0,8579	0,855	0,8521	0,8493	0,8465	0,8438	0,841	0,8383	0,8356	0,833	0,8304	0,8278	0,8252	0,8227	0,8201	0,8176	0,8152	0,8127	0,8103
60	0,8568	0,8539	0,8511	0,8483	0,8455	0,8427	0,84	0,8373	0,8346	0,8319	0,8293	0,8267	0,8241	0,8216	0,8191	0,8166	0,8141	0,8117	0,8093
60,1	0,8558	0,8529	0,85	0,8472	0,8444	0,8416	0,8389	0,8362	0,8335	0,8309	0,8283	0,8257	0,8231	0,8206	0,818	0,8155	0,8131	0,8106	0,8082
60,2	0,8547	0,8518	0,849	0,8461	0,8433	0,8406	0,8378	0,8351	0,8325	0,8298	0,8272	0,8246	0,822	0,8195	0,817	0,8145	0,812	0,8096	0,8072
60,3	0,8536	0,8508	0,8479	0,8451	0,8423	0,8395	0,8368	0,8341	0,8314	0,8288	0,8261	0,8236	0,821	0,8184	0,8159	0,8134	0,811	0,8085	0,8061
60,4	0,8526	0,8497	0,8468	0,844	0,8412	0,8385	0,8357	0,833	0,8304	0,8277	0,8251	0,8225	0,8199	0,8174	0,8149	0,8124	0,8099	0,8075	0,8051

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
57	0,8384	0,836	0,8337	0,8313	0,829	0,8267	0,8244	0,8221	0,8199	0,8176	0,8154	0,8132	0,8111	0,8089	0,8068	0,8047	0,8025	0,8005	0,7984
57,1	0,8374	0,835	0,8326	0,8303	0,8279	0,8256	0,8233	0,8211	0,8188	0,8166	0,8144	0,8122	0,81	0,8079	0,8057	0,8036	0,8015	0,7994	0,7974
57,2	0,8363	0,8339	0,8316	0,8292	0,8269	0,8246	0,8223	0,82	0,8178	0,8155	0,8133	0,8111	0,809	0,8068	0,8047	0,8026	0,8005	0,7984	0,7963
57,3	0,8353	0,8329	0,8305	0,8281	0,8258	0,8235	0,8212	0,819	0,8167	0,8145	0,8123	0,8101	0,8079	0,8058	0,8036	0,8015	0,7994	0,7973	0,7953
57,4	0,8342	0,8318	0,8294	0,8271	0,8248	0,8225	0,8202	0,8179	0,8157	0,8134	0,8112	0,809	0,8069	0,8047	0,8026	0,8005	0,7984	0,7963	0,7942
57,5	0,8332	0,8308	0,8284	0,826	0,8237	0,8214	0,8191	0,8169	0,8146	0,8124	0,8102	0,808	0,8058	0,8037	0,8015	0,7994	0,7973	0,7952	0,7932
57,6	0,8321	0,8297	0,8273	0,825	0,8227	0,8204	0,8181	0,8158	0,8136	0,8113	0,8091	0,8069	0,8048	0,8026	0,8005	0,7984	0,7963	0,7942	0,7921
57,7	0,831	0,8287	0,8263	0,8239	0,8216	0,8193	0,817	0,8148	0,8125	0,8103	0,8081	0,8059	0,8037	0,8016	0,7994	0,7973	0,7952	0,7932	0,7911
57,8	0,83	0,8276	0,8252	0,8229	0,8206	0,8183	0,816	0,8137	0,8115	0,8092	0,807	0,8048	0,8027	0,8005	0,7984	0,7963	0,7942	0,7921	0,79
57,9	0,8289	0,8265	0,8242	0,8218	0,8195	0,8172	0,8149	0,8127	0,8104	0,8082	0,806	0,8038	0,8016	0,7995	0,7974	0,7952	0,7931	0,7911	0,789
58	0,8279	0,8255	0,8231	0,8208	0,8185	0,8162	0,8139	0,8116	0,8094	0,8071	0,8049	0,8028	0,8006	0,7984	0,7963	0,7942	0,7921	0,79	0,788
58,1	0,8268	0,8244	0,8221	0,8197	0,8174	0,8151	0,8128	0,8106	0,8083	0,8061	0,8039	0,8017	0,7995	0,7974	0,7953	0,7932	0,7911	0,789	0,7869
58,2	0,8258	0,8234	0,821	0,8187	0,8164	0,8141	0,8118	0,8095	0,8073	0,805	0,8028	0,8007	0,7985	0,7963	0,7942	0,7921	0,79	0,7879	0,7859
58,3	0,8247	0,8223	0,82	0,8176	0,8153	0,813	0,8107	0,8085	0,8062	0,804	0,8018	0,7996	0,7974	0,7953	0,7932	0,7911	0,789	0,7869	0,7848
58,4	0,8237	0,8213	0,8189	0,8166	0,8143	0,812	0,8097	0,8074	0,8052	0,803	0,8008	0,7986	0,7964	0,7943	0,7921	0,79	0,7879	0,7859	0,7838
58,5	0,8226	0,8202	0,8179	0,8155	0,8132	0,8109	0,8086	0,8064	0,8041	0,8019	0,7997	0,7975	0,7954	0,7932	0,7911	0,789	0,7869	0,7848	0,7828
58,6	0,8216	0,8192	0,8168	0,8145	0,8122	0,8099	0,8076	0,8053	0,8031	0,8009	0,7987	0,7965	0,7943	0,7922	0,79	0,7879	0,7858	0,7838	0,7817
58,7	0,8205	0,8181	0,8158	0,8134	0,8111	0,8088	0,8065	0,8043	0,802	0,7998	0,7976	0,7954	0,7933	0,7911	0,789	0,7869	0,7848	0,7827	0,7807
58,8	0,8195	0,8171	0,8147	0,8124	0,8101	0,8078	0,8055	0,8032	0,801	0,7988	0,7966	0,7944	0,7922	0,7901	0,788	0,7859	0,7838	0,7817	0,7796
58,9	0,8184	0,816	0,8137	0,8113	0,809	0,8067	0,8044	0,8022	0,7999	0,7977	0,7955	0,7933	0,7912	0,789	0,7869	0,7848	0,7827	0,7806	0,7786
59	0,8174	0,815	0,8126	0,8103	0,808	0,8057	0,8034	0,8011	0,7989	0,7967	0,7945	0,7923	0,7901	0,788	0,7859	0,7838	0,7817	0,7796	0,7775
59,1	0,8163	0,8139	0,8116	0,8092	0,8069	0,8046	0,8023	0,8001	0,7978	0,7956	0,7934	0,7913	0,7891	0,787	0,7848	0,7827	0,7806	0,7786	0,7765
59,2	0,8153	0,8129	0,8105	0,8082	0,8059	0,8036	0,8013	0,799	0,7968	0,7946	0,7924	0,7902	0,7881	0,7859	0,7838	0,7817	0,7796	0,7775	0,7755
59,3	0,8142	0,8118	0,8095	0,8071	0,8048	0,8025	0,8002	0,798	0,7958	0,7935	0,7913	0,7892	0,787	0,7849	0,7827	0,7806	0,7786	0,7765	0,7744
59,4	0,8132	0,8108	0,8084	0,8061	0,8038	0,8015	0,7992	0,7969	0,7947	0,7925	0,7903	0,7881	0,786	0,7838	0,7817	0,7796	0,7775	0,7754	0,7734
59,5	0,8121	0,8097	0,8074	0,805	0,8027	0,8004	0,7982	0,7959	0,7937	0,7915	0,7893	0,7871	0,7849	0,7828	0,7807	0,7786	0,7765	0,7744	0,7724
59,6	0,8111	0,8087	0,8063	0,804	0,8017	0,7994	0,7971	0,7949	0,7926	0,7904	0,7882	0,786	0,7839	0,7817	0,7796	0,7775	0,7754	0,7734	0,7713
59,7	0,81	0,8076	0,8053	0,8029	0,8006	0,7983	0,7961	0,7938	0,7916	0,7894	0,7872	0,785	0,7828	0,7807	0,7786	0,7765	0,7744	0,7723	0,7703
59,8	0,809	0,8066	0,8042	0,8019	0,7996	0,7973	0,795	0,7928	0,7905	0,7883	0,7861	0,784	0,7818	0,7797	0,7775	0,7754	0,7734	0,7713	0,7692
59,9	0,8079	0,8055	0,8032	0,8008	0,7985	0,7962	0,794	0,7917	0,7895	0,7873	0,7851	0,7829	0,7808	0,7786	0,7765	0,7744	0,7723	0,7703	0,7682
60	0,8069	0,8045	0,8021	0,7998	0,7975	0,7952	0,7929	0,7907	0,7884	0,7862	0,784	0,7819	0,7797	0,7776	0,7755	0,7734	0,7713	0,7692	0,7672
60,1	0,8058	0,8034	0,8011	0,7988	0,7964	0,7942	0,7919	0,7896	0,7874	0,7852	0,783	0,7808	0,7787	0,7765	0,7744	0,7723	0,7702	0,7682	0,7661
60,2	0,8048	0,8024	0,8	0,7977	0,7954	0,7931	0,7908	0,7886	0,7864	0,7842	0,782	0,7798	0,7776	0,7755	0,7734	0,7713	0,7692	0,7671	0,7651
60,3	0,8037	0,8013	0,799	0,7967	0,7944	0,7921	0,7898	0,7875	0,7853	0,7831	0,7809	0,7787	0,7766	0,7745	0,7723	0,7702	0,7682	0,7661	0,764
60,4	0,8027	0,8003	0,7979	0,7956	0,7933	0,791	0,7888	0,7865	0,7843	0,7821	0,7799	0,7777	0,7756	0,7734	0,7713	0,7692	0,7671	0,7651	0,763

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
57	0,7963	0,7943	0,7923	0,7903	0,7883	0,7863	0,7844	0,7824	0,7805	0,7786	0,7767	0,7748	0,7729	0,7711	0,7692	0,7674	0,7656	0,7638	0,762
57,1	0,7953	0,7933	0,7912	0,7892	0,7873	0,7853	0,7833	0,7814	0,7795	0,7775	0,7756	0,7738	0,7719	0,77	0,7682	0,7664	0,7645	0,7627	0,7609
57,2	0,7943	0,7922	0,7902	0,7882	0,7862	0,7842	0,7823	0,7803	0,7784	0,7765	0,7746	0,7727	0,7709	0,769	0,7672	0,7653	0,7635	0,7617	0,7599
57,3	0,7932	0,7912	0,7892	0,7872	0,7852	0,7832	0,7812	0,7793	0,7774	0,7755	0,7736	0,7717	0,7698	0,768	0,7661	0,7643	0,7625	0,7607	0,7589
57,4	0,7922	0,7901	0,7881	0,7861	0,7841	0,7822	0,7802	0,7783	0,7763	0,7744	0,7725	0,7706	0,7688	0,7669	0,7651	0,7633	0,7614	0,7596	0,7578
57,5	0,7911	0,7891	0,7871	0,7851	0,7831	0,7811	0,7792	0,7772	0,7753	0,7734	0,7715	0,7696	0,7677	0,7659	0,764	0,7622	0,7604	0,7586	0,7568
57,6	0,7901	0,7881	0,786	0,784	0,7821	0,7801	0,7781	0,7762	0,7743	0,7724	0,7705	0,7686	0,7667	0,7649	0,763	0,7612	0,7594	0,7576	0,7558
57,7	0,789	0,787	0,785	0,783	0,781	0,779	0,7771	0,7751	0,7732	0,7713	0,7694	0,7675	0,7657	0,7638	0,762	0,7601	0,7583	0,7565	0,7547
57,8	0,788	0,786	0,784	0,782	0,78	0,778	0,776	0,7741	0,7722	0,7703	0,7684	0,7665	0,7646	0,7628	0,7609	0,7591	0,7573	0,7555	0,7537
57,9	0,787	0,7849	0,7829	0,7809	0,7789	0,777	0,775	0,7731	0,7711	0,7692	0,7673	0,7655	0,7636	0,7617	0,7599	0,7581	0,7563	0,7545	0,7527
58	0,7859	0,7839	0,7819	0,7799	0,7779	0,7759	0,774	0,772	0,7701	0,7682	0,7663	0,7644	0,7626	0,7607	0,7589	0,757	0,7552	0,7534	0,7516
58,1	0,7849	0,7828	0,7808	0,7788	0,7769	0,7749	0,7729	0,771	0,7691	0,7672	0,7653	0,7634	0,7615	0,7597	0,7578	0,756	0,7542	0,7524	0,7506
58,2	0,7838	0,7818	0,7798	0,7778	0,7758	0,7738	0,7719	0,77	0,768	0,7661	0,7642	0,7624	0,7605	0,7586	0,7568	0,755	0,7532	0,7514	0,7496
58,3	0,7828	0,7808	0,7788	0,7768	0,7748	0,7728	0,7709	0,7689	0,767	0,7651	0,7632	0,7613	0,7595	0,7576	0,7558	0,7539	0,7521	0,7503	0,7485
58,4	0,7817	0,7797	0,7777	0,7757	0,7737	0,7718	0,7698	0,7679	0,766	0,7641	0,7622	0,7603	0,7584	0,7566	0,7547	0,7529	0,7511	0,7493	0,7475
58,5	0,7807	0,7787	0,7767	0,7747	0,7727	0,7707	0,7688	0,7669	0,7649	0,763	0,7611	0,7593	0,7574	0,7555	0,7537	0,7519	0,7501	0,7483	0,7465
58,6	0,7797	0,7776	0,7756	0,7736	0,7717	0,7697	0,7677	0,7658	0,7639	0,762	0,7601	0,7582	0,7564	0,7545	0,7527	0,7508	0,749	0,7472	0,7455
58,7	0,7786	0,7766	0,7746	0,7726	0,7706	0,7687	0,7667	0,7648	0,7629	0,761	0,7591	0,7572	0,7553	0,7535	0,7516	0,7498	0,748	0,7462	0,7444
58,8	0,7776	0,7756	0,7736	0,7716	0,7696	0,7676	0,7657	0,7637	0,7618	0,7599	0,758	0,7562	0,7543	0,7524	0,7506	0,7488	0,747	0,7452	0,7434
58,9	0,7765	0,7745	0,7725	0,7705	0,7685	0,7666	0,7646	0,7627	0,7608	0,7589	0,757	0,7551	0,7533	0,7514	0,7496	0,7478	0,7459	0,7441	0,7424
59	0,7755	0,7735	0,7715	0,7695	0,7675	0,7655	0,7636	0,7617	0,7598	0,7579	0,756	0,7541	0,7522	0,7504	0,7485	0,7467	0,7449	0,7431	0,7413
59,1	0,7745	0,7724	0,7704	0,7684	0,7665	0,7645	0,7626	0,7606	0,7587	0,7568	0,7549	0,7531	0,7512	0,7493	0,7475	0,7457	0,7439	0,7421	0,7403
59,2	0,7734	0,7714	0,7694	0,7674	0,7654	0,7635	0,7615	0,7596	0,7577	0,7558	0,7539	0,752	0,7502	0,7483	0,7465	0,7447	0,7429	0,7411	0,7393
59,3	0,7724	0,7704	0,7684	0,7664	0,7644	0,7624	0,7605	0,7586	0,7566	0,7547	0,7529	0,751	0,7491	0,7473	0,7454	0,7436	0,7418	0,74	0,7382
59,4	0,7714	0,7693	0,7673	0,7653	0,7634	0,7614	0,7595	0,7575	0,7556	0,7537	0,7518	0,75	0,7481	0,7462	0,7444	0,7426	0,7408	0,739	0,7372
59,5	0,7703	0,7683	0,7663	0,7643	0,7623	0,7604	0,7584	0,7565	0,7546	0,7527	0,7508	0,7489	0,7471	0,7452	0,7434	0,7416	0,7398	0,738	0,7362
59,6	0,7693	0,7673	0,7653	0,7633	0,7613	0,7593	0,7574	0,7555	0,7535	0,7516	0,7498	0,7479	0,746	0,7442	0,7424	0,7405	0,7387	0,7369	0,7352
59,7	0,7682	0,7662	0,7642	0,7622	0,7603	0,7583	0,7564	0,7544	0,7525	0,7506	0,7487	0,7469	0,745	0,7432	0,7413	0,7395	0,7377	0,7359	0,7341
59,8	0,7672	0,7652	0,7632	0,7612	0,7592	0,7573	0,7553	0,7534	0,7515	0,7496	0,7477	0,7458	0,744	0,7421	0,7403	0,7385	0,7367	0,7349	0,7331
59,9	0,7662	0,7641	0,7621	0,7602	0,7582	0,7562	0,7543	0,7524	0,7504	0,7485	0,7467	0,7448	0,7429	0,7411	0,7393	0,7374	0,7356	0,7338	0,7321
60	0,7651	0,7631	0,7611	0,7591	0,7571	0,7552	0,7533	0,7513	0,7494	0,7475	0,7456	0,7438	0,7419	0,7401	0,7382	0,7364	0,7346	0,7328	0,731
60,1	0,7641	0,7621	0,7601	0,7581	0,7561	0,7542	0,7522	0,7503	0,7484	0,7465	0,7446	0,7427	0,7409	0,739	0,7372	0,7354	0,7336	0,7318	0,73
60,2	0,7631	0,761	0,759	0,757	0,7551	0,7531	0,7512	0,7493	0,7473	0,7455	0,7436	0,7417	0,7398	0,738	0,7362	0,7344	0,7326	0,7308	0,729
60,3	0,762	0,76	0,758	0,756	0,754	0,7521	0,7501	0,7482	0,7463	0,7444	0,7425	0,7407	0,7388	0,737	0,7351	0,7333	0,7315	0,7297	0,728
60,4	0,761	0,759	0,757	0,755	0,753	0,7511	0,7491	0,7472	0,7453	0,7434	0,7415	0,7396	0,7378	0,7359	0,7341	0,7323	0,7305	0,7287	0,7269

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
57	0,7602	0,7584	0,7567	0,7549	0,7532	0,7515	0,7498	0,7481
57,1	0,7592	0,7574	0,7556	0,7539	0,7522	0,7504	0,7487	0,747
57,2	0,7581	0,7564	0,7546	0,7529	0,7511	0,7494	0,7477	0,746
57,3	0,7571	0,7553	0,7536	0,7518	0,7501	0,7484	0,7467	0,745
57,4	0,7561	0,7543	0,7525	0,7508	0,7491	0,7473	0,7456	0,7439
57,5	0,755	0,7533	0,7515	0,7498	0,748	0,7463	0,7446	0,7429
57,6	0,754	0,7522	0,7505	0,7487	0,747	0,7453	0,7436	0,7419
57,7	0,753	0,7512	0,7494	0,7477	0,746	0,7442	0,7425	0,7408
57,8	0,7519	0,7502	0,7484	0,7467	0,7449	0,7432	0,7415	0,7398
57,9	0,7509	0,7491	0,7474	0,7456	0,7439	0,7422	0,7405	0,7388
58	0,7499	0,7481	0,7463	0,7446	0,7429	0,7412	0,7395	0,7378
58,1	0,7488	0,7471	0,7453	0,7436	0,7419	0,7401	0,7384	0,7367
58,2	0,7478	0,746	0,7443	0,7425	0,7408	0,7391	0,7374	0,7357
58,3	0,7468	0,745	0,7433	0,7415	0,7398	0,7381	0,7364	0,7347
58,4	0,7457	0,744	0,7422	0,7405	0,7388	0,737	0,7353	0,7337
58,5	0,7447	0,7429	0,7412	0,7395	0,7377	0,736	0,7343	0,7326
58,6	0,7437	0,7419	0,7402	0,7384	0,7367	0,735	0,7333	0,7316
58,7	0,7426	0,7409	0,7391	0,7374	0,7357	0,734	0,7323	0,7306
58,8	0,7416	0,7399	0,7381	0,7364	0,7346	0,7329	0,7312	0,7295
58,9	0,7406	0,7388	0,7371	0,7353	0,7336	0,7319	0,7302	0,7285
59	0,7396	0,7378	0,7361	0,7343	0,7326	0,7309	0,7292	0,7275
59,1	0,7385	0,7368	0,735	0,7333	0,7316	0,7299	0,7282	0,7265
59,2	0,7375	0,7357	0,734	0,7323	0,7305	0,7288	0,7271	0,7254
59,3	0,7365	0,7347	0,733	0,7312	0,7295	0,7278	0,7261	0,7244
59,4	0,7354	0,7337	0,7319	0,7302	0,7285	0,7268	0,7251	0,7234
59,5	0,7344	0,7327	0,7309	0,7292	0,7275	0,7257	0,7241	0,7224
59,6	0,7334	0,7316	0,7299	0,7282	0,7264	0,7247	0,723	0,7213
59,7	0,7324	0,7306	0,7289	0,7271	0,7254	0,7237	0,722	0,7203
59,8	0,7313	0,7296	0,7278	0,7261	0,7244	0,7227	0,721	0,7193
59,9	0,7303	0,7285	0,7268	0,7251	0,7234	0,7216	0,7199	0,7183
60	0,7293	0,7275	0,7258	0,724	0,7223	0,7206	0,7189	0,7172
60,1	0,7282	0,7265	0,7247	0,723	0,7213	0,7196	0,7179	0,7162
60,2	0,7272	0,7255	0,7237	0,722	0,7203	0,7186	0,7169	0,7152
60,3	0,7262	0,7244	0,7227	0,721	0,7192	0,7175	0,7158	0,7142
60,4	0,7252	0,7234	0,7217	0,7199	0,7182	0,7165	0,7148	0,7131

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
60,5	1,3843	1,3608	1,3394	1,3197	1,3014	1,2844	1,2685	1,2535	1,2394	1,2261	1,2134	1,2014	1,1899	1,1789	1,1684	1,1583	1,1486	1,1393	1,1303
60,6	1,3831	1,3596	1,3382	1,3185	1,3002	1,2832	1,2673	1,2524	1,2383	1,2249	1,2123	1,2002	1,1887	1,1778	1,1672	1,1572	1,1475	1,1381	1,1291
60,7	1,3818	1,3584	1,337	1,3173	1,299	1,282	1,2661	1,2512	1,2371	1,2238	1,2111	1,1991	1,1876	1,1766	1,1661	1,156	1,1463	1,137	1,128
60,8	1,3806	1,3572	1,3358	1,3161	1,2978	1,2808	1,2649	1,25	1,2359	1,2226	1,2099	1,1979	1,1864	1,1754	1,1649	1,1549	1,1452	1,1358	1,1269
60,9	1,3794	1,356	1,3346	1,3149	1,2966	1,2797	1,2638	1,2488	1,2347	1,2214	1,2088	1,1967	1,1853	1,1743	1,1638	1,1537	1,144	1,1347	1,1257
61	1,3782	1,3548	1,3334	1,3137	1,2955	1,2785	1,2626	1,2477	1,2336	1,2203	1,2076	1,1956	1,1841	1,1731	1,1626	1,1526	1,1429	1,1336	1,1246
61,1	1,377	1,3536	1,3322	1,3125	1,2943	1,2773	1,2614	1,2465	1,2324	1,2191	1,2064	1,1944	1,183	1,172	1,1615	1,1514	1,1417	1,1324	1,1234
61,2	1,3758	1,3524	1,331	1,3113	1,2931	1,2761	1,2602	1,2453	1,2312	1,2179	1,2053	1,1933	1,1818	1,1708	1,1603	1,1503	1,1406	1,1313	1,1223
61,3	1,3746	1,3512	1,3298	1,3101	1,2919	1,2749	1,2591	1,2441	1,2301	1,2168	1,2041	1,1921	1,1806	1,1697	1,1592	1,1491	1,1395	1,1301	1,1212
61,4	1,3734	1,35	1,3286	1,3089	1,2907	1,2738	1,2579	1,243	1,2289	1,2156	1,203	1,191	1,1795	1,1685	1,158	1,148	1,1383	1,129	1,12
61,5	1,3721	1,3488	1,3274	1,3077	1,2895	1,2726	1,2567	1,2418	1,2277	1,2144	1,2018	1,1898	1,1783	1,1674	1,1569	1,1468	1,1372	1,1279	1,1189
61,6	1,3709	1,3476	1,3262	1,3065	1,2883	1,2714	1,2555	1,2406	1,2266	1,2133	1,2006	1,1886	1,1772	1,1662	1,1558	1,1457	1,136	1,1267	1,1178
61,7	1,3697	1,3463	1,325	1,3054	1,2872	1,2702	1,2544	1,2395	1,2254	1,2121	1,1995	1,1875	1,176	1,1651	1,1546	1,1446	1,1349	1,1256	1,1166
61,8	1,3685	1,3451	1,3238	1,3042	1,286	1,269	1,2532	1,2383	1,2242	1,2109	1,1983	1,1863	1,1749	1,1639	1,1535	1,1434	1,1338	1,1245	1,1155
61,9	1,3673	1,3439	1,3226	1,303	1,2848	1,2679	1,252	1,2371	1,2231	1,2098	1,1972	1,1852	1,1737	1,1628	1,1523	1,1423	1,1326	1,1233	1,1144
62	1,3661	1,3427	1,3214	1,3018	1,2836	1,2667	1,2508	1,2359	1,2219	1,2086	1,196	1,184	1,1726	1,1616	1,1512	1,1411	1,1315	1,1222	1,1132
62,1	1,3649	1,3415	1,3202	1,3006	1,2824	1,2655	1,2497	1,2348	1,2207	1,2075	1,1949	1,1829	1,1714	1,1605	1,15	1,14	1,1303	1,121	1,1121
62,2	1,3637	1,3403	1,319	1,2994	1,2812	1,2643	1,2485	1,2336	1,2196	1,2063	1,1937	1,1817	1,1703	1,1593	1,1489	1,1388	1,1292	1,1199	1,111
62,3	1,3625	1,3391	1,3178	1,2982	1,2801	1,2631	1,2473	1,2324	1,2184	1,2051	1,1925	1,1806	1,1691	1,1582	1,1477	1,1377	1,1281	1,1188	1,1098
62,4	1,3613	1,3379	1,3166	1,297	1,2789	1,262	1,2461	1,2313	1,2172	1,204	1,1914	1,1794	1,168	1,157	1,1466	1,1366	1,1269	1,1176	1,1087
62,5	1,3601	1,3367	1,3154	1,2958	1,2777	1,2608	1,245	1,2301	1,2161	1,2028	1,1902	1,1782	1,1668	1,1559	1,1454	1,1354	1,1258	1,1165	1,1075
62,6	1,3589	1,3356	1,3143	1,2947	1,2765	1,2596	1,2438	1,2289	1,2149	1,2017	1,1891	1,1771	1,1657	1,1548	1,1443	1,1343	1,1246	1,1154	1,1064
62,7	1,3577	1,3344	1,3131	1,2935	1,2753	1,2584	1,2426	1,2278	1,2138	1,2005	1,1879	1,1759	1,1645	1,1536	1,1432	1,1331	1,1235	1,1142	1,1053
62,8	1,3565	1,3332	1,3119	1,2923	1,2741	1,2573	1,2414	1,2266	1,2126	1,1993	1,1868	1,1748	1,1634	1,1525	1,142	1,132	1,1224	1,1131	1,1041
62,9	1,3553	1,332	1,3107	1,2911	1,273	1,2561	1,2403	1,2254	1,2114	1,1982	1,1856	1,1736	1,1622	1,1513	1,1409	1,1308	1,1212	1,1119	1,103
63	1,3541	1,3308	1,3095	1,2899	1,2718	1,2549	1,2391	1,2243	1,2103	1,197	1,1844	1,1725	1,1611	1,1502	1,1397	1,1297	1,1201	1,1108	1,1019
63,1	1,3528	1,3296	1,3083	1,2887	1,2706	1,2537	1,2379	1,2231	1,2091	1,1959	1,1833	1,1713	1,1599	1,149	1,1386	1,1286	1,1189	1,1097	1,1007
63,2	1,3516	1,3284	1,3071	1,2875	1,2694	1,2526	1,2368	1,2219	1,2079	1,1947	1,1821	1,1702	1,1588	1,1479	1,1374	1,1274	1,1178	1,1085	1,0996
63,3	1,3504	1,3272	1,3059	1,2864	1,2682	1,2514	1,2356	1,2208	1,2068	1,1935	1,181	1,169	1,1576	1,1467	1,1363	1,1263	1,1167	1,1074	1,0985
63,4	1,3492	1,326	1,3047	1,2852	1,2671	1,2502	1,2344	1,2196	1,2056	1,1924	1,1798	1,1679	1,1565	1,1456	1,1352	1,1251	1,1155	1,1063	1,0974
63,5	1,348	1,3248	1,3035	1,284	1,2659	1,249	1,2333	1,2184	1,2044	1,1912	1,1787	1,1667	1,1553	1,1444	1,134	1,124	1,1144	1,1051	1,0962
63,6	1,3468	1,3236	1,3024	1,2828	1,2647	1,2479	1,2321	1,2173	1,2033	1,1901	1,1775	1,1656	1,1542	1,1433	1,1329	1,1229	1,1133	1,104	1,0951
63,7	1,3456	1,3224	1,3012	1,2816	1,2635	1,2467	1,2309	1,2161	1,2021	1,1889	1,1764	1,1644	1,153	1,1422	1,1317	1,1217	1,1121	1,1029	1,094
63,8	1,3444	1,3212	1,3	1,2804	1,2624	1,2455	1,2297	1,2149	1,201	1,1877	1,1752	1,1633	1,1519	1,141	1,1306	1,1206	1,111	1,1017	1,0928
63,9	1,3432	1,32	1,2988	1,2793	1,2612	1,2443	1,2286	1,2138	1,1998	1,1866	1,174	1,1621	1,1507	1,1399	1,1294	1,1194	1,1098	1,1006	1,0917

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
60,5	1,1216	1,1132	1,1051	1,0972	1,0896	1,0822	1,075	1,0681	1,0613	1,0547	1,0482	1,042	1,0358	1,0298	1,024	1,0183	1,0127	1,0073	1,0019
60,6	1,1205	1,1121	1,104	1,0961	1,0885	1,0811	1,0739	1,0669	1,0602	1,0535	1,0471	1,0408	1,0347	1,0287	1,0229	1,0172	1,0116	1,0062	1,0008
60,7	1,1193	1,1109	1,1028	1,095	1,0874	1,08	1,0728	1,0658	1,059	1,0524	1,046	1,0397	1,0336	1,0276	1,0218	1,0161	1,0105	1,0051	0,9997
60,8	1,1182	1,1098	1,1017	1,0938	1,0862	1,0788	1,0717	1,0647	1,0579	1,0513	1,0449	1,0386	1,0325	1,0265	1,0207	1,015	1,0094	1,004	0,9986
60,9	1,1171	1,1087	1,1006	1,0927	1,0851	1,0777	1,0706	1,0636	1,0568	1,0502	1,0438	1,0375	1,0314	1,0254	1,0196	1,0139	1,0083	1,0029	0,9975
61	1,1159	1,1075	1,0994	1,0916	1,084	1,0766	1,0694	1,0625	1,0557	1,0491	1,0426	1,0364	1,0303	1,0243	1,0185	1,0128	1,0072	1,0018	0,9964
61,1	1,1148	1,1064	1,0983	1,0905	1,0829	1,0755	1,0683	1,0613	1,0546	1,048	1,0415	1,0353	1,0292	1,0232	1,0174	1,0117	1,0061	1,0007	0,9953
61,2	1,1136	1,1053	1,0972	1,0893	1,0817	1,0744	1,0672	1,0602	1,0534	1,0468	1,0404	1,0342	1,028	1,0221	1,0163	1,0106	1,005	0,9996	0,9942
61,3	1,1125	1,1041	1,096	1,0882	1,0806	1,0732	1,0661	1,0591	1,0523	1,0457	1,0393	1,033	1,0269	1,021	1,0151	1,0095	1,0039	0,9984	0,9931
61,4	1,1114	1,103	1,0949	1,0871	1,0795	1,0721	1,0649	1,058	1,0512	1,0446	1,0382	1,0319	1,0258	1,0199	1,014	1,0084	1,0028	0,9973	0,992
61,5	1,1102	1,1019	1,0938	1,0859	1,0784	1,071	1,0638	1,0569	1,0501	1,0435	1,0371	1,0308	1,0247	1,0188	1,0129	1,0072	1,0017	0,9962	0,9909
61,6	1,1091	1,1007	1,0927	1,0848	1,0772	1,0699	1,0627	1,0557	1,049	1,0424	1,036	1,0297	1,0236	1,0176	1,0118	1,0061	1,0006	0,9951	0,9898
61,7	1,108	1,0996	1,0915	1,0837	1,0761	1,0687	1,0616	1,0546	1,0479	1,0413	1,0349	1,0286	1,0225	1,0165	1,0107	1,005	0,9995	0,994	0,9887
61,8	1,1068	1,0985	1,0904	1,0826	1,075	1,0676	1,0605	1,0535	1,0467	1,0402	1,0337	1,0275	1,0214	1,0154	1,0096	1,0039	0,9984	0,9929	0,9876
61,9	1,1057	1,0974	1,0893	1,0814	1,0739	1,0665	1,0593	1,0524	1,0456	1,039	1,0326	1,0264	1,0203	1,0143	1,0085	1,0028	0,9973	0,9918	0,9865
62	1,1046	1,0962	1,0881	1,0803	1,0727	1,0654	1,0582	1,0513	1,0445	1,0379	1,0315	1,0253	1,0192	1,0132	1,0074	1,0017	0,9962	0,9907	0,9854
62,1	1,1034	1,0951	1,087	1,0792	1,0716	1,0642	1,0571	1,0502	1,0434	1,0368	1,0304	1,0242	1,0181	1,0121	1,0063	1,0006	0,9951	0,9896	0,9843
62,2	1,1023	1,094	1,0859	1,0781	1,0705	1,0631	1,056	1,049	1,0423	1,0357	1,0293	1,023	1,0169	1,011	1,0052	0,9995	0,994	0,9885	0,9832
62,3	1,1012	1,0928	1,0848	1,0769	1,0694	1,062	1,0549	1,0479	1,0412	1,0346	1,0282	1,0219	1,0158	1,0099	1,0041	0,9984	0,9929	0,9874	0,9821
62,4	1,1	1,0917	1,0836	1,0758	1,0682	1,0609	1,0537	1,0468	1,04	1,0335	1,0271	1,0208	1,0147	1,0088	1,003	0,9973	0,9918	0,9863	0,981
62,5	1,0989	1,0906	1,0825	1,0747	1,0671	1,0598	1,0526	1,0457	1,0389	1,0324	1,026	1,0197	1,0136	1,0077	1,0019	0,9962	0,9907	0,9852	0,9799
62,6	1,0978	1,0894	1,0814	1,0736	1,066	1,0586	1,0515	1,0446	1,0378	1,0312	1,0248	1,0186	1,0125	1,0066	1,0008	0,9951	0,9896	0,9841	0,9788
62,7	1,0967	1,0883	1,0803	1,0724	1,0649	1,0575	1,0504	1,0434	1,0367	1,0301	1,0237	1,0175	1,0114	1,0055	0,9997	0,994	0,9885	0,983	0,9777
62,8	1,0955	1,0872	1,0791	1,0713	1,0637	1,0564	1,0493	1,0423	1,0356	1,029	1,0226	1,0164	1,0103	1,0044	0,9986	0,9929	0,9874	0,9819	0,9766
62,9	1,0944	1,0861	1,078	1,0702	1,0626	1,0553	1,0481	1,0412	1,0345	1,0279	1,0215	1,0153	1,0092	1,0033	0,9975	0,9918	0,9862	0,9808	0,9755
63	1,0933	1,0849	1,0769	1,0691	1,0615	1,0542	1,047	1,0401	1,0334	1,0268	1,0204	1,0142	1,0081	1,0021	0,9964	0,9907	0,9851	0,9797	0,9744
63,1	1,0921	1,0838	1,0757	1,0679	1,0604	1,053	1,0459	1,039	1,0322	1,0257	1,0193	1,0131	1,007	1,001	0,9952	0,9896	0,984	0,9786	0,9733
63,2	1,091	1,0827	1,0746	1,0668	1,0593	1,0519	1,0448	1,0379	1,0311	1,0246	1,0182	1,0119	1,0059	0,9999	0,9941	0,9885	0,9829	0,9775	0,9722
63,3	1,0899	1,0815	1,0735	1,0657	1,0581	1,0508	1,0437	1,0368	1,03	1,0235	1,0171	1,0108	1,0048	0,9988	0,993	0,9874	0,9818	0,9764	0,9711
63,4	1,0887	1,0804	1,0724	1,0646	1,057	1,0497	1,0426	1,0356	1,0289	1,0223	1,016	1,0097	1,0037	0,9977	0,9919	0,9863	0,9807	0,9753	0,97
63,5	1,0876	1,0793	1,0712	1,0635	1,0559	1,0486	1,0414	1,0345	1,0278	1,0212	1,0148	1,0086	1,0025	0,9966	0,9908	0,9852	0,9796	0,9742	0,9689
63,6	1,0865	1,0782	1,0701	1,0623	1,0548	1,0474	1,0403	1,0334	1,0267	1,0201	1,0137	1,0075	1,0014	0,9955	0,9897	0,9841	0,9785	0,9731	0,9678
63,7	1,0854	1,077	1,069	1,0612	1,0537	1,0463	1,0392	1,0323	1,0256	1,019	1,0126	1,0064	1,0003	0,9944	0,9886	0,983	0,9774	0,972	0,9667
63,8	1,0842	1,0759	1,0679	1,0601	1,0525	1,0452	1,0381	1,0312	1,0244	1,0179	1,0115	1,0053	0,9992	0,9933	0,9875	0,9819	0,9763	0,9709	0,9656
63,9	1,0831	1,0748	1,0667	1,059	1,0514	1,0441	1,037	1,0301	1,0233	1,0168	1,0104	1,0042	0,9981	0,9922	0,9864	0,9808	0,9752	0,9698	0,9645

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
60,5	0,9967	0,9916	0,9866	0,9817	0,9768	0,9721	0,9675	0,9629	0,9584	0,954	0,9497	0,9454	0,9412	0,9371	0,9331	0,9291	0,9252	0,9213	0,9175
60,6	0,9956	0,9905	0,9855	0,9806	0,9757	0,971	0,9664	0,9618	0,9573	0,9529	0,9486	0,9443	0,9402	0,9361	0,932	0,928	0,9241	0,9202	0,9164
60,7	0,9945	0,9894	0,9844	0,9795	0,9746	0,9699	0,9653	0,9607	0,9562	0,9518	0,9475	0,9433	0,9391	0,935	0,9309	0,9269	0,923	0,9192	0,9154
60,8	0,9934	0,9883	0,9833	0,9784	0,9735	0,9688	0,9642	0,9596	0,9551	0,9507	0,9464	0,9422	0,938	0,9339	0,9298	0,9259	0,9219	0,9181	0,9143
60,9	0,9923	0,9872	0,9822	0,9773	0,9724	0,9677	0,9631	0,9585	0,954	0,9497	0,9453	0,9411	0,9369	0,9328	0,9288	0,9248	0,9209	0,917	0,9132
61	0,9912	0,9861	0,9811	0,9762	0,9714	0,9666	0,962	0,9574	0,953	0,9486	0,9442	0,94	0,9358	0,9317	0,9277	0,9237	0,9198	0,9159	0,9121
61,1	0,9901	0,985	0,98	0,9751	0,9703	0,9655	0,9609	0,9563	0,9519	0,9475	0,9432	0,9389	0,9347	0,9306	0,9266	0,9226	0,9187	0,9148	0,9111
61,2	0,989	0,9839	0,9789	0,974	0,9692	0,9644	0,9598	0,9552	0,9508	0,9464	0,9421	0,9378	0,9337	0,9295	0,9255	0,9215	0,9176	0,9138	0,91
61,3	0,9879	0,9828	0,9778	0,9729	0,9681	0,9633	0,9587	0,9542	0,9497	0,9453	0,941	0,9367	0,9326	0,9285	0,9244	0,9205	0,9165	0,9127	0,9089
61,4	0,9868	0,9817	0,9767	0,9718	0,967	0,9623	0,9576	0,9531	0,9486	0,9442	0,9399	0,9357	0,9315	0,9274	0,9233	0,9194	0,9155	0,9116	0,9078
61,5	0,9857	0,9806	0,9756	0,9707	0,9659	0,9612	0,9565	0,952	0,9475	0,9431	0,9388	0,9346	0,9304	0,9263	0,9223	0,9183	0,9144	0,9105	0,9067
61,6	0,9846	0,9795	0,9745	0,9696	0,9648	0,9601	0,9554	0,9509	0,9464	0,942	0,9377	0,9335	0,9293	0,9252	0,9212	0,9172	0,9133	0,9095	0,9057
61,7	0,9835	0,9784	0,9734	0,9685	0,9637	0,959	0,9543	0,9498	0,9453	0,9409	0,9366	0,9324	0,9282	0,9241	0,9201	0,9161	0,9122	0,9084	0,9046
61,8	0,9824	0,9773	0,9723	0,9674	0,9626	0,9579	0,9533	0,9487	0,9442	0,9399	0,9356	0,9313	0,9271	0,9231	0,919	0,9151	0,9111	0,9073	0,9035
61,9	0,9813	0,9762	0,9712	0,9663	0,9615	0,9568	0,9522	0,9476	0,9432	0,9388	0,9345	0,9302	0,9261	0,922	0,9179	0,914	0,9101	0,9062	0,9024
62	0,9802	0,9751	0,9701	0,9652	0,9604	0,9557	0,9511	0,9465	0,9421	0,9377	0,9334	0,9291	0,925	0,9209	0,9169	0,9129	0,909	0,9051	0,9014
62,1	0,9791	0,974	0,969	0,9641	0,9593	0,9546	0,95	0,9454	0,941	0,9366	0,9323	0,9281	0,9239	0,9198	0,9158	0,9118	0,9079	0,9041	0,9003
62,2	0,978	0,9729	0,9679	0,963	0,9582	0,9535	0,9489	0,9444	0,9399	0,9355	0,9312	0,927	0,9228	0,9187	0,9147	0,9107	0,9068	0,903	0,8992
62,3	0,9769	0,9718	0,9668	0,9619	0,9571	0,9524	0,9478	0,9433	0,9388	0,9344	0,9301	0,9259	0,9217	0,9176	0,9136	0,9096	0,9057	0,9019	0,8981
62,4	0,9758	0,9707	0,9657	0,9608	0,956	0,9513	0,9467	0,9422	0,9377	0,9333	0,929	0,9248	0,9206	0,9166	0,9125	0,9086	0,9047	0,9008	0,897
62,5	0,9747	0,9696	0,9646	0,9597	0,955	0,9502	0,9456	0,9411	0,9366	0,9323	0,928	0,9237	0,9196	0,9155	0,9114	0,9075	0,9036	0,8998	0,896
62,6	0,9736	0,9685	0,9635	0,9587	0,9539	0,9492	0,9445	0,94	0,9355	0,9312	0,9269	0,9226	0,9185	0,9144	0,9104	0,9064	0,9025	0,8987	0,8949
62,7	0,9725	0,9674	0,9625	0,9576	0,9528	0,9481	0,9434	0,9389	0,9345	0,9301	0,9258	0,9216	0,9174	0,9133	0,9093	0,9053	0,9014	0,8976	0,8938
62,8	0,9714	0,9663	0,9614	0,9565	0,9517	0,947	0,9424	0,9378	0,9334	0,929	0,9247	0,9205	0,9163	0,9122	0,9082	0,9042	0,9004	0,8965	0,8927
62,9	0,9703	0,9652	0,9603	0,9554	0,9506	0,9459	0,9413	0,9367	0,9323	0,9279	0,9236	0,9194	0,9152	0,9111	0,9071	0,9032	0,8993	0,8954	0,8917
63	0,9692	0,9641	0,9592	0,9543	0,9495	0,9448	0,9402	0,9356	0,9312	0,9268	0,9225	0,9183	0,9142	0,9101	0,906	0,9021	0,8982	0,8944	0,8906
63,1	0,9681	0,9631	0,9581	0,9532	0,9484	0,9437	0,9391	0,9346	0,9301	0,9257	0,9214	0,9172	0,9131	0,909	0,905	0,901	0,8971	0,8933	0,8895
63,2	0,967	0,962	0,957	0,9521	0,9473	0,9426	0,938	0,9335	0,929	0,9247	0,9204	0,9161	0,912	0,9079	0,9039	0,8999	0,896	0,8922	0,8884
63,3	0,9659	0,9609	0,9559	0,951	0,9462	0,9415	0,9369	0,9324	0,9279	0,9236	0,9193	0,9151	0,9109	0,9068	0,9028	0,8989	0,895	0,8911	0,8874
63,4	0,9648	0,9598	0,9548	0,9499	0,9451	0,9404	0,9358	0,9313	0,9268	0,9225	0,9182	0,914	0,9098	0,9057	0,9017	0,8978	0,8939	0,8901	0,8863
63,5	0,9637	0,9587	0,9537	0,9488	0,944	0,9393	0,9347	0,9302	0,9258	0,9214	0,9171	0,9129	0,9087	0,9047	0,9006	0,8967	0,8928	0,889	0,8852
63,6	0,9627	0,9576	0,9526	0,9477	0,9429	0,9382	0,9336	0,9291	0,9247	0,9203	0,916	0,9118	0,9077	0,9036	0,8996	0,8956	0,8917	0,8879	0,8841
63,7	0,9616	0,9565	0,9515	0,9466	0,9418	0,9372	0,9325	0,928	0,9236	0,9192	0,9149	0,9107	0,9066	0,9025	0,8985	0,8945	0,8906	0,8868	0,883
63,8	0,9605	0,9554	0,9504	0,9455	0,9408	0,9361	0,9315	0,9269	0,9225	0,9181	0,9138	0,9096	0,9055	0,9014	0,8974	0,8935	0,8896	0,8857	0,882
63,9	0,9594	0,9543	0,9493	0,9444	0,9397	0,935	0,9304	0,9258	0,9214	0,917	0,9128	0,9086	0,9044	0,9003	0,8963	0,8924	0,8885	0,8847	0,8809

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
60,5	0,9138	0,9101	0,9065	0,9029	0,8993	0,8959	0,8924	0,889	0,8857	0,8824	0,8791	0,8759	0,8727	0,8696	0,8665	0,8634	0,8604	0,8574	0,8544
60,6	0,9127	0,909	0,9054	0,9018	0,8983	0,8948	0,8913	0,8879	0,8846	0,8813	0,878	0,8748	0,8716	0,8685	0,8654	0,8624	0,8593	0,8563	0,8534
60,7	0,9116	0,9079	0,9043	0,9007	0,8972	0,8937	0,8903	0,8869	0,8835	0,8802	0,877	0,8738	0,8706	0,8674	0,8643	0,8613	0,8583	0,8553	0,8523
60,8	0,9105	0,9069	0,9032	0,8996	0,8961	0,8926	0,8892	0,8858	0,8825	0,8792	0,8759	0,8727	0,8695	0,8664	0,8633	0,8602	0,8572	0,8542	0,8513
60,9	0,9095	0,9058	0,9022	0,8986	0,895	0,8916	0,8881	0,8847	0,8814	0,8781	0,8748	0,8716	0,8684	0,8653	0,8622	0,8592	0,8561	0,8531	0,8502
61	0,9084	0,9047	0,9011	0,8975	0,894	0,8905	0,8871	0,8837	0,8803	0,877	0,8738	0,8706	0,8674	0,8642	0,8612	0,8581	0,8551	0,8521	0,8491
61,1	0,9073	0,9036	0,9	0,8964	0,8929	0,8894	0,886	0,8826	0,8793	0,876	0,8727	0,8695	0,8663	0,8632	0,8601	0,857	0,854	0,851	0,8481
61,2	0,9062	0,9026	0,8989	0,8953	0,8918	0,8883	0,8849	0,8815	0,8782	0,8749	0,8716	0,8684	0,8653	0,8621	0,859	0,856	0,8529	0,85	0,847
61,3	0,9052	0,9015	0,8979	0,8943	0,8907	0,8873	0,8838	0,8805	0,8771	0,8738	0,8706	0,8674	0,8642	0,8611	0,858	0,8549	0,8519	0,8489	0,846
61,4	0,9041	0,9004	0,8968	0,8932	0,8897	0,8862	0,8828	0,8794	0,876	0,8728	0,8695	0,8663	0,8631	0,86	0,8569	0,8538	0,8508	0,8478	0,8449
61,5	0,903	0,8993	0,8957	0,8921	0,8886	0,8851	0,8817	0,8783	0,875	0,8717	0,8684	0,8652	0,8621	0,8589	0,8558	0,8528	0,8498	0,8468	0,8438
61,6	0,9019	0,8983	0,8946	0,8911	0,8875	0,8841	0,8806	0,8772	0,8739	0,8706	0,8674	0,8642	0,861	0,8579	0,8548	0,8517	0,8487	0,8457	0,8428
61,7	0,9009	0,8972	0,8935	0,89	0,8865	0,883	0,8796	0,8762	0,8728	0,8695	0,8663	0,8631	0,8599	0,8568	0,8537	0,8506	0,8476	0,8447	0,8417
61,8	0,8998	0,8961	0,8925	0,8889	0,8854	0,8819	0,8785	0,8751	0,8718	0,8685	0,8652	0,862	0,8589	0,8557	0,8526	0,8496	0,8466	0,8436	0,8406
61,9	0,8987	0,895	0,8914	0,8878	0,8843	0,8808	0,8774	0,874	0,8707	0,8674	0,8642	0,861	0,8578	0,8547	0,8516	0,8485	0,8455	0,8425	0,8396
62	0,8976	0,8939	0,8903	0,8868	0,8832	0,8798	0,8763	0,873	0,8696	0,8663	0,8631	0,8599	0,8567	0,8536	0,8505	0,8475	0,8444	0,8415	0,8385
62,1	0,8965	0,8929	0,8893	0,8857	0,8822	0,8787	0,8753	0,8719	0,8686	0,8653	0,862	0,8588	0,8557	0,8525	0,8494	0,8464	0,8434	0,8404	0,8375
62,2	0,8955	0,8918	0,8882	0,8846	0,8811	0,8776	0,8742	0,8708	0,8675	0,8642	0,861	0,8578	0,8546	0,8515	0,8484	0,8453	0,8423	0,8393	0,8364
62,3	0,8944	0,8907	0,8871	0,8835	0,88	0,8766	0,8731	0,8698	0,8664	0,8631	0,8599	0,8567	0,8535	0,8504	0,8473	0,8443	0,8413	0,8383	0,8353
62,4	0,8933	0,8897	0,886	0,8825	0,8789	0,8755	0,8721	0,8687	0,8654	0,8621	0,8588	0,8556	0,8525	0,8493	0,8463	0,8432	0,8402	0,8372	0,8343
62,5	0,8922	0,8886	0,885	0,8814	0,8779	0,8744	0,871	0,8676	0,8643	0,861	0,8578	0,8546	0,8514	0,8483	0,8452	0,8421	0,8391	0,8362	0,8332
62,6	0,8912	0,8875	0,8839	0,8803	0,8768	0,8733	0,8699	0,8665	0,8632	0,8599	0,8567	0,8535	0,8503	0,8472	0,8441	0,8411	0,8381	0,8351	0,8322
62,7	0,8901	0,8864	0,8828	0,8792	0,8757	0,8723	0,8688	0,8655	0,8621	0,8589	0,8556	0,8524	0,8493	0,8461	0,8431	0,84	0,837	0,834	0,8311
62,8	0,889	0,8854	0,8817	0,8782	0,8747	0,8712	0,8678	0,8644	0,8611	0,8578	0,8546	0,8514	0,8482	0,8451	0,842	0,839	0,836	0,833	0,83
62,9	0,8879	0,8843	0,8807	0,8771	0,8736	0,8701	0,8667	0,8633	0,86	0,8567	0,8535	0,8503	0,8471	0,844	0,8409	0,8379	0,8349	0,8319	0,829
63	0,8869	0,8832	0,8796	0,876	0,8725	0,8691	0,8656	0,8623	0,8589	0,8557	0,8524	0,8492	0,8461	0,843	0,8399	0,8368	0,8338	0,8309	0,8279
63,1	0,8858	0,8821	0,8785	0,875	0,8714	0,868	0,8646	0,8612	0,8579	0,8546	0,8514	0,8482	0,845	0,8419	0,8388	0,8358	0,8328	0,8298	0,8269
63,2	0,8847	0,8811	0,8774	0,8739	0,8704	0,8669	0,8635	0,8601	0,8568	0,8535	0,8503	0,8471	0,8439	0,8408	0,8377	0,8347	0,8317	0,8287	0,8258
63,3	0,8836	0,88	0,8764	0,8728	0,8693	0,8658	0,8624	0,8591	0,8557	0,8525	0,8492	0,846	0,8429	0,8398	0,8367	0,8336	0,8306	0,8277	0,8247
63,4	0,8826	0,8789	0,8753	0,8717	0,8682	0,8648	0,8614	0,858	0,8547	0,8514	0,8482	0,845	0,8418	0,8387	0,8356	0,8326	0,8296	0,8266	0,8237
63,5	0,8815	0,8778	0,8742	0,8707	0,8672	0,8637	0,8603	0,8569	0,8536	0,8503	0,8471	0,8439	0,8407	0,8376	0,8346	0,8315	0,8285	0,8256	0,8226
63,6	0,8804	0,8768	0,8731	0,8696	0,8661	0,8626	0,8592	0,8559	0,8525	0,8493	0,846	0,8428	0,8397	0,8366	0,8335	0,8305	0,8275	0,8245	0,8216
63,7	0,8793	0,8757	0,8721	0,8685	0,865	0,8616	0,8581	0,8548	0,8515	0,8482	0,845	0,8418	0,8386	0,8355	0,8324	0,8294	0,8264	0,8234	0,8205
63,8	0,8783	0,8746	0,871	0,8674	0,8639	0,8605	0,8571	0,8537	0,8504	0,8471	0,8439	0,8407	0,8376	0,8344	0,8314	0,8283	0,8253	0,8224	0,8194
63,9	0,8772	0,8735	0,8699	0,8664	0,8629	0,8594	0,856	0,8526	0,8493	0,8461	0,8428	0,8396	0,8365	0,8334	0,8303	0,8273	0,8243	0,8213	0,8184

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
60,5	0,8515	0,8486	0,8458	0,843	0,8402	0,8374	0,8347	0,832	0,8293	0,8267	0,824	0,8214	0,8189	0,8163	0,8138	0,8113	0,8089	0,8064	0,804
60,6	0,8505	0,8476	0,8447	0,8419	0,8391	0,8364	0,8336	0,8309	0,8282	0,8256	0,823	0,8204	0,8178	0,8153	0,8128	0,8103	0,8078	0,8054	0,803
60,7	0,8494	0,8465	0,8437	0,8408	0,8381	0,8353	0,8326	0,8299	0,8272	0,8245	0,8219	0,8193	0,8168	0,8142	0,8117	0,8092	0,8068	0,8043	0,8019
60,8	0,8483	0,8455	0,8426	0,8398	0,837	0,8342	0,8315	0,8288	0,8261	0,8235	0,8209	0,8183	0,8157	0,8132	0,8107	0,8082	0,8057	0,8033	0,8009
60,9	0,8473	0,8444	0,8415	0,8387	0,8359	0,8332	0,8305	0,8278	0,8251	0,8224	0,8198	0,8172	0,8147	0,8121	0,8096	0,8071	0,8047	0,8022	0,7998
61	0,8462	0,8433	0,8405	0,8377	0,8349	0,8321	0,8294	0,8267	0,824	0,8214	0,8188	0,8162	0,8136	0,8111	0,8086	0,8061	0,8036	0,8012	0,7988
61,1	0,8452	0,8423	0,8394	0,8366	0,8338	0,8311	0,8283	0,8256	0,823	0,8203	0,8177	0,8151	0,8126	0,81	0,8075	0,805	0,8026	0,8001	0,7977
61,2	0,8441	0,8412	0,8384	0,8356	0,8328	0,83	0,8273	0,8246	0,8219	0,8193	0,8167	0,8141	0,8115	0,809	0,8065	0,804	0,8015	0,7991	0,7967
61,3	0,843	0,8402	0,8373	0,8345	0,8317	0,829	0,8262	0,8235	0,8209	0,8182	0,8156	0,813	0,8105	0,8079	0,8054	0,8029	0,8005	0,798	0,7956
61,4	0,842	0,8391	0,8363	0,8334	0,8307	0,8279	0,8252	0,8225	0,8198	0,8172	0,8146	0,812	0,8094	0,8069	0,8044	0,8019	0,7994	0,797	0,7946
61,5	0,8409	0,838	0,8352	0,8324	0,8296	0,8268	0,8241	0,8214	0,8188	0,8161	0,8135	0,8109	0,8084	0,8058	0,8033	0,8008	0,7984	0,7959	0,7935
61,6	0,8399	0,837	0,8341	0,8313	0,8285	0,8258	0,8231	0,8204	0,8177	0,8151	0,8125	0,8099	0,8073	0,8048	0,8023	0,7998	0,7973	0,7949	0,7925
61,7	0,8388	0,8359	0,8331	0,8303	0,8275	0,8247	0,822	0,8193	0,8166	0,814	0,8114	0,8088	0,8063	0,8037	0,8012	0,7987	0,7963	0,7939	0,7914
61,8	0,8377	0,8349	0,832	0,8292	0,8264	0,8237	0,8209	0,8183	0,8156	0,813	0,8103	0,8078	0,8052	0,8027	0,8002	0,7977	0,7952	0,7928	0,7904
61,9	0,8367	0,8338	0,831	0,8281	0,8254	0,8226	0,8199	0,8172	0,8145	0,8119	0,8093	0,8067	0,8042	0,8016	0,7991	0,7966	0,7942	0,7918	0,7893
62	0,8356	0,8327	0,8299	0,8271	0,8243	0,8216	0,8188	0,8161	0,8135	0,8108	0,8082	0,8057	0,8031	0,8006	0,7981	0,7956	0,7931	0,7907	0,7883
62,1	0,8346	0,8317	0,8288	0,826	0,8233	0,8205	0,8178	0,8151	0,8124	0,8098	0,8072	0,8046	0,8021	0,7995	0,797	0,7945	0,7921	0,7897	0,7873
62,2	0,8335	0,8306	0,8278	0,825	0,8222	0,8194	0,8167	0,814	0,8114	0,8087	0,8061	0,8036	0,801	0,7985	0,796	0,7935	0,791	0,7886	0,7862
62,3	0,8324	0,8296	0,8267	0,8239	0,8211	0,8184	0,8157	0,813	0,8103	0,8077	0,8051	0,8025	0,8	0,7974	0,7949	0,7924	0,79	0,7876	0,7852
62,4	0,8314	0,8285	0,8257	0,8229	0,8201	0,8173	0,8146	0,8119	0,8093	0,8066	0,804	0,8015	0,7989	0,7964	0,7939	0,7914	0,7889	0,7865	0,7841
62,5	0,8303	0,8274	0,8246	0,8218	0,819	0,8163	0,8136	0,8109	0,8082	0,8056	0,803	0,8004	0,7978	0,7953	0,7928	0,7903	0,7879	0,7855	0,7831
62,6	0,8293	0,8264	0,8236	0,8207	0,818	0,8152	0,8125	0,8098	0,8072	0,8045	0,8019	0,7993	0,7968	0,7943	0,7918	0,7893	0,7868	0,7844	0,782
62,7	0,8282	0,8253	0,8225	0,8197	0,8169	0,8142	0,8114	0,8088	0,8061	0,8035	0,8009	0,7983	0,7957	0,7932	0,7907	0,7882	0,7858	0,7834	0,781
62,8	0,8271	0,8243	0,8214	0,8186	0,8159	0,8131	0,8104	0,8077	0,8051	0,8024	0,7998	0,7972	0,7947	0,7922	0,7897	0,7872	0,7847	0,7823	0,7799
62,9	0,8261	0,8232	0,8204	0,8176	0,8148	0,8121	0,8093	0,8067	0,804	0,8014	0,7988	0,7962	0,7936	0,7911	0,7886	0,7861	0,7837	0,7813	0,7789
63	0,825	0,8222	0,8193	0,8165	0,8137	0,811	0,8083	0,8056	0,8029	0,8003	0,7977	0,7951	0,7926	0,7901	0,7876	0,7851	0,7827	0,7802	0,7778
63,1	0,824	0,8211	0,8183	0,8155	0,8127	0,8099	0,8072	0,8045	0,8019	0,7993	0,7967	0,7941	0,7915	0,789	0,7865	0,784	0,7816	0,7792	0,7768
63,2	0,8229	0,82	0,8172	0,8144	0,8116	0,8089	0,8062	0,8035	0,8008	0,7982	0,7956	0,793	0,7905	0,788	0,7855	0,783	0,7806	0,7781	0,7757
63,3	0,8218	0,819	0,8161	0,8133	0,8106	0,8078	0,8051	0,8024	0,7998	0,7972	0,7946	0,792	0,7894	0,7869	0,7844	0,782	0,7795	0,7771	0,7747
63,4	0,8208	0,8179	0,8151	0,8123	0,8095	0,8068	0,8041	0,8014	0,7987	0,7961	0,7935	0,7909	0,7884	0,7859	0,7834	0,7809	0,7785	0,776	0,7736
63,5	0,8197	0,8169	0,814	0,8112	0,8085	0,8057	0,803	0,8003	0,7977	0,795	0,7925	0,7899	0,7873	0,7848	0,7823	0,7799	0,7774	0,775	0,7726
63,6	0,8187	0,8158	0,813	0,8102	0,8074	0,8047	0,802	0,7993	0,7966	0,794	0,7914	0,7888	0,7863	0,7838	0,7813	0,7788	0,7764	0,7739	0,7715
63,7	0,8176	0,8147	0,8119	0,8091	0,8063	0,8036	0,8009	0,7982	0,7956	0,7929	0,7903	0,7878	0,7852	0,7827	0,7802	0,7778	0,7753	0,7729	0,7705
63,8	0,8165	0,8137	0,8109	0,8081	0,8053	0,8025	0,7998	0,7972	0,7945	0,7919	0,7893	0,7867	0,7842	0,7817	0,7792	0,7767	0,7743	0,7718	0,7694
63,9	0,8155	0,8126	0,8098	0,807	0,8042	0,8015	0,7988	0,7961	0,7935	0,7908	0,7882	0,7857	0,7831	0,7806	0,7781	0,7756	0,7732	0,7708	0,7684

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
60,5	0,8016	0,7992	0,7969	0,7946	0,7923	0,79	0,7877	0,7855	0,7832	0,781	0,7788	0,7767	0,7745	0,7724	0,7703	0,7682	0,7661	0,764	0,762
60,6	0,8006	0,7982	0,7959	0,7935	0,7912	0,7889	0,7867	0,7844	0,7822	0,78	0,7778	0,7756	0,7735	0,7713	0,7692	0,7671	0,765	0,763	0,7609
60,7	0,7995	0,7972	0,7948	0,7925	0,7902	0,7879	0,7856	0,7834	0,7811	0,7789	0,7768	0,7746	0,7724	0,7703	0,7682	0,7661	0,764	0,7619	0,7599
60,8	0,7985	0,7961	0,7938	0,7914	0,7891	0,7868	0,7846	0,7823	0,7801	0,7779	0,7757	0,7735	0,7714	0,7693	0,7671	0,765	0,763	0,7609	0,7589
60,9	0,7974	0,7951	0,7927	0,7904	0,7881	0,7858	0,7835	0,7813	0,7791	0,7769	0,7747	0,7725	0,7704	0,7682	0,7661	0,764	0,7619	0,7599	0,7578
61	0,7964	0,794	0,7917	0,7893	0,787	0,7848	0,7825	0,7802	0,778	0,7758	0,7736	0,7715	0,7693	0,7672	0,7651	0,763	0,7609	0,7588	0,7568
61,1	0,7953	0,793	0,7906	0,7883	0,786	0,7837	0,7814	0,7792	0,777	0,7748	0,7726	0,7704	0,7683	0,7661	0,764	0,7619	0,7599	0,7578	0,7557
61,2	0,7943	0,7919	0,7896	0,7872	0,7849	0,7827	0,7804	0,7782	0,7759	0,7737	0,7715	0,7694	0,7672	0,7651	0,763	0,7609	0,7588	0,7568	0,7547
61,3	0,7932	0,7909	0,7885	0,7862	0,7839	0,7816	0,7794	0,7771	0,7749	0,7727	0,7705	0,7683	0,7662	0,7641	0,762	0,7599	0,7578	0,7557	0,7537
61,4	0,7922	0,7898	0,7875	0,7852	0,7829	0,7806	0,7783	0,7761	0,7738	0,7716	0,7695	0,7673	0,7651	0,763	0,7609	0,7588	0,7567	0,7547	0,7526
61,5	0,7911	0,7888	0,7864	0,7841	0,7818	0,7795	0,7773	0,775	0,7728	0,7706	0,7684	0,7663	0,7641	0,762	0,7599	0,7578	0,7557	0,7536	0,7516
61,6	0,7901	0,7877	0,7854	0,7831	0,7808	0,7785	0,7762	0,774	0,7718	0,7696	0,7674	0,7652	0,7631	0,7609	0,7588	0,7567	0,7547	0,7526	0,7506
61,7	0,7891	0,7867	0,7843	0,782	0,7797	0,7774	0,7752	0,7729	0,7707	0,7685	0,7663	0,7642	0,762	0,7599	0,7578	0,7557	0,7536	0,7516	0,7495
61,8	0,788	0,7856	0,7833	0,781	0,7787	0,7764	0,7741	0,7719	0,7697	0,7675	0,7653	0,7631	0,761	0,7589	0,7568	0,7547	0,7526	0,7505	0,7485
61,9	0,787	0,7846	0,7823	0,7799	0,7776	0,7754	0,7731	0,7709	0,7686	0,7664	0,7643	0,7621	0,76	0,7578	0,7557	0,7536	0,7516	0,7495	0,7475
62	0,7859	0,7835	0,7812	0,7789	0,7766	0,7743	0,7721	0,7698	0,7676	0,7654	0,7632	0,7611	0,7589	0,7568	0,7547	0,7526	0,7505	0,7485	0,7464
62,1	0,7849	0,7825	0,7802	0,7778	0,7755	0,7733	0,771	0,7688	0,7666	0,7644	0,7622	0,76	0,7579	0,7557	0,7536	0,7515	0,7495	0,7474	0,7454
62,2	0,7838	0,7815	0,7791	0,7768	0,7745	0,7722	0,77	0,7677	0,7655	0,7633	0,7611	0,759	0,7568	0,7547	0,7526	0,7505	0,7484	0,7464	0,7443
62,3	0,7828	0,7804	0,7781	0,7758	0,7735	0,7712	0,7689	0,7667	0,7645	0,7623	0,7601	0,7579	0,7558	0,7537	0,7516	0,7495	0,7474	0,7453	0,7433
62,4	0,7817	0,7794	0,777	0,7747	0,7724	0,7701	0,7679	0,7656	0,7634	0,7612	0,7591	0,7569	0,7547	0,7526	0,7505	0,7484	0,7464	0,7443	0,7423
62,5	0,7807	0,7783	0,776	0,7737	0,7714	0,7691	0,7668	0,7646	0,7624	0,7602	0,758	0,7559	0,7537	0,7516	0,7495	0,7474	0,7453	0,7433	0,7412
62,6	0,7796	0,7773	0,7749	0,7726	0,7703	0,768	0,7658	0,7636	0,7613	0,7591	0,757	0,7548	0,7527	0,7505	0,7484	0,7464	0,7443	0,7422	0,7402
62,7	0,7786	0,7762	0,7739	0,7716	0,7693	0,767	0,7647	0,7625	0,7603	0,7581	0,7559	0,7538	0,7516	0,7495	0,7474	0,7453	0,7432	0,7412	0,7392
62,8	0,7775	0,7752	0,7728	0,7705	0,7682	0,766	0,7637	0,7615	0,7593	0,7571	0,7549	0,7527	0,7506	0,7485	0,7464	0,7443	0,7422	0,7402	0,7381
62,9	0,7765	0,7741	0,7718	0,7695	0,7672	0,7649	0,7627	0,7604	0,7582	0,756	0,7538	0,7517	0,7496	0,7474	0,7453	0,7432	0,7412	0,7391	0,7371
63	0,7754	0,7731	0,7708	0,7684	0,7661	0,7639	0,7616	0,7594	0,7572	0,755	0,7528	0,7506	0,7485	0,7464	0,7443	0,7422	0,7401	0,7381	0,7361
63,1	0,7744	0,772	0,7697	0,7674	0,7651	0,7628	0,7606	0,7583	0,7561	0,7539	0,7518	0,7496	0,7475	0,7454	0,7432	0,7412	0,7391	0,737	0,735
63,2	0,7733	0,771	0,7687	0,7663	0,7641	0,7618	0,7595	0,7573	0,7551	0,7529	0,7507	0,7486	0,7464	0,7443	0,7422	0,7401	0,7381	0,736	0,734
63,3	0,7723	0,7699	0,7676	0,7653	0,763	0,7607	0,7585	0,7563	0,754	0,7519	0,7497	0,7475	0,7454	0,7433	0,7412	0,7391	0,737	0,735	0,7329
63,4	0,7713	0,7689	0,7666	0,7643	0,762	0,7597	0,7574	0,7552	0,753	0,7508	0,7486	0,7465	0,7443	0,7422	0,7401	0,738	0,736	0,7339	0,7319
63,5	0,7702	0,7679	0,7655	0,7632	0,7609	0,7586	0,7564	0,7542	0,752	0,7498	0,7476	0,7454	0,7433	0,7412	0,7391	0,737	0,7349	0,7329	0,7309
63,6	0,7692	0,7668	0,7645	0,7622	0,7599	0,7576	0,7554	0,7531	0,7509	0,7487	0,7466	0,7444	0,7423	0,7402	0,7381	0,736	0,7339	0,7319	0,7298
63,7	0,7681	0,7658	0,7634	0,7611	0,7588	0,7566	0,7543	0,7521	0,7499	0,7477	0,7455	0,7434	0,7412	0,7391	0,737	0,7349	0,7329	0,7308	0,7288
63,8	0,7671	0,7647	0,7624	0,7601	0,7578	0,7555	0,7533	0,751	0,7488	0,7466	0,7445	0,7423	0,7402	0,7381	0,736	0,7339	0,7318	0,7298	0,7277
63,9	0,766	0,7637	0,7613	0,759	0,7567	0,7545	0,7522	0,75	0,7478	0,7456	0,7434	0,7413	0,7391	0,737	0,7349	0,7329	0,7308	0,7287	0,7267

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
60,5	0,7599	0,7579	0,7559	0,7539	0,752	0,75	0,7481	0,7462	0,7442	0,7424	0,7405	0,7386	0,7367	0,7349	0,7331	0,7313	0,7295	0,7277	0,7259
60,6	0,7589	0,7569	0,7549	0,7529	0,7509	0,749	0,747	0,7451	0,7432	0,7413	0,7394	0,7376	0,7357	0,7339	0,7321	0,7302	0,7284	0,7266	0,7249
60,7	0,7579	0,7559	0,7539	0,7519	0,7499	0,748	0,746	0,7441	0,7422	0,7403	0,7384	0,7365	0,7347	0,7328	0,731	0,7292	0,7274	0,7256	0,7238
60,8	0,7568	0,7548	0,7528	0,7508	0,7489	0,7469	0,745	0,7431	0,7412	0,7393	0,7374	0,7355	0,7337	0,7318	0,73	0,7282	0,7264	0,7246	0,7228
60,9	0,7558	0,7538	0,7518	0,7498	0,7478	0,7459	0,7439	0,742	0,7401	0,7382	0,7363	0,7345	0,7326	0,7308	0,729	0,7272	0,7254	0,7236	0,7218
61	0,7548	0,7527	0,7507	0,7488	0,7468	0,7449	0,7429	0,741	0,7391	0,7372	0,7353	0,7334	0,7316	0,7298	0,7279	0,7261	0,7243	0,7225	0,7208
61,1	0,7537	0,7517	0,7497	0,7477	0,7458	0,7438	0,7419	0,74	0,7381	0,7362	0,7343	0,7324	0,7306	0,7287	0,7269	0,7251	0,7233	0,7215	0,7197
61,2	0,7527	0,7507	0,7487	0,7467	0,7447	0,7428	0,7408	0,7389	0,737	0,7351	0,7333	0,7314	0,7295	0,7277	0,7259	0,7241	0,7223	0,7205	0,7187
61,3	0,7516	0,7496	0,7476	0,7457	0,7437	0,7417	0,7398	0,7379	0,736	0,7341	0,7322	0,7304	0,7285	0,7267	0,7248	0,723	0,7212	0,7195	0,7177
61,4	0,7506	0,7486	0,7466	0,7446	0,7427	0,7407	0,7388	0,7369	0,735	0,7331	0,7312	0,7293	0,7275	0,7256	0,7238	0,722	0,7202	0,7184	0,7167
61,5	0,7496	0,7476	0,7456	0,7436	0,7416	0,7397	0,7377	0,7358	0,7339	0,732	0,7302	0,7283	0,7264	0,7246	0,7228	0,721	0,7192	0,7174	0,7156
61,6	0,7485	0,7465	0,7445	0,7426	0,7406	0,7386	0,7367	0,7348	0,7329	0,731	0,7291	0,7273	0,7254	0,7236	0,7218	0,7199	0,7182	0,7164	0,7146
61,7	0,7475	0,7455	0,7435	0,7415	0,7396	0,7376	0,7357	0,7338	0,7319	0,73	0,7281	0,7262	0,7244	0,7226	0,7207	0,7189	0,7171	0,7153	0,7136
61,8	0,7465	0,7445	0,7425	0,7405	0,7385	0,7366	0,7346	0,7327	0,7308	0,7289	0,7271	0,7252	0,7234	0,7215	0,7197	0,7179	0,7161	0,7143	0,7125
61,9	0,7454	0,7434	0,7414	0,7395	0,7375	0,7355	0,7336	0,7317	0,7298	0,7279	0,726	0,7242	0,7223	0,7205	0,7187	0,7169	0,7151	0,7133	0,7115
62	0,7444	0,7424	0,7404	0,7384	0,7365	0,7345	0,7326	0,7307	0,7288	0,7269	0,725	0,7231	0,7213	0,7195	0,7176	0,7158	0,714	0,7123	0,7105
62,1	0,7434	0,7414	0,7394	0,7374	0,7354	0,7335	0,7315	0,7296	0,7277	0,7258	0,724	0,7221	0,7203	0,7184	0,7166	0,7148	0,713	0,7112	0,7095
62,2	0,7423	0,7403	0,7383	0,7363	0,7344	0,7324	0,7305	0,7286	0,7267	0,7248	0,7229	0,7211	0,7192	0,7174	0,7156	0,7138	0,712	0,7102	0,7084
62,3	0,7413	0,7393	0,7373	0,7353	0,7334	0,7314	0,7295	0,7276	0,7257	0,7238	0,7219	0,72	0,7182	0,7164	0,7146	0,7127	0,711	0,7092	0,7074
62,4	0,7402	0,7382	0,7363	0,7343	0,7323	0,7304	0,7285	0,7265	0,7246	0,7227	0,7209	0,719	0,7172	0,7153	0,7135	0,7117	0,7099	0,7081	0,7064
62,5	0,7392	0,7372	0,7352	0,7332	0,7313	0,7293	0,7274	0,7255	0,7236	0,7217	0,7198	0,718	0,7161	0,7143	0,7125	0,7107	0,7089	0,7071	0,7053
62,6	0,7382	0,7362	0,7342	0,7322	0,7303	0,7283	0,7264	0,7245	0,7226	0,7207	0,7188	0,717	0,7151	0,7133	0,7115	0,7097	0,7079	0,7061	0,7043
62,7	0,7371	0,7351	0,7331	0,7312	0,7292	0,7273	0,7253	0,7234	0,7215	0,7197	0,7178	0,7159	0,7141	0,7123	0,7104	0,7086	0,7068	0,7051	0,7033
62,8	0,7361	0,7341	0,7321	0,7301	0,7282	0,7262	0,7243	0,7224	0,7205	0,7186	0,7167	0,7149	0,7131	0,7112	0,7094	0,7076	0,7058	0,704	0,7023
62,9	0,7351	0,7331	0,7311	0,7291	0,7272	0,7252	0,7233	0,7214	0,7195	0,7176	0,7157	0,7139	0,712	0,7102	0,7084	0,7066	0,7048	0,703	0,7012
63	0,734	0,732	0,73	0,7281	0,7261	0,7242	0,7222	0,7203	0,7184	0,7166	0,7147	0,7128	0,711	0,7092	0,7073	0,7055	0,7038	0,702	0,7002
63,1	0,733	0,731	0,729	0,727	0,7251	0,7231	0,7212	0,7193	0,7174	0,7155	0,7137	0,7118	0,71	0,7081	0,7063	0,7045	0,7027	0,7009	0,6992
63,2	0,732	0,73	0,728	0,726	0,724	0,7221	0,7202	0,7183	0,7164	0,7145	0,7126	0,7108	0,7089	0,7071	0,7053	0,7035	0,7017	0,6999	0,6982
63,3	0,7309	0,7289	0,7269	0,725	0,723	0,7211	0,7191	0,7172	0,7153	0,7135	0,7116	0,7097	0,7079	0,7061	0,7043	0,7025	0,7007	0,6989	0,6971
63,4	0,7299	0,7279	0,7259	0,7239	0,722	0,72	0,7181	0,7162	0,7143	0,7124	0,7106	0,7087	0,7069	0,705	0,7032	0,7014	0,6996	0,6979	0,6961
63,5	0,7288	0,7268	0,7249	0,7229	0,7209	0,719	0,7171	0,7152	0,7133	0,7114	0,7095	0,7077	0,7058	0,704	0,7022	0,7004	0,6986	0,6968	0,6951
63,6	0,7278	0,7258	0,7238	0,7219	0,7199	0,718	0,716	0,7141	0,7122	0,7104	0,7085	0,7066	0,7048	0,703	0,7012	0,6994	0,6976	0,6958	0,694
63,7	0,7268	0,7248	0,7228	0,7208	0,7189	0,7169	0,715	0,7131	0,7112	0,7093	0,7075	0,7056	0,7038	0,7019	0,7001	0,6983	0,6965	0,6948	0,693
63,8	0,7257	0,7237	0,7218	0,7198	0,7178	0,7159	0,714	0,7121	0,7102	0,7083	0,7064	0,7046	0,7027	0,7009	0,6991	0,6973	0,6955	0,6937	0,692
63,9	0,7247	0,7227	0,7207	0,7188	0,7168	0,7149	0,7129	0,711	0,7091	0,7073	0,7054	0,7035	0,7017	0,6999	0,6981	0,6963	0,6945	0,6927	0,6909

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
60,5	0,7241	0,7224	0,7206	0,7189	0,7172	0,7155	0,7138	0,7121
60,6	0,7231	0,7214	0,7196	0,7179	0,7162	0,7145	0,7128	0,7111
60,7	0,7221	0,7203	0,7186	0,7169	0,7151	0,7134	0,7117	0,7101
60,8	0,7211	0,7193	0,7176	0,7158	0,7141	0,7124	0,7107	0,709
60,9	0,72	0,7183	0,7165	0,7148	0,7131	0,7114	0,7097	0,708
61	0,719	0,7172	0,7155	0,7138	0,7121	0,7104	0,7087	0,707
61,1	0,718	0,7162	0,7145	0,7128	0,711	0,7093	0,7077	0,706
61,2	0,7169	0,7152	0,7135	0,7117	0,71	0,7083	0,7066	0,7049
61,3	0,7159	0,7142	0,7124	0,7107	0,709	0,7073	0,7056	0,7039
61,4	0,7149	0,7131	0,7114	0,7097	0,708	0,7063	0,7046	0,7029
61,5	0,7139	0,7121	0,7104	0,7087	0,7069	0,7052	0,7036	0,7019
61,6	0,7128	0,7111	0,7094	0,7076	0,7059	0,7042	0,7025	0,7009
61,7	0,7118	0,7101	0,7083	0,7066	0,7049	0,7032	0,7015	0,6998
61,8	0,7108	0,709	0,7073	0,7056	0,7039	0,7022	0,7005	0,6988
61,9	0,7098	0,708	0,7063	0,7046	0,7028	0,7011	0,6995	0,6978
62	0,7087	0,707	0,7052	0,7035	0,7018	0,7001	0,6984	0,6968
62,1	0,7077	0,706	0,7042	0,7025	0,7008	0,6991	0,6974	0,6957
62,2	0,7067	0,7049	0,7032	0,7015	0,6998	0,6981	0,6964	0,6947
62,3	0,7056	0,7039	0,7022	0,7004	0,6987	0,697	0,6954	0,6937
62,4	0,7046	0,7029	0,7011	0,6994	0,6977	0,696	0,6943	0,6927
62,5	0,7036	0,7018	0,7001	0,6984	0,6967	0,695	0,6933	0,6916
62,6	0,7026	0,7008	0,6991	0,6974	0,6957	0,694	0,6923	0,6906
62,7	0,7015	0,6998	0,6981	0,6963	0,6946	0,6929	0,6913	0,6896
62,8	0,7005	0,6988	0,697	0,6953	0,6936	0,6919	0,6902	0,6886
62,9	0,6995	0,6977	0,696	0,6943	0,6926	0,6909	0,6892	0,6875
63	0,6985	0,6967	0,695	0,6933	0,6916	0,6899	0,6882	0,6865
63,1	0,6974	0,6957	0,694	0,6922	0,6905	0,6888	0,6872	0,6855
63,2	0,6964	0,6947	0,6929	0,6912	0,6895	0,6878	0,6861	0,6845
63,3	0,6954	0,6936	0,6919	0,6902	0,6885	0,6868	0,6851	0,6834
63,4	0,6943	0,6926	0,6909	0,6892	0,6875	0,6858	0,6841	0,6824
63,5	0,6933	0,6916	0,6898	0,6881	0,6864	0,6847	0,6831	0,6814
63,6	0,6923	0,6905	0,6888	0,6871	0,6854	0,6837	0,682	0,6804
63,7	0,6913	0,6895	0,6878	0,6861	0,6844	0,6827	0,681	0,6793
63,8	0,6902	0,6885	0,6868	0,685	0,6833	0,6817	0,68	0,6783
63,9	0,6892	0,6875	0,6857	0,684	0,6823	0,6806	0,6789	0,6773

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
64	1,342	1,3188	1,2976	1,2781	1,26	1,2432	1,2274	1,2126	1,1986	1,1854	1,1729	1,161	1,1496	1,1387	1,1283	1,1183	1,1087	1,0995	1,0906
64,1	1,3408	1,3176	1,2964	1,2769	1,2588	1,242	1,2262	1,2114	1,1975	1,1843	1,1717	1,1598	1,1484	1,1376	1,1272	1,1172	1,1076	1,0983	1,0894
64,2	1,3396	1,3164	1,2952	1,2757	1,2576	1,2408	1,2251	1,2103	1,1963	1,1831	1,1706	1,1587	1,1473	1,1364	1,126	1,116	1,1064	1,0972	1,0883
64,3	1,3384	1,3152	1,294	1,2745	1,2565	1,2396	1,2239	1,2091	1,1952	1,182	1,1694	1,1575	1,1461	1,1353	1,1249	1,1149	1,1053	1,0961	1,0872
64,4	1,3372	1,314	1,2929	1,2734	1,2553	1,2385	1,2227	1,2079	1,194	1,1808	1,1683	1,1564	1,145	1,1341	1,1237	1,1138	1,1042	1,0949	1,086
64,5	1,336	1,3128	1,2917	1,2722	1,2541	1,2373	1,2216	1,2068	1,1928	1,1796	1,1671	1,1552	1,1439	1,133	1,1226	1,1126	1,103	1,0938	1,0849
64,6	1,3348	1,3117	1,2905	1,271	1,2529	1,2361	1,2204	1,2056	1,1917	1,1785	1,166	1,1541	1,1427	1,1319	1,1215	1,1115	1,1019	1,0927	1,0838
64,7	1,3336	1,3105	1,2893	1,2698	1,2518	1,235	1,2192	1,2045	1,1905	1,1773	1,1648	1,1529	1,1416	1,1307	1,1203	1,1103	1,1008	1,0915	1,0826
64,8	1,3324	1,3093	1,2881	1,2686	1,2506	1,2338	1,2181	1,2033	1,1894	1,1762	1,1637	1,1518	1,1404	1,1296	1,1192	1,1092	1,0996	1,0904	1,0815
64,9	1,3312	1,3081	1,2869	1,2674	1,2494	1,2326	1,2169	1,2021	1,1882	1,175	1,1625	1,1506	1,1393	1,1284	1,118	1,1081	1,0985	1,0893	1,0804
65	1,33	1,3069	1,2857	1,2663	1,2482	1,2314	1,2157	1,201	1,187	1,1739	1,1614	1,1495	1,1381	1,1273	1,1169	1,1069	1,0973	1,0881	1,0792
65,1	1,3288	1,3057	1,2845	1,2651	1,2471	1,2303	1,2146	1,1998	1,1859	1,1727	1,1602	1,1483	1,137	1,1261	1,1157	1,1058	1,0962	1,087	1,0781
65,2	1,3276	1,3045	1,2834	1,2639	1,2459	1,2291	1,2134	1,1986	1,1847	1,1716	1,1591	1,1472	1,1358	1,125	1,1146	1,1046	1,0951	1,0859	1,077
65,3	1,3264	1,3033	1,2822	1,2627	1,2447	1,2279	1,2122	1,1975	1,1836	1,1704	1,1579	1,146	1,1347	1,1238	1,1135	1,1035	1,0939	1,0847	1,0759
65,4	1,3253	1,3021	1,281	1,2615	1,2435	1,2268	1,2111	1,1963	1,1824	1,1692	1,1568	1,1449	1,1335	1,1227	1,1123	1,1024	1,0928	1,0836	1,0747
65,5	1,3241	1,3009	1,2798	1,2604	1,2424	1,2256	1,2099	1,1952	1,1812	1,1681	1,1556	1,1437	1,1324	1,1216	1,1112	1,1012	1,0917	1,0825	1,0736
65,6	1,3229	1,2997	1,2786	1,2592	1,2412	1,2244	1,2087	1,194	1,1801	1,1669	1,1544	1,1426	1,1312	1,1204	1,11	1,1001	1,0905	1,0813	1,0725
65,7	1,3217	1,2985	1,2774	1,258	1,24	1,2232	1,2076	1,1928	1,1789	1,1658	1,1533	1,1414	1,1301	1,1193	1,1089	1,099	1,0894	1,0802	1,0713
65,8	1,3205	1,2974	1,2762	1,2568	1,2388	1,2221	1,2064	1,1917	1,1778	1,1646	1,1521	1,1403	1,1289	1,1181	1,1078	1,0978	1,0883	1,0791	1,0702
65,9	1,3193	1,2962	1,2751	1,2556	1,2377	1,2209	1,2052	1,1905	1,1766	1,1635	1,151	1,1391	1,1278	1,117	1,1066	1,0967	1,0871	1,0779	1,0691
66	1,3181	1,295	1,2739	1,2545	1,2365	1,2197	1,2041	1,1893	1,1755	1,1623	1,1498	1,138	1,1267	1,1158	1,1055	1,0955	1,086	1,0768	1,0679
66,1	1,3169	1,2938	1,2727	1,2533	1,2353	1,2186	1,2029	1,1882	1,1743	1,1612	1,1487	1,1368	1,1255	1,1147	1,1043	1,0944	1,0849	1,0757	1,0668
66,2	1,3157	1,2926	1,2715	1,2521	1,2341	1,2174	1,2017	1,187	1,1731	1,16	1,1475	1,1357	1,1244	1,1136	1,1032	1,0933	1,0837	1,0745	1,0657
66,3	1,3145	1,2914	1,2703	1,2509	1,233	1,2162	1,2006	1,1859	1,172	1,1588	1,1464	1,1345	1,1232	1,1124	1,1021	1,0921	1,0826	1,0734	1,0645
66,4	1,3133	1,2902	1,2691	1,2497	1,2318	1,2151	1,1994	1,1847	1,1708	1,1577	1,1452	1,1334	1,1221	1,1113	1,1009	1,091	1,0814	1,0723	1,0634
66,5	1,3121	1,289	1,268	1,2486	1,2306	1,2139	1,1982	1,1835	1,1697	1,1565	1,1441	1,1322	1,1209	1,1101	1,0998	1,0898	1,0803	1,0711	1,0623
66,6	1,3109	1,2878	1,2668	1,2474	1,2294	1,2127	1,1971	1,1824	1,1685	1,1554	1,1429	1,1311	1,1198	1,109	1,0986	1,0887	1,0792	1,07	1,0611
66,7	1,3097	1,2866	1,2656	1,2462	1,2283	1,2115	1,1959	1,1812	1,1673	1,1542	1,1418	1,1299	1,1186	1,1078	1,0975	1,0876	1,078	1,0689	1,06
66,8	1,3085	1,2854	1,2644	1,245	1,2271	1,2104	1,1947	1,18	1,1662	1,1531	1,1406	1,1288	1,1175	1,1067	1,0963	1,0864	1,0769	1,0677	1,0589
66,9	1,3073	1,2843	1,2632	1,2438	1,2259	1,2092	1,1936	1,1789	1,165	1,1519	1,1395	1,1276	1,1163	1,1055	1,0952	1,0853	1,0758	1,0666	1,0577
67	1,3061	1,2831	1,262	1,2427	1,2247	1,208	1,1924	1,1777	1,1639	1,1507	1,1383	1,1265	1,1152	1,1044	1,0941	1,0841	1,0746	1,0655	1,0566
67,1	1,3049	1,2819	1,2608	1,2415	1,2236	1,2069	1,1912	1,1765	1,1627	1,1496	1,1372	1,1253	1,114	1,1033	1,0929	1,083	1,0735	1,0643	1,0555
67,2	1,3037	1,2807	1,2597	1,2403	1,2224	1,2057	1,1901	1,1754	1,1615	1,1484	1,136	1,1242	1,1129	1,1021	1,0918	1,0819	1,0723	1,0632	1,0543
67,3	1,3025	1,2795	1,2585	1,2391	1,2212	1,2045	1,1889	1,1742	1,1604	1,1473	1,1348	1,123	1,1117	1,101	1,0906	1,0807	1,0712	1,062	1,0532
67,4	1,3013	1,2783	1,2573	1,2379	1,22	1,2033	1,1877	1,1731	1,1592	1,1461	1,1337	1,1219	1,1106	1,0998	1,0895	1,0796	1,0701	1,0609	1,0521

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
64	1,082	1,0737	1,0656	1,0578	1,0503	1,043	1,0359	1,0289	1,0222	1,0157	1,0093	1,0031	0,997	0,9911	0,9853	0,9797	0,9741	0,9687	0,9634
64,1	1,0808	1,0725	1,0645	1,0567	1,0492	1,0418	1,0347	1,0278	1,0211	1,0146	1,0082	1,002	0,9959	0,99	0,9842	0,9786	0,973	0,9676	0,9623
64,2	1,0797	1,0714	1,0634	1,0556	1,048	1,0407	1,0336	1,0267	1,02	1,0134	1,0071	1,0009	0,9948	0,9889	0,9831	0,9775	0,9719	0,9665	0,9612
64,3	1,0786	1,0703	1,0622	1,0545	1,0469	1,0396	1,0325	1,0256	1,0189	1,0123	1,006	0,9998	0,9937	0,9878	0,982	0,9764	0,9708	0,9654	0,9601
64,4	1,0774	1,0691	1,0611	1,0533	1,0458	1,0385	1,0314	1,0245	1,0178	1,0112	1,0049	0,9986	0,9926	0,9867	0,9809	0,9753	0,9697	0,9643	0,9591
64,5	1,0763	1,068	1,06	1,0522	1,0447	1,0374	1,0303	1,0234	1,0167	1,0101	1,0037	0,9975	0,9915	0,9856	0,9798	0,9741	0,9686	0,9632	0,958
64,6	1,0752	1,0669	1,0589	1,0511	1,0436	1,0363	1,0292	1,0223	1,0155	1,009	1,0026	0,9964	0,9904	0,9845	0,9787	0,973	0,9675	0,9621	0,9569
64,7	1,0741	1,0658	1,0577	1,05	1,0424	1,0351	1,028	1,0211	1,0144	1,0079	1,0015	0,9953	0,9893	0,9834	0,9776	0,9719	0,9664	0,961	0,9558
64,8	1,0729	1,0646	1,0566	1,0489	1,0413	1,034	1,0269	1,02	1,0133	1,0068	1,0004	0,9942	0,9882	0,9822	0,9765	0,9708	0,9653	0,9599	0,9547
64,9	1,0718	1,0635	1,0555	1,0477	1,0402	1,0329	1,0258	1,0189	1,0122	1,0057	0,9993	0,9931	0,987	0,9811	0,9754	0,9697	0,9642	0,9588	0,9536
65	1,0707	1,0624	1,0544	1,0466	1,0391	1,0318	1,0247	1,0178	1,0111	1,0046	0,9982	0,992	0,9859	0,98	0,9743	0,9686	0,9631	0,9577	0,9525
65,1	1,0695	1,0613	1,0532	1,0455	1,038	1,0307	1,0236	1,0167	1,01	1,0034	0,9971	0,9909	0,9848	0,9789	0,9732	0,9675	0,962	0,9566	0,9514
65,2	1,0684	1,0601	1,0521	1,0444	1,0368	1,0295	1,0224	1,0156	1,0089	1,0023	0,996	0,9898	0,9837	0,9778	0,9721	0,9664	0,9609	0,9555	0,9503
65,3	1,0673	1,059	1,051	1,0432	1,0357	1,0284	1,0213	1,0144	1,0077	1,0012	0,9949	0,9887	0,9826	0,9767	0,971	0,9653	0,9598	0,9544	0,9492
65,4	1,0662	1,0579	1,0499	1,0421	1,0346	1,0273	1,0202	1,0133	1,0066	1,0001	0,9938	0,9876	0,9815	0,9756	0,9699	0,9642	0,9587	0,9533	0,9481
65,5	1,065	1,0568	1,0487	1,041	1,0335	1,0262	1,0191	1,0122	1,0055	0,999	0,9926	0,9864	0,9804	0,9745	0,9687	0,9631	0,9576	0,9522	0,947
65,6	1,0639	1,0556	1,0476	1,0399	1,0324	1,0251	1,018	1,0111	1,0044	0,9979	0,9915	0,9853	0,9793	0,9734	0,9676	0,962	0,9565	0,9511	0,9459
65,7	1,0628	1,0545	1,0465	1,0387	1,0312	1,0239	1,0169	1,01	1,0033	0,9968	0,9904	0,9842	0,9782	0,9723	0,9665	0,9609	0,9554	0,95	0,9448
65,8	1,0616	1,0534	1,0454	1,0376	1,0301	1,0228	1,0157	1,0089	1,0022	0,9957	0,9893	0,9831	0,9771	0,9712	0,9654	0,9598	0,9543	0,9489	0,9437
65,9	1,0605	1,0522	1,0442	1,0365	1,029	1,0217	1,0146	1,0078	1,0011	0,9945	0,9882	0,982	0,976	0,9701	0,9643	0,9587	0,9532	0,9478	0,9426
66	1,0594	1,0511	1,0431	1,0354	1,0279	1,0206	1,0135	1,0066	0,9999	0,9934	0,9871	0,9809	0,9749	0,969	0,9632	0,9576	0,9521	0,9467	0,9415
66,1	1,0582	1,05	1,042	1,0343	1,0267	1,0195	1,0124	1,0055	0,9988	0,9923	0,986	0,9798	0,9738	0,9679	0,9621	0,9565	0,951	0,9456	0,9404
66,2	1,0571	1,0489	1,0409	1,0331	1,0256	1,0183	1,0113	1,0044	0,9977	0,9912	0,9849	0,9787	0,9726	0,9668	0,961	0,9554	0,9499	0,9445	0,9393
66,3	1,056	1,0477	1,0397	1,032	1,0245	1,0172	1,0102	1,0033	0,9966	0,9901	0,9838	0,9776	0,9715	0,9657	0,9599	0,9543	0,9488	0,9434	0,9382
66,4	1,0549	1,0466	1,0386	1,0309	1,0234	1,0161	1,009	1,0022	0,9955	0,989	0,9826	0,9765	0,9704	0,9645	0,9588	0,9532	0,9477	0,9423	0,9371
66,5	1,0537	1,0455	1,0375	1,0298	1,0223	1,015	1,0079	1,0011	0,9944	0,9879	0,9815	0,9754	0,9693	0,9634	0,9577	0,9521	0,9466	0,9412	0,936
66,6	1,0526	1,0443	1,0364	1,0286	1,0211	1,0139	1,0068	0,9999	0,9933	0,9868	0,9804	0,9742	0,9682	0,9623	0,9566	0,951	0,9455	0,9401	0,9349
66,7	1,0515	1,0432	1,0352	1,0275	1,02	1,0127	1,0057	0,9988	0,9921	0,9856	0,9793	0,9731	0,9671	0,9612	0,9555	0,9499	0,9444	0,939	0,9338
66,8	1,0503	1,0421	1,0341	1,0264	1,0189	1,0116	1,0046	0,9977	0,991	0,9845	0,9782	0,972	0,966	0,9601	0,9544	0,9488	0,9433	0,9379	0,9327
66,9	1,0492	1,041	1,033	1,0253	1,0178	1,0105	1,0034	0,9966	0,9899	0,9834	0,9771	0,9709	0,9649	0,959	0,9533	0,9477	0,9422	0,9368	0,9316
67	1,0481	1,0398	1,0319	1,0241	1,0166	1,0094	1,0023	0,9955	0,9888	0,9823	0,976	0,9698	0,9638	0,9579	0,9522	0,9466	0,9411	0,9357	0,9305
67,1	1,047	1,0387	1,0307	1,023	1,0155	1,0083	1,0012	0,9943	0,9877	0,9812	0,9749	0,9687	0,9627	0,9568	0,9511	0,9454	0,94	0,9346	0,9294
67,2	1,0458	1,0376	1,0296	1,0219	1,0144	1,0071	1,0001	0,9932	0,9866	0,9801	0,9737	0,9676	0,9616	0,9557	0,9499	0,9443	0,9389	0,9335	0,9283
67,3	1,0447	1,0365	1,0285	1,0208	1,0133	1,006	0,999	0,9921	0,9854	0,979	0,9726	0,9665	0,9604	0,9546	0,9488	0,9432	0,9378	0,9324	0,9272
67,4	1,0436	1,0353	1,0274	1,0196	1,0122	1,0049	0,9978	0,991	0,9843	0,9778	0,9715	0,9653	0,9593	0,9535	0,9477	0,9421	0,9367	0,9313	0,9261

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
64	0,9583	0,9532	0,9482	0,9433	0,9386	0,9339	0,9293	0,9248	0,9203	0,916	0,9117	0,9075	0,9033	0,8992	0,8952	0,8913	0,8874	0,8836	0,8798
64,1	0,9572	0,9521	0,9471	0,9423	0,9375	0,9328	0,9282	0,9237	0,9192	0,9149	0,9106	0,9064	0,9022	0,8982	0,8942	0,8902	0,8863	0,8825	0,8787
64,2	0,9561	0,951	0,946	0,9412	0,9364	0,9317	0,9271	0,9226	0,9181	0,9138	0,9095	0,9053	0,9012	0,8971	0,8931	0,8891	0,8853	0,8814	0,8777
64,3	0,955	0,9499	0,9449	0,9401	0,9353	0,9306	0,926	0,9215	0,9171	0,9127	0,9084	0,9042	0,9001	0,896	0,892	0,8881	0,8842	0,8804	0,8766
64,4	0,9539	0,9488	0,9438	0,939	0,9342	0,9295	0,9249	0,9204	0,916	0,9116	0,9073	0,9031	0,899	0,8949	0,8909	0,887	0,8831	0,8793	0,8755
64,5	0,9528	0,9477	0,9428	0,9379	0,9331	0,9284	0,9238	0,9193	0,9149	0,9105	0,9063	0,902	0,8979	0,8938	0,8898	0,8859	0,882	0,8782	0,8744
64,6	0,9517	0,9466	0,9417	0,9368	0,932	0,9273	0,9227	0,9182	0,9138	0,9094	0,9052	0,901	0,8968	0,8928	0,8888	0,8848	0,8809	0,8771	0,8734
64,7	0,9506	0,9455	0,9406	0,9357	0,9309	0,9262	0,9217	0,9171	0,9127	0,9084	0,9041	0,8999	0,8957	0,8917	0,8877	0,8837	0,8799	0,876	0,8723
64,8	0,9495	0,9444	0,9395	0,9346	0,9298	0,9252	0,9206	0,9161	0,9116	0,9073	0,903	0,8988	0,8947	0,8906	0,8866	0,8827	0,8788	0,875	0,8712
64,9	0,9484	0,9433	0,9384	0,9335	0,9287	0,9241	0,9195	0,915	0,9105	0,9062	0,9019	0,8977	0,8936	0,8895	0,8855	0,8816	0,8777	0,8739	0,8701
65	0,9473	0,9422	0,9373	0,9324	0,9277	0,923	0,9184	0,9139	0,9094	0,9051	0,9008	0,8966	0,8925	0,8884	0,8844	0,8805	0,8766	0,8728	0,869
65,1	0,9462	0,9411	0,9362	0,9313	0,9266	0,9219	0,9173	0,9128	0,9084	0,904	0,8997	0,8955	0,8914	0,8873	0,8833	0,8794	0,8755	0,8717	0,868
65,2	0,9451	0,94	0,9351	0,9302	0,9255	0,9208	0,9162	0,9117	0,9073	0,9029	0,8987	0,8945	0,8903	0,8863	0,8823	0,8783	0,8745	0,8706	0,8669
65,3	0,944	0,9389	0,934	0,9291	0,9244	0,9197	0,9151	0,9106	0,9062	0,9018	0,8976	0,8934	0,8892	0,8852	0,8812	0,8773	0,8734	0,8696	0,8658
65,4	0,9429	0,9378	0,9329	0,928	0,9233	0,9186	0,914	0,9095	0,9051	0,9008	0,8965	0,8923	0,8882	0,8841	0,8801	0,8762	0,8723	0,8685	0,8647
65,5	0,9418	0,9368	0,9318	0,9269	0,9222	0,9175	0,9129	0,9084	0,904	0,8997	0,8954	0,8912	0,8871	0,883	0,879	0,8751	0,8712	0,8674	0,8637
65,6	0,9407	0,9357	0,9307	0,9259	0,9211	0,9164	0,9118	0,9073	0,9029	0,8986	0,8943	0,8901	0,886	0,8819	0,8779	0,874	0,8701	0,8663	0,8626
65,7	0,9396	0,9346	0,9296	0,9248	0,92	0,9153	0,9107	0,9063	0,9018	0,8975	0,8932	0,889	0,8849	0,8808	0,8769	0,8729	0,8691	0,8653	0,8615
65,8	0,9385	0,9335	0,9285	0,9237	0,9189	0,9142	0,9097	0,9052	0,9007	0,8964	0,8921	0,8879	0,8838	0,8798	0,8758	0,8718	0,868	0,8642	0,8604
65,9	0,9374	0,9324	0,9274	0,9226	0,9178	0,9131	0,9086	0,9041	0,8997	0,8953	0,891	0,8869	0,8827	0,8787	0,8747	0,8708	0,8669	0,8631	0,8593
66	0,9363	0,9313	0,9263	0,9215	0,9167	0,9121	0,9075	0,903	0,8986	0,8942	0,89	0,8858	0,8816	0,8776	0,8736	0,8697	0,8658	0,862	0,8583
66,1	0,9352	0,9302	0,9252	0,9204	0,9156	0,911	0,9064	0,9019	0,8975	0,8931	0,8889	0,8847	0,8806	0,8765	0,8725	0,8686	0,8647	0,8609	0,8572
66,2	0,9341	0,9291	0,9241	0,9193	0,9145	0,9099	0,9053	0,9008	0,8964	0,892	0,8878	0,8836	0,8795	0,8754	0,8714	0,8675	0,8637	0,8599	0,8561
66,3	0,933	0,928	0,923	0,9182	0,9134	0,9088	0,9042	0,8997	0,8953	0,891	0,8867	0,8825	0,8784	0,8743	0,8704	0,8664	0,8626	0,8588	0,855
66,4	0,9319	0,9269	0,9219	0,9171	0,9123	0,9077	0,9031	0,8986	0,8942	0,8899	0,8856	0,8814	0,8773	0,8733	0,8693	0,8654	0,8615	0,8577	0,8539
66,5	0,9308	0,9258	0,9208	0,916	0,9112	0,9066	0,902	0,8975	0,8931	0,8888	0,8845	0,8803	0,8762	0,8722	0,8682	0,8643	0,8604	0,8566	0,8529
66,6	0,9297	0,9247	0,9197	0,9149	0,9102	0,9055	0,9009	0,8964	0,892	0,8877	0,8834	0,8793	0,8751	0,8711	0,8671	0,8632	0,8593	0,8555	0,8518
66,7	0,9286	0,9236	0,9186	0,9138	0,9091	0,9044	0,8998	0,8953	0,8909	0,8866	0,8823	0,8782	0,874	0,87	0,866	0,8621	0,8582	0,8544	0,8507
66,8	0,9275	0,9225	0,9176	0,9127	0,908	0,9033	0,8987	0,8943	0,8898	0,8855	0,8813	0,8771	0,873	0,8689	0,8649	0,861	0,8572	0,8534	0,8496
66,9	0,9264	0,9214	0,9165	0,9116	0,9069	0,9022	0,8976	0,8932	0,8888	0,8844	0,8802	0,876	0,8719	0,8678	0,8639	0,8599	0,8561	0,8523	0,8485
67	0,9253	0,9203	0,9154	0,9105	0,9058	0,9011	0,8966	0,8921	0,8877	0,8833	0,8791	0,8749	0,8708	0,8667	0,8628	0,8588	0,855	0,8512	0,8475
67,1	0,9242	0,9192	0,9143	0,9094	0,9047	0,9	0,8955	0,891	0,8866	0,8822	0,878	0,8738	0,8697	0,8657	0,8617	0,8578	0,8539	0,8501	0,8464
67,2	0,9231	0,9181	0,9132	0,9083	0,9036	0,8989	0,8944	0,8899	0,8855	0,8812	0,8769	0,8727	0,8686	0,8646	0,8606	0,8567	0,8528	0,849	0,8453
67,3	0,922	0,917	0,9121	0,9072	0,9025	0,8978	0,8933	0,8888	0,8844	0,8801	0,8758	0,8716	0,8675	0,8635	0,8595	0,8556	0,8517	0,8479	0,8442
67,4	0,9209	0,9159	0,911	0,9061	0,9014	0,8967	0,8922	0,8877	0,8833	0,879	0,8747	0,8705	0,8664	0,8624	0,8584	0,8545	0,8507	0,8469	0,8431

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
64	0,8761	0,8725	0,8689	0,8653	0,8618	0,8583	0,8549	0,8516	0,8483	0,845	0,8418	0,8386	0,8354	0,8323	0,8292	0,8262	0,8232	0,8202	0,8173
64,1	0,875	0,8714	0,8678	0,8642	0,8607	0,8573	0,8539	0,8505	0,8472	0,8439	0,8407	0,8375	0,8344	0,8312	0,8282	0,8251	0,8221	0,8192	0,8163
64,2	0,874	0,8703	0,8667	0,8632	0,8597	0,8562	0,8528	0,8494	0,8461	0,8429	0,8396	0,8364	0,8333	0,8302	0,8271	0,8241	0,8211	0,8181	0,8152
64,3	0,8729	0,8692	0,8656	0,8621	0,8586	0,8551	0,8517	0,8484	0,8451	0,8418	0,8386	0,8354	0,8322	0,8291	0,826	0,823	0,82	0,8171	0,8141
64,4	0,8718	0,8682	0,8646	0,861	0,8575	0,8541	0,8507	0,8473	0,844	0,8407	0,8375	0,8343	0,8312	0,8281	0,825	0,8219	0,819	0,816	0,8131
64,5	0,8707	0,8671	0,8635	0,8599	0,8564	0,853	0,8496	0,8462	0,8429	0,8396	0,8364	0,8332	0,8301	0,827	0,8239	0,8209	0,8179	0,8149	0,812
64,6	0,8697	0,866	0,8624	0,8589	0,8554	0,8519	0,8485	0,8452	0,8418	0,8386	0,8354	0,8322	0,829	0,8259	0,8229	0,8198	0,8168	0,8139	0,8109
64,7	0,8686	0,8649	0,8613	0,8578	0,8543	0,8508	0,8474	0,8441	0,8408	0,8375	0,8343	0,8311	0,828	0,8249	0,8218	0,8188	0,8158	0,8128	0,8099
64,8	0,8675	0,8639	0,8603	0,8567	0,8532	0,8498	0,8464	0,843	0,8397	0,8364	0,8332	0,83	0,8269	0,8238	0,8207	0,8177	0,8147	0,8117	0,8088
64,9	0,8664	0,8628	0,8592	0,8556	0,8521	0,8487	0,8453	0,8419	0,8386	0,8354	0,8321	0,829	0,8258	0,8227	0,8197	0,8166	0,8136	0,8107	0,8078
65	0,8653	0,8617	0,8581	0,8546	0,8511	0,8476	0,8442	0,8409	0,8376	0,8343	0,8311	0,8279	0,8248	0,8217	0,8186	0,8156	0,8126	0,8096	0,8067
65,1	0,8643	0,8606	0,857	0,8535	0,85	0,8466	0,8432	0,8398	0,8365	0,8332	0,83	0,8268	0,8237	0,8206	0,8175	0,8145	0,8115	0,8086	0,8056
65,2	0,8632	0,8595	0,856	0,8524	0,8489	0,8455	0,8421	0,8387	0,8354	0,8322	0,8289	0,8258	0,8226	0,8195	0,8165	0,8134	0,8104	0,8075	0,8046
65,3	0,8621	0,8585	0,8549	0,8513	0,8479	0,8444	0,841	0,8377	0,8344	0,8311	0,8279	0,8247	0,8216	0,8185	0,8154	0,8124	0,8094	0,8064	0,8035
65,4	0,861	0,8574	0,8538	0,8503	0,8468	0,8433	0,8399	0,8366	0,8333	0,83	0,8268	0,8236	0,8205	0,8174	0,8143	0,8113	0,8083	0,8054	0,8024
65,5	0,86	0,8563	0,8527	0,8492	0,8457	0,8423	0,8389	0,8355	0,8322	0,829	0,8257	0,8226	0,8194	0,8163	0,8133	0,8102	0,8073	0,8043	0,8014
65,6	0,8589	0,8552	0,8517	0,8481	0,8446	0,8412	0,8378	0,8344	0,8311	0,8279	0,8247	0,8215	0,8184	0,8153	0,8122	0,8092	0,8062	0,8032	0,8003
65,7	0,8578	0,8542	0,8506	0,847	0,8436	0,8401	0,8367	0,8334	0,8301	0,8268	0,8236	0,8204	0,8173	0,8142	0,8111	0,8081	0,8051	0,8022	0,7993
65,8	0,8567	0,8531	0,8495	0,846	0,8425	0,839	0,8356	0,8323	0,829	0,8257	0,8225	0,8194	0,8162	0,8131	0,8101	0,807	0,8041	0,8011	0,7982
65,9	0,8556	0,852	0,8484	0,8449	0,8414	0,838	0,8346	0,8312	0,8279	0,8247	0,8215	0,8183	0,8152	0,8121	0,809	0,806	0,803	0,8	0,7971
66	0,8546	0,8509	0,8473	0,8438	0,8403	0,8369	0,8335	0,8302	0,8269	0,8236	0,8204	0,8172	0,8141	0,811	0,8079	0,8049	0,8019	0,799	0,7961
66,1	0,8535	0,8499	0,8463	0,8427	0,8393	0,8358	0,8324	0,8291	0,8258	0,8225	0,8193	0,8161	0,813	0,8099	0,8069	0,8038	0,8009	0,7979	0,795
66,2	0,8524	0,8488	0,8452	0,8417	0,8382	0,8347	0,8314	0,828	0,8247	0,8215	0,8182	0,8151	0,8119	0,8089	0,8058	0,8028	0,7998	0,7969	0,7939
66,3	0,8513	0,8477	0,8441	0,8406	0,8371	0,8337	0,8303	0,8269	0,8236	0,8204	0,8172	0,814	0,8109	0,8078	0,8047	0,8017	0,7987	0,7958	0,7929
66,4	0,8503	0,8466	0,843	0,8395	0,836	0,8326	0,8292	0,8259	0,8226	0,8193	0,8161	0,8129	0,8098	0,8067	0,8037	0,8006	0,7977	0,7947	0,7918
66,5	0,8492	0,8455	0,842	0,8384	0,835	0,8315	0,8281	0,8248	0,8215	0,8182	0,815	0,8119	0,8087	0,8056	0,8026	0,7996	0,7966	0,7937	0,7907
66,6	0,8481	0,8445	0,8409	0,8374	0,8339	0,8304	0,8271	0,8237	0,8204	0,8172	0,814	0,8108	0,8077	0,8046	0,8015	0,7985	0,7955	0,7926	0,7897
66,7	0,847	0,8434	0,8398	0,8363	0,8328	0,8294	0,826	0,8226	0,8194	0,8161	0,8129	0,8097	0,8066	0,8035	0,8005	0,7974	0,7945	0,7915	0,7886
66,8	0,8459	0,8423	0,8387	0,8352	0,8317	0,8283	0,8249	0,8216	0,8183	0,815	0,8118	0,8087	0,8055	0,8024	0,7994	0,7964	0,7934	0,7905	0,7875
66,9	0,8449	0,8412	0,8376	0,8341	0,8306	0,8272	0,8238	0,8205	0,8172	0,814	0,8107	0,8076	0,8045	0,8014	0,7983	0,7953	0,7923	0,7894	0,7865
67	0,8438	0,8401	0,8366	0,833	0,8296	0,8261	0,8228	0,8194	0,8161	0,8129	0,8097	0,8065	0,8034	0,8003	0,7972	0,7942	0,7913	0,7883	0,7854
67,1	0,8427	0,8391	0,8355	0,832	0,8285	0,8251	0,8217	0,8183	0,8151	0,8118	0,8086	0,8054	0,8023	0,7992	0,7962	0,7932	0,7902	0,7872	0,7843
67,2	0,8416	0,838	0,8344	0,8309	0,8274	0,824	0,8206	0,8173	0,814	0,8107	0,8075	0,8044	0,8012	0,7982	0,7951	0,7921	0,7891	0,7862	0,7833
67,3	0,8405	0,8369	0,8333	0,8298	0,8263	0,8229	0,8195	0,8162	0,8129	0,8097	0,8065	0,8033	0,8002	0,7971	0,794	0,791	0,788	0,7851	0,7822
67,4	0,8394	0,8358	0,8322	0,8287	0,8253	0,8218	0,8184	0,8151	0,8118	0,8086	0,8054	0,8022	0,7991	0,796	0,793	0,79	0,787	0,784	0,7811

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
64	0,8144	0,8116	0,8087	0,8059	0,8032	0,8004	0,7977	0,795	0,7924	0,7898	0,7872	0,7846	0,7821	0,7796	0,7771	0,7746	0,7722	0,7697	0,7673
64,1	0,8134	0,8105	0,8077	0,8049	0,8021	0,7994	0,7967	0,794	0,7913	0,7887	0,7861	0,7836	0,781	0,7785	0,776	0,7735	0,7711	0,7687	0,7663
64,2	0,8123	0,8094	0,8066	0,8038	0,8011	0,7983	0,7956	0,7929	0,7903	0,7877	0,7851	0,7825	0,78	0,7775	0,775	0,7725	0,7701	0,7676	0,7652
64,3	0,8112	0,8084	0,8056	0,8028	0,8	0,7973	0,7946	0,7919	0,7892	0,7866	0,784	0,7815	0,7789	0,7764	0,7739	0,7714	0,769	0,7666	0,7642
64,4	0,8102	0,8073	0,8045	0,8017	0,7989	0,7962	0,7935	0,7908	0,7882	0,7856	0,783	0,7804	0,7779	0,7754	0,7729	0,7704	0,768	0,7655	0,7631
64,5	0,8091	0,8063	0,8034	0,8006	0,7979	0,7951	0,7924	0,7898	0,7871	0,7845	0,7819	0,7794	0,7768	0,7743	0,7718	0,7693	0,7669	0,7645	0,7621
64,6	0,8081	0,8052	0,8024	0,7996	0,7968	0,7941	0,7914	0,7887	0,7861	0,7835	0,7809	0,7783	0,7758	0,7732	0,7708	0,7683	0,7659	0,7634	0,761
64,7	0,807	0,8041	0,8013	0,7985	0,7958	0,793	0,7903	0,7877	0,785	0,7824	0,7798	0,7772	0,7747	0,7722	0,7697	0,7672	0,7648	0,7624	0,76
64,8	0,8059	0,8031	0,8003	0,7975	0,7947	0,792	0,7893	0,7866	0,784	0,7813	0,7788	0,7762	0,7737	0,7711	0,7687	0,7662	0,7638	0,7613	0,7589
64,9	0,8049	0,802	0,7992	0,7964	0,7936	0,7909	0,7882	0,7855	0,7829	0,7803	0,7777	0,7751	0,7726	0,7701	0,7676	0,7651	0,7627	0,7603	0,7579
65	0,8038	0,801	0,7981	0,7953	0,7926	0,7899	0,7872	0,7845	0,7818	0,7792	0,7766	0,7741	0,7715	0,769	0,7666	0,7641	0,7617	0,7592	0,7568
65,1	0,8028	0,7999	0,7971	0,7943	0,7915	0,7888	0,7861	0,7834	0,7808	0,7782	0,7756	0,773	0,7705	0,768	0,7655	0,763	0,7606	0,7582	0,7558
65,2	0,8017	0,7988	0,796	0,7932	0,7905	0,7877	0,785	0,7824	0,7797	0,7771	0,7745	0,772	0,7694	0,7669	0,7644	0,762	0,7595	0,7571	0,7547
65,3	0,8006	0,7978	0,795	0,7922	0,7894	0,7867	0,784	0,7813	0,7787	0,7761	0,7735	0,7709	0,7684	0,7659	0,7634	0,7609	0,7585	0,7561	0,7537
65,4	0,7996	0,7967	0,7939	0,7911	0,7884	0,7856	0,7829	0,7803	0,7776	0,775	0,7724	0,7699	0,7673	0,7648	0,7623	0,7599	0,7574	0,755	0,7526
65,5	0,7985	0,7957	0,7928	0,79	0,7873	0,7846	0,7819	0,7792	0,7766	0,774	0,7714	0,7688	0,7663	0,7638	0,7613	0,7588	0,7564	0,754	0,7516
65,6	0,7974	0,7946	0,7918	0,789	0,7862	0,7835	0,7808	0,7781	0,7755	0,7729	0,7703	0,7678	0,7652	0,7627	0,7602	0,7578	0,7553	0,7529	0,7505
65,7	0,7964	0,7935	0,7907	0,7879	0,7852	0,7824	0,7798	0,7771	0,7744	0,7718	0,7693	0,7667	0,7642	0,7617	0,7592	0,7567	0,7543	0,7519	0,7495
65,8	0,7953	0,7925	0,7897	0,7869	0,7841	0,7814	0,7787	0,776	0,7734	0,7708	0,7682	0,7656	0,7631	0,7606	0,7581	0,7557	0,7532	0,7508	0,7484
65,9	0,7943	0,7914	0,7886	0,7858	0,7831	0,7803	0,7776	0,775	0,7723	0,7697	0,7671	0,7646	0,7621	0,7595	0,7571	0,7546	0,7522	0,7498	0,7474
66	0,7932	0,7903	0,7875	0,7847	0,782	0,7793	0,7766	0,7739	0,7713	0,7687	0,7661	0,7635	0,761	0,7585	0,756	0,7536	0,7511	0,7487	0,7463
66,1	0,7921	0,7893	0,7865	0,7837	0,7809	0,7782	0,7755	0,7729	0,7702	0,7676	0,765	0,7625	0,7599	0,7574	0,755	0,7525	0,7501	0,7477	0,7453
66,2	0,7911	0,7882	0,7854	0,7826	0,7799	0,7771	0,7745	0,7718	0,7692	0,7665	0,764	0,7614	0,7589	0,7564	0,7539	0,7515	0,749	0,7466	0,7442
66,3	0,79	0,7872	0,7843	0,7816	0,7788	0,7761	0,7734	0,7707	0,7681	0,7655	0,7629	0,7604	0,7578	0,7553	0,7528	0,7504	0,748	0,7456	0,7432
66,4	0,7889	0,7861	0,7833	0,7805	0,7777	0,775	0,7723	0,7697	0,767	0,7644	0,7619	0,7593	0,7568	0,7543	0,7518	0,7493	0,7469	0,7445	0,7421
66,5	0,7879	0,785	0,7822	0,7794	0,7767	0,774	0,7713	0,7686	0,766	0,7634	0,7608	0,7582	0,7557	0,7532	0,7507	0,7483	0,7459	0,7435	0,7411
66,6	0,7868	0,784	0,7811	0,7784	0,7756	0,7729	0,7702	0,7676	0,7649	0,7623	0,7597	0,7572	0,7547	0,7522	0,7497	0,7472	0,7448	0,7424	0,74
66,7	0,7857	0,7829	0,7801	0,7773	0,7746	0,7718	0,7691	0,7665	0,7639	0,7613	0,7587	0,7561	0,7536	0,7511	0,7486	0,7462	0,7437	0,7413	0,739
66,8	0,7847	0,7818	0,779	0,7762	0,7735	0,7708	0,7681	0,7654	0,7628	0,7602	0,7576	0,7551	0,7525	0,75	0,7476	0,7451	0,7427	0,7403	0,7379
66,9	0,7836	0,7808	0,778	0,7752	0,7724	0,7697	0,767	0,7644	0,7617	0,7591	0,7566	0,754	0,7515	0,749	0,7465	0,7441	0,7416	0,7392	0,7369
67	0,7825	0,7797	0,7769	0,7741	0,7714	0,7686	0,766	0,7633	0,7607	0,7581	0,7555	0,7529	0,7504	0,7479	0,7455	0,743	0,7406	0,7382	0,7358
67,1	0,7815	0,7786	0,7758	0,773	0,7703	0,7676	0,7649	0,7622	0,7596	0,757	0,7544	0,7519	0,7494	0,7469	0,7444	0,7419	0,7395	0,7371	0,7347
67,2	0,7804	0,7776	0,7748	0,772	0,7692	0,7665	0,7638	0,7612	0,7586	0,756	0,7534	0,7508	0,7483	0,7458	0,7433	0,7409	0,7385	0,7361	0,7337
67,3	0,7793	0,7765	0,7737	0,7709	0,7682	0,7655	0,7628	0,7601	0,7575	0,7549	0,7523	0,7498	0,7472	0,7447	0,7423	0,7398	0,7374	0,735	0,7326
67,4	0,7783	0,7754	0,7726	0,7699	0,7671	0,7644	0,7617	0,7591	0,7564	0,7538	0,7513	0,7487	0,7462	0,7437	0,7412	0,7388	0,7363	0,7339	0,7316

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
64	0,765	0,7626	0,7603	0,758	0,7557	0,7534	0,7512	0,749	0,7467	0,7446	0,7424	0,7402	0,7381	0,736	0,7339	0,7318	0,7297	0,7277	0,7257
64,1	0,7639	0,7616	0,7592	0,7569	0,7546	0,7524	0,7501	0,7479	0,7457	0,7435	0,7413	0,7392	0,7371	0,7349	0,7328	0,7308	0,7287	0,7267	0,7246
64,2	0,7629	0,7605	0,7582	0,7559	0,7536	0,7513	0,7491	0,7469	0,7447	0,7425	0,7403	0,7382	0,736	0,7339	0,7318	0,7297	0,7277	0,7256	0,7236
64,3	0,7618	0,7595	0,7571	0,7548	0,7526	0,7503	0,748	0,7458	0,7436	0,7414	0,7393	0,7371	0,735	0,7329	0,7308	0,7287	0,7266	0,7246	0,7226
64,4	0,7608	0,7584	0,7561	0,7538	0,7515	0,7492	0,747	0,7448	0,7426	0,7404	0,7382	0,7361	0,7339	0,7318	0,7297	0,7277	0,7256	0,7235	0,7215
64,5	0,7597	0,7574	0,7551	0,7527	0,7505	0,7482	0,746	0,7437	0,7415	0,7393	0,7372	0,735	0,7329	0,7308	0,7287	0,7266	0,7246	0,7225	0,7205
64,6	0,7587	0,7563	0,754	0,7517	0,7494	0,7472	0,7449	0,7427	0,7405	0,7383	0,7361	0,734	0,7319	0,7297	0,7276	0,7256	0,7235	0,7215	0,7194
64,7	0,7576	0,7553	0,753	0,7507	0,7484	0,7461	0,7439	0,7416	0,7394	0,7373	0,7351	0,7329	0,7308	0,7287	0,7266	0,7245	0,7225	0,7204	0,7184
64,8	0,7566	0,7542	0,7519	0,7496	0,7473	0,7451	0,7428	0,7406	0,7384	0,7362	0,734	0,7319	0,7298	0,7277	0,7256	0,7235	0,7214	0,7194	0,7174
64,9	0,7555	0,7532	0,7509	0,7486	0,7463	0,744	0,7418	0,7395	0,7373	0,7352	0,733	0,7309	0,7287	0,7266	0,7245	0,7224	0,7204	0,7183	0,7163
65	0,7545	0,7521	0,7498	0,7475	0,7452	0,743	0,7407	0,7385	0,7363	0,7341	0,732	0,7298	0,7277	0,7256	0,7235	0,7214	0,7193	0,7173	0,7153
65,1	0,7534	0,7511	0,7488	0,7465	0,7442	0,7419	0,7397	0,7375	0,7353	0,7331	0,7309	0,7288	0,7266	0,7245	0,7224	0,7204	0,7183	0,7163	0,7142
65,2	0,7524	0,75	0,7477	0,7454	0,7431	0,7409	0,7386	0,7364	0,7342	0,732	0,7299	0,7277	0,7256	0,7235	0,7214	0,7193	0,7173	0,7152	0,7132
65,3	0,7513	0,749	0,7467	0,7444	0,7421	0,7398	0,7376	0,7354	0,7332	0,731	0,7288	0,7267	0,7246	0,7224	0,7204	0,7183	0,7162	0,7142	0,7122
65,4	0,7503	0,7479	0,7456	0,7433	0,741	0,7388	0,7365	0,7343	0,7321	0,7299	0,7278	0,7256	0,7235	0,7214	0,7193	0,7172	0,7152	0,7131	0,7111
65,5	0,7492	0,7469	0,7446	0,7423	0,74	0,7377	0,7355	0,7333	0,7311	0,7289	0,7267	0,7246	0,7225	0,7204	0,7183	0,7162	0,7141	0,7121	0,7101
65,6	0,7482	0,7458	0,7435	0,7412	0,7389	0,7367	0,7344	0,7322	0,73	0,7278	0,7257	0,7235	0,7214	0,7193	0,7172	0,7152	0,7131	0,7111	0,709
65,7	0,7471	0,7448	0,7425	0,7402	0,7379	0,7356	0,7334	0,7312	0,729	0,7268	0,7246	0,7225	0,7204	0,7183	0,7162	0,7141	0,7121	0,71	0,708
65,8	0,7461	0,7437	0,7414	0,7391	0,7368	0,7346	0,7323	0,7301	0,7279	0,7258	0,7236	0,7215	0,7193	0,7172	0,7151	0,7131	0,711	0,709	0,707
65,9	0,745	0,7427	0,7404	0,7381	0,7358	0,7335	0,7313	0,7291	0,7269	0,7247	0,7225	0,7204	0,7183	0,7162	0,7141	0,712	0,71	0,7079	0,7059
66	0,744	0,7416	0,7393	0,737	0,7347	0,7325	0,7302	0,728	0,7258	0,7237	0,7215	0,7194	0,7172	0,7151	0,713	0,711	0,7089	0,7069	0,7049
66,1	0,7429	0,7406	0,7383	0,736	0,7337	0,7314	0,7292	0,727	0,7248	0,7226	0,7205	0,7183	0,7162	0,7141	0,712	0,7099	0,7079	0,7058	0,7038
66,2	0,7419	0,7395	0,7372	0,7349	0,7326	0,7304	0,7282	0,7259	0,7237	0,7216	0,7194	0,7173	0,7151	0,713	0,711	0,7089	0,7068	0,7048	0,7028
66,3	0,7408	0,7385	0,7362	0,7339	0,7316	0,7293	0,7271	0,7249	0,7227	0,7205	0,7184	0,7162	0,7141	0,712	0,7099	0,7078	0,7058	0,7038	0,7017
66,4	0,7398	0,7374	0,7351	0,7328	0,7305	0,7283	0,7261	0,7238	0,7216	0,7195	0,7173	0,7152	0,7131	0,7109	0,7089	0,7068	0,7047	0,7027	0,7007
66,5	0,7387	0,7364	0,7341	0,7318	0,7295	0,7272	0,725	0,7228	0,7206	0,7184	0,7163	0,7141	0,712	0,7099	0,7078	0,7058	0,7037	0,7017	0,6997
66,6	0,7377	0,7353	0,733	0,7307	0,7284	0,7262	0,724	0,7217	0,7195	0,7174	0,7152	0,7131	0,711	0,7089	0,7068	0,7047	0,7027	0,7006	0,6986
66,7	0,7366	0,7343	0,732	0,7297	0,7274	0,7251	0,7229	0,7207	0,7185	0,7163	0,7142	0,712	0,7099	0,7078	0,7057	0,7037	0,7016	0,6996	0,6976
66,8	0,7355	0,7332	0,7309	0,7286	0,7263	0,7241	0,7218	0,7196	0,7174	0,7153	0,7131	0,711	0,7089	0,7068	0,7047	0,7026	0,7006	0,6985	0,6965
66,9	0,7345	0,7322	0,7298	0,7276	0,7253	0,723	0,7208	0,7186	0,7164	0,7142	0,7121	0,7099	0,7078	0,7057	0,7036	0,7016	0,6995	0,6975	0,6955
67	0,7334	0,7311	0,7288	0,7265	0,7242	0,722	0,7197	0,7175	0,7153	0,7132	0,711	0,7089	0,7068	0,7047	0,7026	0,7005	0,6985	0,6964	0,6944
67,1	0,7324	0,73	0,7277	0,7254	0,7232	0,7209	0,7187	0,7165	0,7143	0,7121	0,71	0,7078	0,7057	0,7036	0,7015	0,6995	0,6974	0,6954	0,6934
67,2	0,7313	0,729	0,7267	0,7244	0,7221	0,7199	0,7176	0,7154	0,7132	0,7111	0,7089	0,7068	0,7047	0,7026	0,7005	0,6984	0,6964	0,6943	0,6923
67,3	0,7303	0,7279	0,7256	0,7233	0,7211	0,7188	0,7166	0,7144	0,7122	0,71	0,7079	0,7057	0,7036	0,7015	0,6994	0,6974	0,6953	0,6933	0,6913
67,4	0,7292	0,7269	0,7246	0,7223	0,72	0,7178	0,7155	0,7133	0,7111	0,709	0,7068	0,7047	0,7026	0,7005	0,6984	0,6963	0,6943	0,6922	0,6902

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
64	0,7237	0,7217	0,7197	0,7177	0,7158	0,7138	0,7119	0,71	0,7081	0,7062	0,7044	0,7025	0,7007	0,6988	0,697	0,6952	0,6935	0,6917	0,6899
64,1	0,7226	0,7206	0,7186	0,7167	0,7147	0,7128	0,7109	0,709	0,7071	0,7052	0,7033	0,7015	0,6996	0,6978	0,696	0,6942	0,6924	0,6907	0,6889
64,2	0,7216	0,7196	0,7176	0,7156	0,7137	0,7118	0,7098	0,7079	0,706	0,7042	0,7023	0,7004	0,6986	0,6968	0,695	0,6932	0,6914	0,6896	0,6879
64,3	0,7205	0,7186	0,7166	0,7146	0,7127	0,7107	0,7088	0,7069	0,705	0,7031	0,7013	0,6994	0,6976	0,6958	0,6939	0,6921	0,6904	0,6886	0,6868
64,4	0,7195	0,7175	0,7155	0,7136	0,7116	0,7097	0,7078	0,7059	0,704	0,7021	0,7002	0,6984	0,6965	0,6947	0,6929	0,6911	0,6893	0,6876	0,6858
64,5	0,7185	0,7165	0,7145	0,7125	0,7106	0,7086	0,7067	0,7048	0,7029	0,7011	0,6992	0,6973	0,6955	0,6937	0,6919	0,6901	0,6883	0,6865	0,6848
64,6	0,7174	0,7154	0,7135	0,7115	0,7095	0,7076	0,7057	0,7038	0,7019	0,7	0,6982	0,6963	0,6945	0,6927	0,6908	0,689	0,6873	0,6855	0,6837
64,7	0,7164	0,7144	0,7124	0,7105	0,7085	0,7066	0,7047	0,7028	0,7009	0,699	0,6971	0,6953	0,6934	0,6916	0,6898	0,688	0,6862	0,6845	0,6827
64,8	0,7154	0,7134	0,7114	0,7094	0,7075	0,7055	0,7036	0,7017	0,6998	0,698	0,6961	0,6942	0,6924	0,6906	0,6888	0,687	0,6852	0,6834	0,6817
64,9	0,7143	0,7123	0,7103	0,7084	0,7064	0,7045	0,7026	0,7007	0,6988	0,6969	0,6951	0,6932	0,6914	0,6896	0,6877	0,686	0,6842	0,6824	0,6806
65	0,7133	0,7113	0,7093	0,7073	0,7054	0,7035	0,7015	0,6996	0,6978	0,6959	0,694	0,6922	0,6903	0,6885	0,6867	0,6849	0,6831	0,6814	0,6796
65,1	0,7122	0,7102	0,7083	0,7063	0,7044	0,7024	0,7005	0,6986	0,6967	0,6948	0,693	0,6911	0,6893	0,6875	0,6857	0,6839	0,6821	0,6803	0,6786
65,2	0,7112	0,7092	0,7072	0,7053	0,7033	0,7014	0,6995	0,6976	0,6957	0,6938	0,692	0,6901	0,6883	0,6865	0,6846	0,6829	0,6811	0,6793	0,6775
65,3	0,7102	0,7082	0,7062	0,7042	0,7023	0,7004	0,6984	0,6965	0,6946	0,6928	0,6909	0,6891	0,6872	0,6854	0,6836	0,6818	0,68	0,6783	0,6765
65,4	0,7091	0,7071	0,7051	0,7032	0,7012	0,6993	0,6974	0,6955	0,6936	0,6917	0,6899	0,688	0,6862	0,6844	0,6826	0,6808	0,679	0,6772	0,6755
65,5	0,7081	0,7061	0,7041	0,7021	0,7002	0,6983	0,6964	0,6945	0,6926	0,6907	0,6888	0,687	0,6852	0,6833	0,6815	0,6798	0,678	0,6762	0,6745
65,6	0,707	0,705	0,7031	0,7011	0,6992	0,6972	0,6953	0,6934	0,6915	0,6897	0,6878	0,686	0,6841	0,6823	0,6805	0,6787	0,6769	0,6752	0,6734
65,7	0,706	0,704	0,702	0,7001	0,6981	0,6962	0,6943	0,6924	0,6905	0,6886	0,6868	0,6849	0,6831	0,6813	0,6795	0,6777	0,6759	0,6741	0,6724
65,8	0,7049	0,703	0,701	0,699	0,6971	0,6952	0,6932	0,6913	0,6895	0,6876	0,6857	0,6839	0,6821	0,6802	0,6784	0,6766	0,6749	0,6731	0,6714
65,9	0,7039	0,7019	0,6999	0,698	0,696	0,6941	0,6922	0,6903	0,6884	0,6866	0,6847	0,6829	0,681	0,6792	0,6774	0,6756	0,6738	0,6721	0,6703
66	0,7029	0,7009	0,6989	0,6969	0,695	0,6931	0,6912	0,6893	0,6874	0,6855	0,6837	0,6818	0,68	0,6782	0,6764	0,6746	0,6728	0,671	0,6693
66,1	0,7018	0,6998	0,6979	0,6959	0,694	0,692	0,6901	0,6882	0,6863	0,6845	0,6826	0,6808	0,6789	0,6771	0,6753	0,6735	0,6718	0,67	0,6682
66,2	0,7008	0,6988	0,6968	0,6949	0,6929	0,691	0,6891	0,6872	0,6853	0,6834	0,6816	0,6797	0,6779	0,6761	0,6743	0,6725	0,6707	0,669	0,6672
66,3	0,6997	0,6977	0,6958	0,6938	0,6919	0,69	0,688	0,6861	0,6843	0,6824	0,6805	0,6787	0,6769	0,6751	0,6733	0,6715	0,6697	0,6679	0,6662
66,4	0,6987	0,6967	0,6947	0,6928	0,6908	0,6889	0,687	0,6851	0,6832	0,6814	0,6795	0,6777	0,6758	0,674	0,6722	0,6704	0,6687	0,6669	0,6651
66,5	0,6976	0,6957	0,6937	0,6917	0,6898	0,6879	0,686	0,6841	0,6822	0,6803	0,6785	0,6766	0,6748	0,673	0,6712	0,6694	0,6676	0,6659	0,6641
66,6	0,6966	0,6946	0,6927	0,6907	0,6888	0,6868	0,6849	0,683	0,6811	0,6793	0,6774	0,6756	0,6738	0,6719	0,6701	0,6684	0,6666	0,6648	0,6631
66,7	0,6956	0,6936	0,6916	0,6897	0,6877	0,6858	0,6839	0,682	0,6801	0,6782	0,6764	0,6745	0,6727	0,6709	0,6691	0,6673	0,6655	0,6638	0,662
66,8	0,6945	0,6925	0,6906	0,6886	0,6867	0,6847	0,6828	0,6809	0,6791	0,6772	0,6753	0,6735	0,6717	0,6699	0,6681	0,6663	0,6645	0,6627	0,661
66,9	0,6935	0,6915	0,6895	0,6876	0,6856	0,6837	0,6818	0,6799	0,678	0,6762	0,6743	0,6725	0,6706	0,6688	0,667	0,6652	0,6635	0,6617	0,66
67	0,6924	0,6904	0,6885	0,6865	0,6846	0,6827	0,6808	0,6789	0,677	0,6751	0,6733	0,6714	0,6696	0,6678	0,666	0,6642	0,6624	0,6607	0,6589
67,1	0,6914	0,6894	0,6874	0,6855	0,6835	0,6816	0,6797	0,6778	0,6759	0,6741	0,6722	0,6704	0,6686	0,6667	0,6649	0,6632	0,6614	0,6596	0,6579
67,2	0,6903	0,6883	0,6864	0,6844	0,6825	0,6806	0,6787	0,6768	0,6749	0,673	0,6712	0,6693	0,6675	0,6657	0,6639	0,6621	0,6604	0,6586	0,6568
67,3	0,6893	0,6873	0,6853	0,6834	0,6814	0,6795	0,6776	0,6757	0,6739	0,672	0,6701	0,6683	0,6665	0,6647	0,6629	0,6611	0,6593	0,6576	0,6558
67,4	0,6882	0,6863	0,6843	0,6823	0,6804	0,6785	0,6766	0,6747	0,6728	0,6709	0,6691	0,6673	0,6654	0,6636	0,6618	0,66	0,6583	0,6565	0,6548

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
64	0,6882	0,6864	0,6847	0,683	0,6813	0,6796	0,6779	0,6763
64,1	0,6871	0,6854	0,6837	0,682	0,6803	0,6786	0,6769	0,6752
64,2	0,6861	0,6844	0,6827	0,6809	0,6792	0,6775	0,6759	0,6742
64,3	0,6851	0,6833	0,6816	0,6799	0,6782	0,6765	0,6748	0,6732
64,4	0,6841	0,6823	0,6806	0,6789	0,6772	0,6755	0,6738	0,6721
64,5	0,683	0,6813	0,6796	0,6779	0,6762	0,6745	0,6728	0,6711
64,6	0,682	0,6803	0,6785	0,6768	0,6751	0,6734	0,6718	0,6701
64,7	0,681	0,6792	0,6775	0,6758	0,6741	0,6724	0,6707	0,6691
64,8	0,6799	0,6782	0,6765	0,6748	0,6731	0,6714	0,6697	0,668
64,9	0,6789	0,6772	0,6754	0,6737	0,672	0,6704	0,6687	0,667
65	0,6779	0,6761	0,6744	0,6727	0,671	0,6693	0,6676	0,666
65,1	0,6768	0,6751	0,6734	0,6717	0,67	0,6683	0,6666	0,665
65,2	0,6758	0,6741	0,6724	0,6706	0,6689	0,6673	0,6656	0,6639
65,3	0,6748	0,673	0,6713	0,6696	0,6679	0,6662	0,6646	0,6629
65,4	0,6737	0,672	0,6703	0,6686	0,6669	0,6652	0,6635	0,6619
65,5	0,6727	0,671	0,6693	0,6676	0,6659	0,6642	0,6625	0,6608
65,6	0,6717	0,6699	0,6682	0,6665	0,6648	0,6631	0,6615	0,6598
65,7	0,6706	0,6689	0,6672	0,6655	0,6638	0,6621	0,6604	0,6588
65,8	0,6696	0,6679	0,6662	0,6645	0,6628	0,6611	0,6594	0,6577
65,9	0,6686	0,6668	0,6651	0,6634	0,6617	0,66	0,6584	0,6567
66	0,6675	0,6658	0,6641	0,6624	0,6607	0,659	0,6573	0,6557
66,1	0,6665	0,6648	0,6631	0,6614	0,6597	0,658	0,6563	0,6547
66,2	0,6655	0,6637	0,662	0,6603	0,6586	0,657	0,6553	0,6536
66,3	0,6644	0,6627	0,661	0,6593	0,6576	0,6559	0,6542	0,6526
66,4	0,6634	0,6617	0,66	0,6583	0,6566	0,6549	0,6532	0,6516
66,5	0,6624	0,6606	0,6589	0,6572	0,6555	0,6539	0,6522	0,6505
66,6	0,6613	0,6596	0,6579	0,6562	0,6545	0,6528	0,6511	0,6495
66,7	0,6603	0,6586	0,6569	0,6552	0,6535	0,6518	0,6501	0,6485
66,8	0,6593	0,6575	0,6558	0,6541	0,6524	0,6507	0,6491	0,6474
66,9	0,6582	0,6565	0,6548	0,6531	0,6514	0,6497	0,648	0,6464
67	0,6572	0,6555	0,6537	0,652	0,6504	0,6487	0,647	0,6454
67,1	0,6561	0,6544	0,6527	0,651	0,6493	0,6476	0,646	0,6443
67,2	0,6551	0,6534	0,6517	0,65	0,6483	0,6466	0,6449	0,6433
67,3	0,6541	0,6523	0,6506	0,6489	0,6472	0,6456	0,6439	0,6422
67,4	0,653	0,6513	0,6496	0,6479	0,6462	0,6445	0,6429	0,6412

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
67,5	1,3001	1,2771	1,2561	1,2368	1,2189	1,2022	1,1866	1,1719	1,1581	1,145	1,1325	1,1207	1,1094	1,0987	1,0883	1,0784	1,0689	1,0598	1,0509
67,6	1,2989	1,2759	1,2549	1,2356	1,2177	1,201	1,1854	1,1707	1,1569	1,1438	1,1314	1,1196	1,1083	1,0975	1,0872	1,0773	1,0678	1,0586	1,0498
67,7	1,2977	1,2747	1,2537	1,2344	1,2165	1,1998	1,1842	1,1696	1,1557	1,1426	1,1302	1,1184	1,1071	1,0964	1,0861	1,0762	1,0667	1,0575	1,0487
67,8	1,2965	1,2735	1,2525	1,2332	1,2153	1,1987	1,1831	1,1684	1,1546	1,1415	1,1291	1,1173	1,106	1,0952	1,0849	1,075	1,0655	1,0564	1,0475
67,9	1,2953	1,2724	1,2514	1,232	1,2141	1,1975	1,1819	1,1672	1,1534	1,1403	1,1279	1,1161	1,1049	1,0941	1,0838	1,0739	1,0644	1,0552	1,0464
68	1,2941	1,2712	1,2502	1,2309	1,213	1,1963	1,1807	1,1661	1,1523	1,1392	1,1268	1,115	1,1037	1,0929	1,0826	1,0727	1,0632	1,0541	1,0453
68,1	1,2929	1,27	1,249	1,2297	1,2118	1,1951	1,1796	1,1649	1,1511	1,138	1,1256	1,1138	1,1026	1,0918	1,0815	1,0716	1,0621	1,053	1,0441
68,2	1,2917	1,2688	1,2478	1,2285	1,2106	1,194	1,1784	1,1637	1,1499	1,1369	1,1245	1,1127	1,1014	1,0906	1,0803	1,0705	1,061	1,0518	1,043
68,3	1,2905	1,2676	1,2466	1,2273	1,2094	1,1928	1,1772	1,1626	1,1488	1,1357	1,1233	1,1115	1,1003	1,0895	1,0792	1,0693	1,0598	1,0507	1,0419
68,4	1,2894	1,2664	1,2454	1,2261	1,2083	1,1916	1,176	1,1614	1,1476	1,1345	1,1221	1,1104	1,0991	1,0884	1,0781	1,0682	1,0587	1,0495	1,0407
68,5	1,2882	1,2652	1,2442	1,225	1,2071	1,1904	1,1749	1,1602	1,1464	1,1334	1,121	1,1092	1,098	1,0872	1,0769	1,067	1,0575	1,0484	1,0396
68,6	1,287	1,264	1,2431	1,2238	1,2059	1,1893	1,1737	1,1591	1,1453	1,1322	1,1198	1,108	1,0968	1,0861	1,0758	1,0659	1,0564	1,0473	1,0385
68,7	1,2858	1,2628	1,2419	1,2226	1,2047	1,1881	1,1725	1,1579	1,1441	1,1311	1,1187	1,1069	1,0957	1,0849	1,0746	1,0647	1,0553	1,0461	1,0373
68,8	1,2846	1,2616	1,2407	1,2214	1,2036	1,1869	1,1714	1,1567	1,143	1,1299	1,1175	1,1057	1,0945	1,0838	1,0735	1,0636	1,0541	1,045	1,0362
68,9	1,2834	1,2604	1,2395	1,2202	1,2024	1,1858	1,1702	1,1556	1,1418	1,1287	1,1164	1,1046	1,0933	1,0826	1,0723	1,0625	1,053	1,0438	1,035
69	1,2822	1,2592	1,2383	1,219	1,2012	1,1846	1,169	1,1544	1,1406	1,1276	1,1152	1,1034	1,0922	1,0815	1,0712	1,0613	1,0518	1,0427	1,0339
69,1	1,281	1,2581	1,2371	1,2179	1,2	1,1834	1,1679	1,1532	1,1395	1,1264	1,1141	1,1023	1,091	1,0803	1,07	1,0602	1,0507	1,0416	1,0328
69,2	1,2798	1,2569	1,2359	1,2167	1,1988	1,1822	1,1667	1,1521	1,1383	1,1253	1,1129	1,1011	1,0899	1,0792	1,0689	1,059	1,0495	1,0404	1,0316
69,3	1,2786	1,2557	1,2347	1,2155	1,1977	1,1811	1,1655	1,1509	1,1371	1,1241	1,1117	1,1	1,0887	1,078	1,0677	1,0579	1,0484	1,0393	1,0305
69,4	1,2774	1,2545	1,2336	1,2143	1,1965	1,1799	1,1643	1,1497	1,136	1,1229	1,1106	1,0988	1,0876	1,0769	1,0666	1,0567	1,0473	1,0381	1,0294
69,5	1,2762	1,2533	1,2324	1,2131	1,1953	1,1787	1,1632	1,1486	1,1348	1,1218	1,1094	1,0977	1,0864	1,0757	1,0654	1,0556	1,0461	1,037	1,0282
69,6	1,275	1,2521	1,2312	1,2119	1,1941	1,1775	1,162	1,1474	1,1336	1,1206	1,1083	1,0965	1,0853	1,0746	1,0643	1,0544	1,045	1,0359	1,0271
69,7	1,2738	1,2509	1,23	1,2108	1,1929	1,1764	1,1608	1,1462	1,1325	1,1195	1,1071	1,0953	1,0841	1,0734	1,0631	1,0533	1,0438	1,0347	1,0259
69,8	1,2726	1,2497	1,2288	1,2096	1,1918	1,1752	1,1597	1,1451	1,1313	1,1183	1,1059	1,0942	1,083	1,0723	1,062	1,0521	1,0427	1,0336	1,0248
69,9	1,2714	1,2485	1,2276	1,2084	1,1906	1,174	1,1585	1,1439	1,1301	1,1171	1,1048	1,093	1,0818	1,0711	1,0608	1,051	1,0415	1,0324	1,0237
70	1,2702	1,2473	1,2264	1,2072	1,1894	1,1728	1,1573	1,1427	1,129	1,116	1,1036	1,0919	1,0807	1,07	1,0597	1,0499	1,0404	1,0313	1,0225
70,1	1,269	1,2461	1,2252	1,206	1,1882	1,1716	1,1561	1,1416	1,1278	1,1148	1,1025	1,0907	1,0795	1,0688	1,0585	1,0487	1,0392	1,0301	1,0214
70,2	1,2678	1,2449	1,224	1,2048	1,187	1,1705	1,155	1,1404	1,1266	1,1136	1,1013	1,0896	1,0784	1,0676	1,0574	1,0476	1,0381	1,029	1,0202
70,3	1,2666	1,2437	1,2228	1,2036	1,1859	1,1693	1,1538	1,1392	1,1255	1,1125	1,1001	1,0884	1,0772	1,0665	1,0562	1,0464	1,037	1,0279	1,0191
70,4	1,2654	1,2425	1,2217	1,2025	1,1847	1,1681	1,1526	1,138	1,1243	1,1113	1,099	1,0872	1,076	1,0653	1,0551	1,0453	1,0358	1,0267	1,0179
70,5	1,2642	1,2413	1,2205	1,2013	1,1835	1,1669	1,1514	1,1369	1,1231	1,1101	1,0978	1,0861	1,0749	1,0642	1,0539	1,0441	1,0347	1,0256	1,0168
70,6	1,263	1,2401	1,2193	1,2001	1,1823	1,1658	1,1503	1,1357	1,122	1,109	1,0966	1,0849	1,0737	1,063	1,0528	1,043	1,0335	1,0244	1,0157
70,7	1,2618	1,2389	1,2181	1,1989	1,1811	1,1646	1,1491	1,1345	1,1208	1,1078	1,0955	1,0838	1,0726	1,0619	1,0516	1,0418	1,0324	1,0233	1,0145
70,8	1,2606	1,2377	1,2169	1,1977	1,1799	1,1634	1,1479	1,1334	1,1196	1,1066	1,0943	1,0826	1,0714	1,0607	1,0505	1,0407	1,0312	1,0221	1,0134
70,9	1,2594	1,2365	1,2157	1,1965	1,1788	1,1622	1,1467	1,1322	1,1185	1,1055	1,0932	1,0814	1,0702	1,0596	1,0493	1,0395	1,0301	1,021	1,0122

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
67,5	1,0424	1,0342	1,0262	1,0185	1,011	1,0038	0,9967	0,9899	0,9832	0,9767	0,9704	0,9642	0,9582	0,9524	0,9466	0,941	0,9355	0,9302	0,9249
67,6	1,0413	1,0331	1,0251	1,0174	1,0099	1,0027	0,9956	0,9888	0,9821	0,9756	0,9693	0,9631	0,9571	0,9512	0,9455	0,9399	0,9344	0,9291	0,9238
67,7	1,0402	1,0319	1,024	1,0163	1,0088	1,0015	0,9945	0,9876	0,981	0,9745	0,9682	0,962	0,956	0,9501	0,9444	0,9388	0,9333	0,928	0,9227
67,8	1,039	1,0308	1,0228	1,0151	1,0077	1,0004	0,9934	0,9865	0,9799	0,9734	0,9671	0,9609	0,9549	0,949	0,9433	0,9377	0,9322	0,9269	0,9216
67,9	1,0379	1,0297	1,0217	1,014	1,0065	0,9993	0,9922	0,9854	0,9787	0,9723	0,9659	0,9598	0,9538	0,9479	0,9422	0,9366	0,9311	0,9258	0,9205
68	1,0368	1,0285	1,0206	1,0129	1,0054	0,9982	0,9911	0,9843	0,9776	0,9711	0,9648	0,9587	0,9527	0,9468	0,9411	0,9355	0,93	0,9247	0,9194
68,1	1,0356	1,0274	1,0195	1,0118	1,0043	0,997	0,99	0,9832	0,9765	0,97	0,9637	0,9576	0,9516	0,9457	0,94	0,9344	0,9289	0,9236	0,9183
68,2	1,0345	1,0263	1,0183	1,0106	1,0032	0,9959	0,9889	0,982	0,9754	0,9689	0,9626	0,9564	0,9504	0,9446	0,9389	0,9333	0,9278	0,9225	0,9172
68,3	1,0334	1,0251	1,0172	1,0095	1,002	0,9948	0,9878	0,9809	0,9743	0,9678	0,9615	0,9553	0,9493	0,9435	0,9377	0,9322	0,9267	0,9213	0,9161
68,4	1,0322	1,024	1,0161	1,0084	1,0009	0,9937	0,9866	0,9798	0,9731	0,9667	0,9604	0,9542	0,9482	0,9424	0,9366	0,931	0,9256	0,9202	0,915
68,5	1,0311	1,0229	1,0149	1,0072	0,9998	0,9925	0,9855	0,9787	0,972	0,9655	0,9592	0,9531	0,9471	0,9412	0,9355	0,9299	0,9245	0,9191	0,9139
68,6	1,03	1,0217	1,0138	1,0061	0,9987	0,9914	0,9844	0,9776	0,9709	0,9644	0,9581	0,952	0,946	0,9401	0,9344	0,9288	0,9234	0,918	0,9128
68,7	1,0288	1,0206	1,0127	1,005	0,9975	0,9903	0,9833	0,9764	0,9698	0,9633	0,957	0,9509	0,9449	0,939	0,9333	0,9277	0,9223	0,9169	0,9117
68,8	1,0277	1,0195	1,0115	1,0039	0,9964	0,9892	0,9821	0,9753	0,9687	0,9622	0,9559	0,9497	0,9438	0,9379	0,9322	0,9266	0,9211	0,9158	0,9106
68,9	1,0266	1,0183	1,0104	1,0027	0,9953	0,988	0,981	0,9742	0,9675	0,9611	0,9548	0,9486	0,9426	0,9368	0,9311	0,9255	0,92	0,9147	0,9095
69	1,0254	1,0172	1,0093	1,0016	0,9941	0,9869	0,9799	0,9731	0,9664	0,96	0,9537	0,9475	0,9415	0,9357	0,93	0,9244	0,9189	0,9136	0,9084
69,1	1,0243	1,0161	1,0081	1,0005	0,993	0,9858	0,9788	0,9719	0,9653	0,9588	0,9525	0,9464	0,9404	0,9346	0,9288	0,9233	0,9178	0,9125	0,9073
69,2	1,0231	1,0149	1,007	0,9993	0,9919	0,9847	0,9776	0,9708	0,9642	0,9577	0,9514	0,9453	0,9393	0,9334	0,9277	0,9222	0,9167	0,9114	0,9061
69,3	1,022	1,0138	1,0059	0,9982	0,9908	0,9835	0,9765	0,9697	0,9631	0,9566	0,9503	0,9442	0,9382	0,9323	0,9266	0,921	0,9156	0,9103	0,905
69,4	1,0209	1,0127	1,0047	0,9971	0,9896	0,9824	0,9754	0,9686	0,9619	0,9555	0,9492	0,943	0,9371	0,9312	0,9255	0,9199	0,9145	0,9091	0,9039
69,5	1,0197	1,0115	1,0036	0,9959	0,9885	0,9813	0,9743	0,9674	0,9608	0,9543	0,9481	0,9419	0,9359	0,9301	0,9244	0,9188	0,9134	0,908	0,9028
69,6	1,0186	1,0104	1,0025	0,9948	0,9874	0,9801	0,9731	0,9663	0,9597	0,9532	0,9469	0,9408	0,9348	0,929	0,9233	0,9177	0,9123	0,9069	0,9017
69,7	1,0175	1,0093	1,0013	0,9937	0,9862	0,979	0,972	0,9652	0,9586	0,9521	0,9458	0,9397	0,9337	0,9279	0,9222	0,9166	0,9111	0,9058	0,9006
69,8	1,0163	1,0081	1,0002	0,9925	0,9851	0,9779	0,9709	0,9641	0,9574	0,951	0,9447	0,9386	0,9326	0,9267	0,921	0,9155	0,91	0,9047	0,8995
69,9	1,0152	1,007	0,9991	0,9914	0,984	0,9768	0,9697	0,9629	0,9563	0,9499	0,9436	0,9374	0,9315	0,9256	0,9199	0,9144	0,9089	0,9036	0,8984
70	1,014	1,0059	0,9979	0,9903	0,9828	0,9756	0,9686	0,9618	0,9552	0,9487	0,9424	0,9363	0,9303	0,9245	0,9188	0,9132	0,9078	0,9025	0,8973
70,1	1,0129	1,0047	0,9968	0,9891	0,9817	0,9745	0,9675	0,9607	0,9541	0,9476	0,9413	0,9352	0,9292	0,9234	0,9177	0,9121	0,9067	0,9014	0,8961
70,2	1,0118	1,0036	0,9957	0,988	0,9806	0,9734	0,9664	0,9596	0,9529	0,9465	0,9402	0,9341	0,9281	0,9223	0,9166	0,911	0,9056	0,9002	0,895
70,3	1,0106	1,0024	0,9945	0,9869	0,9794	0,9722	0,9652	0,9584	0,9518	0,9454	0,9391	0,933	0,927	0,9211	0,9155	0,9099	0,9045	0,8991	0,8939
70,4	1,0095	1,0013	0,9934	0,9857	0,9783	0,9711	0,9641	0,9573	0,9507	0,9442	0,938	0,9318	0,9259	0,92	0,9143	0,9088	0,9033	0,898	0,8928
70,5	1,0083	1,0002	0,9923	0,9846	0,9772	0,97	0,963	0,9562	0,9495	0,9431	0,9368	0,9307	0,9247	0,9189	0,9132	0,9077	0,9022	0,8969	0,8917
70,6	1,0072	0,999	0,9911	0,9835	0,976	0,9688	0,9618	0,955	0,9484	0,942	0,9357	0,9296	0,9236	0,9178	0,9121	0,9065	0,9011	0,8958	0,8906
70,7	1,0061	0,9979	0,99	0,9823	0,9749	0,9677	0,9607	0,9539	0,9473	0,9408	0,9346	0,9285	0,9225	0,9167	0,911	0,9054	0,9	0,8947	0,8895
70,8	1,0049	0,9967	0,9888	0,9812	0,9738	0,9666	0,9596	0,9528	0,9462	0,9397	0,9334	0,9273	0,9214	0,9155	0,9099	0,9043	0,8989	0,8935	0,8883
70,9	1,0038	0,9956	0,9877	0,98	0,9726	0,9654	0,9584	0,9516	0,945	0,9386	0,9323	0,9262	0,9202	0,9144	0,9087	0,9032	0,8977	0,8924	0,8872

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
67,5	0,9198	0,9148	0,9099	0,905	0,9003	0,8956	0,8911	0,8866	0,8822	0,8779	0,8736	0,8695	0,8653	0,8613	0,8573	0,8534	0,8496	0,8458	0,842
67,6	0,9187	0,9137	0,9088	0,9039	0,8992	0,8945	0,89	0,8855	0,8811	0,8768	0,8725	0,8684	0,8643	0,8602	0,8562	0,8523	0,8485	0,8447	0,841
67,7	0,9176	0,9126	0,9077	0,9028	0,8981	0,8934	0,8889	0,8844	0,88	0,8757	0,8714	0,8673	0,8632	0,8591	0,8552	0,8512	0,8474	0,8436	0,8399
67,8	0,9165	0,9115	0,9066	0,9017	0,897	0,8924	0,8878	0,8833	0,8789	0,8746	0,8704	0,8662	0,8621	0,858	0,8541	0,8502	0,8463	0,8425	0,8388
67,9	0,9154	0,9104	0,9055	0,9006	0,8959	0,8913	0,8867	0,8822	0,8778	0,8735	0,8693	0,8651	0,861	0,857	0,853	0,8491	0,8452	0,8414	0,8377
68	0,9143	0,9093	0,9044	0,8995	0,8948	0,8902	0,8856	0,8811	0,8767	0,8724	0,8682	0,864	0,8599	0,8559	0,8519	0,848	0,8441	0,8404	0,8366
68,1	0,9132	0,9082	0,9033	0,8984	0,8937	0,8891	0,8845	0,88	0,8756	0,8713	0,8671	0,8629	0,8588	0,8548	0,8508	0,8469	0,8431	0,8393	0,8355
68,2	0,9121	0,9071	0,9022	0,8973	0,8926	0,888	0,8834	0,8789	0,8745	0,8702	0,866	0,8618	0,8577	0,8537	0,8497	0,8458	0,842	0,8382	0,8345
68,3	0,911	0,906	0,9011	0,8962	0,8915	0,8869	0,8823	0,8778	0,8734	0,8691	0,8649	0,8607	0,8566	0,8526	0,8486	0,8447	0,8409	0,8371	0,8334
68,4	0,9099	0,9049	0,9	0,8951	0,8904	0,8858	0,8812	0,8767	0,8724	0,868	0,8638	0,8596	0,8555	0,8515	0,8475	0,8436	0,8398	0,836	0,8323
68,5	0,9088	0,9038	0,8988	0,894	0,8893	0,8847	0,8801	0,8756	0,8713	0,8669	0,8627	0,8585	0,8544	0,8504	0,8464	0,8425	0,8387	0,8349	0,8312
68,6	0,9077	0,9027	0,8977	0,8929	0,8882	0,8836	0,879	0,8745	0,8702	0,8658	0,8616	0,8574	0,8533	0,8493	0,8454	0,8415	0,8376	0,8338	0,8301
68,7	0,9066	0,9016	0,8966	0,8918	0,8871	0,8825	0,8779	0,8734	0,8691	0,8648	0,8605	0,8564	0,8523	0,8482	0,8443	0,8404	0,8365	0,8327	0,829
68,8	0,9055	0,9005	0,8955	0,8907	0,886	0,8814	0,8768	0,8724	0,868	0,8637	0,8594	0,8553	0,8512	0,8471	0,8432	0,8393	0,8354	0,8317	0,8279
68,9	0,9044	0,8993	0,8944	0,8896	0,8849	0,8803	0,8757	0,8713	0,8669	0,8626	0,8583	0,8542	0,8501	0,846	0,8421	0,8382	0,8343	0,8306	0,8268
69	0,9033	0,8982	0,8933	0,8885	0,8838	0,8792	0,8746	0,8702	0,8658	0,8615	0,8572	0,8531	0,849	0,8449	0,841	0,8371	0,8333	0,8295	0,8258
69,1	0,9021	0,8971	0,8922	0,8874	0,8827	0,8781	0,8735	0,8691	0,8647	0,8604	0,8561	0,852	0,8479	0,8439	0,8399	0,836	0,8322	0,8284	0,8247
69,2	0,901	0,896	0,8911	0,8863	0,8816	0,877	0,8724	0,868	0,8636	0,8593	0,855	0,8509	0,8468	0,8428	0,8388	0,8349	0,8311	0,8273	0,8236
69,3	0,8999	0,8949	0,89	0,8852	0,8805	0,8759	0,8713	0,8669	0,8625	0,8582	0,8539	0,8498	0,8457	0,8417	0,8377	0,8338	0,83	0,8262	0,8225
69,4	0,8988	0,8938	0,8889	0,8841	0,8794	0,8748	0,8702	0,8658	0,8614	0,8571	0,8528	0,8487	0,8446	0,8406	0,8366	0,8327	0,8289	0,8251	0,8214
69,5	0,8977	0,8927	0,8878	0,883	0,8783	0,8736	0,8691	0,8646	0,8603	0,856	0,8517	0,8476	0,8435	0,8395	0,8355	0,8316	0,8278	0,824	0,8203
69,6	0,8966	0,8916	0,8867	0,8819	0,8772	0,8725	0,868	0,8635	0,8592	0,8549	0,8506	0,8465	0,8424	0,8384	0,8344	0,8305	0,8267	0,8229	0,8192
69,7	0,8955	0,8905	0,8856	0,8808	0,8761	0,8714	0,8669	0,8624	0,8581	0,8538	0,8495	0,8454	0,8413	0,8373	0,8333	0,8294	0,8256	0,8218	0,8181
69,8	0,8944	0,8894	0,8845	0,8797	0,875	0,8703	0,8658	0,8613	0,857	0,8527	0,8484	0,8443	0,8402	0,8362	0,8322	0,8283	0,8245	0,8207	0,817
69,9	0,8933	0,8883	0,8834	0,8786	0,8739	0,8692	0,8647	0,8602	0,8559	0,8516	0,8473	0,8432	0,8391	0,8351	0,8311	0,8272	0,8234	0,8196	0,8159
70	0,8922	0,8872	0,8823	0,8775	0,8727	0,8681	0,8636	0,8591	0,8548	0,8505	0,8462	0,8421	0,838	0,834	0,83	0,8261	0,8223	0,8186	0,8148
70,1	0,891	0,886	0,8811	0,8763	0,8716	0,867	0,8625	0,858	0,8537	0,8494	0,8451	0,841	0,8369	0,8329	0,8289	0,8251	0,8212	0,8175	0,8137
70,2	0,8899	0,8849	0,88	0,8752	0,8705	0,8659	0,8614	0,8569	0,8526	0,8483	0,844	0,8399	0,8358	0,8318	0,8278	0,824	0,8201	0,8164	0,8126
70,3	0,8888	0,8838	0,8789	0,8741	0,8694	0,8648	0,8603	0,8558	0,8515	0,8472	0,8429	0,8388	0,8347	0,8307	0,8267	0,8229	0,819	0,8153	0,8116
70,4	0,8877	0,8827	0,8778	0,873	0,8683	0,8637	0,8592	0,8547	0,8503	0,8461	0,8418	0,8377	0,8336	0,8296	0,8256	0,8218	0,8179	0,8142	0,8105
70,5	0,8866	0,8816	0,8767	0,8719	0,8672	0,8626	0,8581	0,8536	0,8492	0,8449	0,8407	0,8366	0,8325	0,8285	0,8245	0,8207	0,8168	0,8131	0,8094
70,6	0,8855	0,8805	0,8756	0,8708	0,8661	0,8615	0,8569	0,8525	0,8481	0,8438	0,8396	0,8355	0,8314	0,8274	0,8234	0,8196	0,8157	0,812	0,8083
70,7	0,8844	0,8794	0,8745	0,8697	0,865	0,8604	0,8558	0,8514	0,847	0,8427	0,8385	0,8344	0,8303	0,8263	0,8223	0,8185	0,8146	0,8109	0,8072
70,8	0,8832	0,8783	0,8734	0,8686	0,8639	0,8593	0,8547	0,8503	0,8459	0,8416	0,8374	0,8333	0,8292	0,8252	0,8212	0,8174	0,8135	0,8098	0,8061
70,9	0,8821	0,8771	0,8723	0,8675	0,8628	0,8581	0,8536	0,8492	0,8448	0,8405	0,8363	0,8322	0,8281	0,8241	0,8201	0,8163	0,8124	0,8087	0,805

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
67,5	0,8384	0,8347	0,8312	0,8276	0,8242	0,8208	0,8174	0,814	0,8108	0,8075	0,8043	0,8011	0,798	0,7949	0,7919	0,7889	0,7859	0,783	0,7801
67,6	0,8373	0,8337	0,8301	0,8266	0,8231	0,8197	0,8163	0,813	0,8097	0,8064	0,8032	0,8001	0,7969	0,7939	0,7908	0,7878	0,7848	0,7819	0,779
67,7	0,8362	0,8326	0,829	0,8255	0,822	0,8186	0,8152	0,8119	0,8086	0,8054	0,8022	0,799	0,7959	0,7928	0,7897	0,7867	0,7838	0,7808	0,7779
67,8	0,8351	0,8315	0,8279	0,8244	0,8209	0,8175	0,8141	0,8108	0,8075	0,8043	0,8011	0,7979	0,7948	0,7917	0,7887	0,7857	0,7827	0,7798	0,7769
67,9	0,834	0,8304	0,8268	0,8233	0,8199	0,8164	0,8131	0,8097	0,8064	0,8032	0,8	0,7968	0,7937	0,7906	0,7876	0,7846	0,7816	0,7787	0,7758
68	0,833	0,8293	0,8258	0,8222	0,8188	0,8154	0,812	0,8087	0,8054	0,8021	0,7989	0,7958	0,7927	0,7896	0,7865	0,7835	0,7806	0,7776	0,7747
68,1	0,8319	0,8282	0,8247	0,8212	0,8177	0,8143	0,8109	0,8076	0,8043	0,801	0,7979	0,7947	0,7916	0,7885	0,7855	0,7825	0,7795	0,7765	0,7736
68,2	0,8308	0,8272	0,8236	0,8201	0,8166	0,8132	0,8098	0,8065	0,8032	0,8	0,7968	0,7936	0,7905	0,7874	0,7844	0,7814	0,7784	0,7755	0,7726
68,3	0,8297	0,8261	0,8225	0,819	0,8155	0,8121	0,8087	0,8054	0,8021	0,7989	0,7957	0,7925	0,7894	0,7863	0,7833	0,7803	0,7773	0,7744	0,7715
68,4	0,8286	0,825	0,8214	0,8179	0,8144	0,811	0,8077	0,8043	0,8011	0,7978	0,7946	0,7915	0,7883	0,7853	0,7822	0,7792	0,7763	0,7733	0,7704
68,5	0,8275	0,8239	0,8203	0,8168	0,8134	0,8099	0,8066	0,8033	0,8	0,7967	0,7935	0,7904	0,7873	0,7842	0,7812	0,7782	0,7752	0,7723	0,7694
68,6	0,8264	0,8228	0,8193	0,8157	0,8123	0,8089	0,8055	0,8022	0,7989	0,7957	0,7925	0,7893	0,7862	0,7831	0,7801	0,7771	0,7741	0,7712	0,7683
68,7	0,8253	0,8217	0,8182	0,8147	0,8112	0,8078	0,8044	0,8011	0,7978	0,7946	0,7914	0,7882	0,7851	0,782	0,779	0,776	0,773	0,7701	0,7672
68,8	0,8243	0,8206	0,8171	0,8136	0,8101	0,8067	0,8033	0,8	0,7967	0,7935	0,7903	0,7872	0,784	0,781	0,7779	0,7749	0,772	0,769	0,7661
68,9	0,8232	0,8196	0,816	0,8125	0,809	0,8056	0,8022	0,7989	0,7957	0,7924	0,7892	0,7861	0,783	0,7799	0,7769	0,7739	0,7709	0,768	0,7651
69	0,8221	0,8185	0,8149	0,8114	0,8079	0,8045	0,8012	0,7978	0,7946	0,7913	0,7881	0,785	0,7819	0,7788	0,7758	0,7728	0,7698	0,7669	0,764
69,1	0,821	0,8174	0,8138	0,8103	0,8069	0,8034	0,8001	0,7968	0,7935	0,7903	0,7871	0,7839	0,7808	0,7777	0,7747	0,7717	0,7687	0,7658	0,7629
69,2	0,8199	0,8163	0,8127	0,8092	0,8058	0,8024	0,799	0,7957	0,7924	0,7892	0,786	0,7828	0,7797	0,7766	0,7736	0,7706	0,7677	0,7647	0,7618
69,3	0,8188	0,8152	0,8117	0,8081	0,8047	0,8013	0,7979	0,7946	0,7913	0,7881	0,7849	0,7818	0,7786	0,7756	0,7725	0,7695	0,7666	0,7637	0,7608
69,4	0,8177	0,8141	0,8106	0,8071	0,8036	0,8002	0,7968	0,7935	0,7902	0,787	0,7838	0,7807	0,7776	0,7745	0,7715	0,7685	0,7655	0,7626	0,7597
69,5	0,8166	0,813	0,8095	0,806	0,8025	0,7991	0,7957	0,7924	0,7892	0,7859	0,7827	0,7796	0,7765	0,7734	0,7704	0,7674	0,7644	0,7615	0,7586
69,6	0,8155	0,8119	0,8084	0,8049	0,8014	0,798	0,7947	0,7913	0,7881	0,7848	0,7816	0,7785	0,7754	0,7723	0,7693	0,7663	0,7633	0,7604	0,7575
69,7	0,8145	0,8108	0,8073	0,8038	0,8003	0,7969	0,7936	0,7903	0,787	0,7838	0,7806	0,7774	0,7743	0,7712	0,7682	0,7652	0,7623	0,7593	0,7565
69,8	0,8134	0,8098	0,8062	0,8027	0,7992	0,7958	0,7925	0,7892	0,7859	0,7827	0,7795	0,7763	0,7732	0,7702	0,7671	0,7641	0,7612	0,7583	0,7554
69,9	0,8123	0,8087	0,8051	0,8016	0,7982	0,7948	0,7914	0,7881	0,7848	0,7816	0,7784	0,7753	0,7721	0,7691	0,7661	0,7631	0,7601	0,7572	0,7543
70	0,8112	0,8076	0,804	0,8005	0,7971	0,7937	0,7903	0,787	0,7837	0,7805	0,7773	0,7742	0,7711	0,768	0,765	0,762	0,759	0,7561	0,7532
70,1	0,8101	0,8065	0,8029	0,7994	0,796	0,7926	0,7892	0,7859	0,7826	0,7794	0,7762	0,7731	0,77	0,7669	0,7639	0,7609	0,7579	0,755	0,7521
70,2	0,809	0,8054	0,8018	0,7983	0,7949	0,7915	0,7881	0,7848	0,7815	0,7783	0,7751	0,772	0,7689	0,7658	0,7628	0,7598	0,7569	0,7539	0,7511
70,3	0,8079	0,8043	0,8007	0,7972	0,7938	0,7904	0,787	0,7837	0,7805	0,7772	0,7741	0,7709	0,7678	0,7647	0,7617	0,7587	0,7558	0,7529	0,75
70,4	0,8068	0,8032	0,7997	0,7962	0,7927	0,7893	0,7859	0,7826	0,7794	0,7761	0,773	0,7698	0,7667	0,7637	0,7606	0,7576	0,7547	0,7518	0,7489
70,5	0,8057	0,8021	0,7986	0,7951	0,7916	0,7882	0,7849	0,7815	0,7783	0,7751	0,7719	0,7687	0,7656	0,7626	0,7595	0,7566	0,7536	0,7507	0,7478
70,6	0,8046	0,801	0,7975	0,794	0,7905	0,7871	0,7838	0,7805	0,7772	0,774	0,7708	0,7676	0,7645	0,7615	0,7585	0,7555	0,7525	0,7496	0,7467
70,7	0,8035	0,7999	0,7964	0,7929	0,7894	0,786	0,7827	0,7794	0,7761	0,7729	0,7697	0,7666	0,7635	0,7604	0,7574	0,7544	0,7514	0,7485	0,7456
70,8	0,8024	0,7988	0,7953	0,7918	0,7883	0,7849	0,7816	0,7783	0,775	0,7718	0,7686	0,7655	0,7624	0,7593	0,7563	0,7533	0,7504	0,7474	0,7446
70,9	0,8013	0,7977	0,7942	0,7907	0,7872	0,7838	0,7805	0,7772	0,7739	0,7707	0,7675	0,7644	0,7613	0,7582	0,7552	0,7522	0,7493	0,7463	0,7435

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
67,5	0,7772	0,7744	0,7716	0,7688	0,766	0,7633	0,7606	0,758	0,7554	0,7528	0,7502	0,7476	0,7451	0,7426	0,7402	0,7377	0,7353	0,7329	0,7305
67,6	0,7761	0,7733	0,7705	0,7677	0,765	0,7623	0,7596	0,7569	0,7543	0,7517	0,7491	0,7466	0,7441	0,7416	0,7391	0,7367	0,7342	0,7318	0,7295
67,7	0,7751	0,7722	0,7694	0,7667	0,7639	0,7612	0,7585	0,7559	0,7532	0,7506	0,7481	0,7455	0,743	0,7405	0,738	0,7356	0,7332	0,7308	0,7284
67,8	0,774	0,7712	0,7684	0,7656	0,7628	0,7601	0,7575	0,7548	0,7522	0,7496	0,747	0,7445	0,7419	0,7394	0,737	0,7345	0,7321	0,7297	0,7273
67,9	0,7729	0,7701	0,7673	0,7645	0,7618	0,7591	0,7564	0,7537	0,7511	0,7485	0,7459	0,7434	0,7409	0,7384	0,7359	0,7335	0,7311	0,7287	0,7263
68	0,7719	0,769	0,7662	0,7634	0,7607	0,758	0,7553	0,7527	0,75	0,7474	0,7449	0,7423	0,7398	0,7373	0,7349	0,7324	0,73	0,7276	0,7252
68,1	0,7708	0,768	0,7651	0,7624	0,7596	0,7569	0,7543	0,7516	0,749	0,7464	0,7438	0,7413	0,7388	0,7363	0,7338	0,7313	0,7289	0,7265	0,7242
68,2	0,7697	0,7669	0,7641	0,7613	0,7586	0,7559	0,7532	0,7505	0,7479	0,7453	0,7427	0,7402	0,7377	0,7352	0,7327	0,7303	0,7279	0,7255	0,7231
68,3	0,7686	0,7658	0,763	0,7602	0,7575	0,7548	0,7521	0,7495	0,7468	0,7442	0,7417	0,7391	0,7366	0,7341	0,7317	0,7292	0,7268	0,7244	0,722
68,4	0,7676	0,7647	0,7619	0,7592	0,7564	0,7537	0,7511	0,7484	0,7458	0,7432	0,7406	0,7381	0,7356	0,7331	0,7306	0,7282	0,7257	0,7233	0,721
68,5	0,7665	0,7637	0,7609	0,7581	0,7554	0,7527	0,75	0,7473	0,7447	0,7421	0,7396	0,737	0,7345	0,732	0,7295	0,7271	0,7247	0,7223	0,7199
68,6	0,7654	0,7626	0,7598	0,757	0,7543	0,7516	0,7489	0,7463	0,7436	0,7411	0,7385	0,7359	0,7334	0,7309	0,7285	0,726	0,7236	0,7212	0,7189
68,7	0,7644	0,7615	0,7587	0,756	0,7532	0,7505	0,7478	0,7452	0,7426	0,74	0,7374	0,7349	0,7324	0,7299	0,7274	0,725	0,7226	0,7202	0,7178
68,8	0,7633	0,7605	0,7577	0,7549	0,7522	0,7495	0,7468	0,7441	0,7415	0,7389	0,7363	0,7338	0,7313	0,7288	0,7263	0,7239	0,7215	0,7191	0,7167
68,9	0,7622	0,7594	0,7566	0,7538	0,7511	0,7484	0,7457	0,7431	0,7404	0,7378	0,7353	0,7327	0,7302	0,7277	0,7253	0,7228	0,7204	0,718	0,7157
69	0,7611	0,7583	0,7555	0,7527	0,75	0,7473	0,7446	0,742	0,7394	0,7368	0,7342	0,7317	0,7292	0,7267	0,7242	0,7218	0,7194	0,717	0,7146
69,1	0,7601	0,7572	0,7544	0,7517	0,7489	0,7462	0,7436	0,7409	0,7383	0,7357	0,7331	0,7306	0,7281	0,7256	0,7231	0,7207	0,7183	0,7159	0,7135
69,2	0,759	0,7562	0,7534	0,7506	0,7479	0,7452	0,7425	0,7398	0,7372	0,7346	0,7321	0,7295	0,727	0,7245	0,7221	0,7196	0,7172	0,7148	0,7125
69,3	0,7579	0,7551	0,7523	0,7495	0,7468	0,7441	0,7414	0,7388	0,7362	0,7336	0,731	0,7285	0,726	0,7235	0,721	0,7186	0,7162	0,7138	0,7114
69,4	0,7568	0,754	0,7512	0,7485	0,7457	0,743	0,7403	0,7377	0,7351	0,7325	0,7299	0,7274	0,7249	0,7224	0,7199	0,7175	0,7151	0,7127	0,7103
69,5	0,7558	0,7529	0,7501	0,7474	0,7446	0,7419	0,7393	0,7366	0,734	0,7314	0,7289	0,7263	0,7238	0,7213	0,7189	0,7164	0,714	0,7116	0,7093
69,6	0,7547	0,7519	0,7491	0,7463	0,7436	0,7409	0,7382	0,7356	0,7329	0,7304	0,7278	0,7253	0,7228	0,7203	0,7178	0,7154	0,713	0,7106	0,7082
69,7	0,7536	0,7508	0,748	0,7452	0,7425	0,7398	0,7371	0,7345	0,7319	0,7293	0,7267	0,7242	0,7217	0,7192	0,7167	0,7143	0,7119	0,7095	0,7071
69,8	0,7525	0,7497	0,7469	0,7441	0,7414	0,7387	0,7361	0,7334	0,7308	0,7282	0,7256	0,7231	0,7206	0,7181	0,7157	0,7132	0,7108	0,7084	0,7061
69,9	0,7514	0,7486	0,7458	0,7431	0,7403	0,7376	0,735	0,7323	0,7297	0,7271	0,7246	0,722	0,7195	0,7171	0,7146	0,7122	0,7098	0,7074	0,705
70	0,7504	0,7475	0,7448	0,742	0,7393	0,7366	0,7339	0,7313	0,7286	0,7261	0,7235	0,721	0,7185	0,716	0,7135	0,7111	0,7087	0,7063	0,7039
70,1	0,7493	0,7465	0,7437	0,7409	0,7382	0,7355	0,7328	0,7302	0,7276	0,725	0,7224	0,7199	0,7174	0,7149	0,7125	0,71	0,7076	0,7052	0,7029
70,2	0,7482	0,7454	0,7426	0,7398	0,7371	0,7344	0,7317	0,7291	0,7265	0,7239	0,7214	0,7188	0,7163	0,7138	0,7114	0,7089	0,7065	0,7042	0,7018
70,3	0,7471	0,7443	0,7415	0,7388	0,736	0,7333	0,7307	0,728	0,7254	0,7228	0,7203	0,7177	0,7152	0,7128	0,7103	0,7079	0,7055	0,7031	0,7007
70,4	0,746	0,7432	0,7404	0,7377	0,735	0,7323	0,7296	0,727	0,7243	0,7218	0,7192	0,7167	0,7142	0,7117	0,7092	0,7068	0,7044	0,702	0,6997
70,5	0,745	0,7421	0,7393	0,7366	0,7339	0,7312	0,7285	0,7259	0,7233	0,7207	0,7181	0,7156	0,7131	0,7106	0,7082	0,7057	0,7033	0,7009	0,6986
70,6	0,7439	0,7411	0,7383	0,7355	0,7328	0,7301	0,7274	0,7248	0,7222	0,7196	0,717	0,7145	0,712	0,7095	0,7071	0,7047	0,7022	0,6999	0,6975
70,7	0,7428	0,74	0,7372	0,7344	0,7317	0,729	0,7264	0,7237	0,7211	0,7185	0,716	0,7134	0,7109	0,7085	0,706	0,7036	0,7012	0,6988	0,6964
70,8	0,7417	0,7389	0,7361	0,7333	0,7306	0,7279	0,7253	0,7226	0,72	0,7174	0,7149	0,7124	0,7099	0,7074	0,7049	0,7025	0,7001	0,6977	0,6954
70,9	0,7406	0,7378	0,735	0,7323	0,7295	0,7269	0,7242	0,7216	0,7189	0,7164	0,7138	0,7113	0,7088	0,7063	0,7039	0,7014	0,699	0,6966	0,6943

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
67,5	0,7282	0,7258	0,7235	0,7212	0,719	0,7167	0,7145	0,7123	0,7101	0,7079	0,7058	0,7036	0,7015	0,6994	0,6973	0,6953	0,6932	0,6912	0,6892
67,6	0,7271	0,7248	0,7225	0,7202	0,7179	0,7157	0,7134	0,7112	0,709	0,7069	0,7047	0,7026	0,7005	0,6984	0,6963	0,6942	0,6922	0,6902	0,6881
67,7	0,726	0,7237	0,7214	0,7191	0,7168	0,7146	0,7124	0,7102	0,708	0,7058	0,7037	0,7015	0,6994	0,6973	0,6952	0,6932	0,6911	0,6891	0,6871
67,8	0,725	0,7227	0,7203	0,7181	0,7158	0,7135	0,7113	0,7091	0,7069	0,7048	0,7026	0,7005	0,6984	0,6963	0,6942	0,6921	0,6901	0,6881	0,686
67,9	0,7239	0,7216	0,7193	0,717	0,7147	0,7125	0,7103	0,7081	0,7059	0,7037	0,7016	0,6994	0,6973	0,6952	0,6931	0,6911	0,689	0,687	0,685
68	0,7229	0,7205	0,7182	0,7159	0,7137	0,7114	0,7092	0,707	0,7048	0,7026	0,7005	0,6984	0,6963	0,6942	0,6921	0,69	0,688	0,686	0,6839
68,1	0,7218	0,7195	0,7172	0,7149	0,7126	0,7104	0,7082	0,7059	0,7038	0,7016	0,6994	0,6973	0,6952	0,6931	0,691	0,689	0,6869	0,6849	0,6829
68,2	0,7207	0,7184	0,7161	0,7138	0,7116	0,7093	0,7071	0,7049	0,7027	0,7005	0,6984	0,6963	0,6941	0,6921	0,69	0,6879	0,6859	0,6839	0,6818
68,3	0,7197	0,7174	0,7151	0,7128	0,7105	0,7083	0,706	0,7038	0,7016	0,6995	0,6973	0,6952	0,6931	0,691	0,6889	0,6869	0,6848	0,6828	0,6808
68,4	0,7186	0,7163	0,714	0,7117	0,7094	0,7072	0,705	0,7028	0,7006	0,6984	0,6963	0,6942	0,692	0,6899	0,6879	0,6858	0,6838	0,6817	0,6797
68,5	0,7176	0,7152	0,7129	0,7107	0,7084	0,7061	0,7039	0,7017	0,6995	0,6974	0,6952	0,6931	0,691	0,6889	0,6868	0,6848	0,6827	0,6807	0,6787
68,6	0,7165	0,7142	0,7119	0,7096	0,7073	0,7051	0,7029	0,7007	0,6985	0,6963	0,6942	0,692	0,6899	0,6878	0,6858	0,6837	0,6817	0,6796	0,6776
68,7	0,7154	0,7131	0,7108	0,7085	0,7063	0,704	0,7018	0,6996	0,6974	0,6953	0,6931	0,691	0,6889	0,6868	0,6847	0,6827	0,6806	0,6786	0,6766
68,8	0,7144	0,7121	0,7098	0,7075	0,7052	0,703	0,7007	0,6985	0,6964	0,6942	0,6921	0,6899	0,6878	0,6857	0,6837	0,6816	0,6796	0,6775	0,6755
68,9	0,7133	0,711	0,7087	0,7064	0,7041	0,7019	0,6997	0,6975	0,6953	0,6931	0,691	0,6889	0,6868	0,6847	0,6826	0,6805	0,6785	0,6765	0,6745
69	0,7123	0,7099	0,7076	0,7053	0,7031	0,7008	0,6986	0,6964	0,6942	0,6921	0,6899	0,6878	0,6857	0,6836	0,6815	0,6795	0,6774	0,6754	0,6734
69,1	0,7112	0,7089	0,7066	0,7043	0,702	0,6998	0,6976	0,6954	0,6932	0,691	0,6889	0,6868	0,6846	0,6826	0,6805	0,6784	0,6764	0,6744	0,6724
69,2	0,7101	0,7078	0,7055	0,7032	0,701	0,6987	0,6965	0,6943	0,6921	0,69	0,6878	0,6857	0,6836	0,6815	0,6794	0,6774	0,6753	0,6733	0,6713
69,3	0,7091	0,7067	0,7044	0,7022	0,6999	0,6977	0,6954	0,6932	0,6911	0,6889	0,6868	0,6846	0,6825	0,6804	0,6784	0,6763	0,6743	0,6723	0,6702
69,4	0,708	0,7057	0,7034	0,7011	0,6988	0,6966	0,6944	0,6922	0,69	0,6878	0,6857	0,6836	0,6815	0,6794	0,6773	0,6753	0,6732	0,6712	0,6692
69,5	0,7069	0,7046	0,7023	0,7	0,6978	0,6955	0,6933	0,6911	0,6889	0,6868	0,6846	0,6825	0,6804	0,6783	0,6762	0,6742	0,6722	0,6701	0,6681
69,6	0,7059	0,7035	0,7012	0,699	0,6967	0,6945	0,6923	0,6901	0,6879	0,6857	0,6836	0,6815	0,6793	0,6773	0,6752	0,6731	0,6711	0,6691	0,6671
69,7	0,7048	0,7025	0,7002	0,6979	0,6956	0,6934	0,6912	0,689	0,6868	0,6847	0,6825	0,6804	0,6783	0,6762	0,6741	0,6721	0,67	0,668	0,666
69,8	0,7037	0,7014	0,6991	0,6968	0,6946	0,6923	0,6901	0,6879	0,6857	0,6836	0,6814	0,6793	0,6772	0,6751	0,6731	0,671	0,669	0,667	0,665
69,9	0,7027	0,7003	0,698	0,6958	0,6935	0,6913	0,6891	0,6869	0,6847	0,6825	0,6804	0,6783	0,6762	0,6741	0,672	0,67	0,6679	0,6659	0,6639
70	0,7016	0,6993	0,697	0,6947	0,6924	0,6902	0,688	0,6858	0,6836	0,6815	0,6793	0,6772	0,6751	0,673	0,6709	0,6689	0,6669	0,6648	0,6628
70,1	0,7005	0,6982	0,6959	0,6936	0,6914	0,6891	0,6869	0,6847	0,6826	0,6804	0,6783	0,6761	0,674	0,6719	0,6699	0,6678	0,6658	0,6638	0,6618
70,2	0,6995	0,6971	0,6948	0,6926	0,6903	0,6881	0,6859	0,6837	0,6815	0,6793	0,6772	0,6751	0,673	0,6709	0,6688	0,6668	0,6647	0,6627	0,6607
70,3	0,6984	0,6961	0,6938	0,6915	0,6892	0,687	0,6848	0,6826	0,6804	0,6783	0,6761	0,674	0,6719	0,6698	0,6678	0,6657	0,6637	0,6617	0,6597
70,4	0,6973	0,695	0,6927	0,6904	0,6882	0,6859	0,6837	0,6815	0,6794	0,6772	0,6751	0,6729	0,6708	0,6688	0,6667	0,6646	0,6626	0,6606	0,6586
70,5	0,6962	0,6939	0,6916	0,6894	0,6871	0,6849	0,6827	0,6805	0,6783	0,6761	0,674	0,6719	0,6698	0,6677	0,6656	0,6636	0,6615	0,6595	0,6575
70,6	0,6952	0,6929	0,6906	0,6883	0,686	0,6838	0,6816	0,6794	0,6772	0,6751	0,6729	0,6708	0,6687	0,6666	0,6646	0,6625	0,6605	0,6585	0,6565
70,7	0,6941	0,6918	0,6895	0,6872	0,685	0,6827	0,6805	0,6783	0,6761	0,674	0,6719	0,6697	0,6676	0,6656	0,6635	0,6614	0,6594	0,6574	0,6554
70,8	0,693	0,6907	0,6884	0,6861	0,6839	0,6817	0,6794	0,6773	0,6751	0,6729	0,6708	0,6687	0,6666	0,6645	0,6624	0,6604	0,6583	0,6563	0,6543
70,9	0,6919	0,6896	0,6873	0,6851	0,6828	0,6806	0,6784	0,6762	0,674	0,6719	0,6697	0,6676	0,6655	0,6634	0,6614	0,6593	0,6573	0,6553	0,6533

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
67,5	0,6872	0,6852	0,6832	0,6813	0,6794	0,6774	0,6755	0,6736	0,6718	0,6699	0,6681	0,6662	0,6644	0,6626	0,6608	0,659	0,6572	0,6555	0,6537
67,6	0,6861	0,6842	0,6822	0,6802	0,6783	0,6764	0,6745	0,6726	0,6707	0,6689	0,667	0,6652	0,6634	0,6615	0,6597	0,658	0,6562	0,6544	0,6527
67,7	0,6851	0,6831	0,6812	0,6792	0,6773	0,6753	0,6734	0,6716	0,6697	0,6678	0,666	0,6641	0,6623	0,6605	0,6587	0,6569	0,6551	0,6534	0,6516
67,8	0,684	0,6821	0,6801	0,6782	0,6762	0,6743	0,6724	0,6705	0,6686	0,6668	0,6649	0,6631	0,6613	0,6595	0,6577	0,6559	0,6541	0,6523	0,6506
67,9	0,683	0,681	0,6791	0,6771	0,6752	0,6733	0,6713	0,6695	0,6676	0,6657	0,6639	0,662	0,6602	0,6584	0,6566	0,6548	0,6531	0,6513	0,6496
68	0,6819	0,68	0,678	0,6761	0,6741	0,6722	0,6703	0,6684	0,6665	0,6647	0,6628	0,661	0,6592	0,6574	0,6556	0,6538	0,652	0,6503	0,6485
68,1	0,6809	0,6789	0,677	0,675	0,6731	0,6712	0,6693	0,6674	0,6655	0,6636	0,6618	0,66	0,6581	0,6563	0,6545	0,6527	0,651	0,6492	0,6475
68,2	0,6798	0,6779	0,6759	0,674	0,672	0,6701	0,6682	0,6663	0,6644	0,6626	0,6607	0,6589	0,6571	0,6553	0,6535	0,6517	0,6499	0,6482	0,6464
68,3	0,6788	0,6768	0,6749	0,6729	0,671	0,6691	0,6672	0,6653	0,6634	0,6615	0,6597	0,6579	0,656	0,6542	0,6524	0,6507	0,6489	0,6471	0,6454
68,4	0,6777	0,6758	0,6738	0,6719	0,6699	0,668	0,6661	0,6642	0,6623	0,6605	0,6586	0,6568	0,655	0,6532	0,6514	0,6496	0,6478	0,6461	0,6443
68,5	0,6767	0,6747	0,6728	0,6708	0,6689	0,667	0,6651	0,6632	0,6613	0,6594	0,6576	0,6558	0,6539	0,6521	0,6503	0,6486	0,6468	0,645	0,6433
68,6	0,6756	0,6737	0,6717	0,6698	0,6678	0,6659	0,664	0,6621	0,6603	0,6584	0,6565	0,6547	0,6529	0,6511	0,6493	0,6475	0,6458	0,644	0,6423
68,7	0,6746	0,6726	0,6707	0,6687	0,6668	0,6649	0,663	0,6611	0,6592	0,6573	0,6555	0,6537	0,6519	0,65	0,6483	0,6465	0,6447	0,643	0,6412
68,8	0,6735	0,6716	0,6696	0,6677	0,6657	0,6638	0,6619	0,66	0,6582	0,6563	0,6545	0,6526	0,6508	0,649	0,6472	0,6454	0,6437	0,6419	0,6402
68,9	0,6725	0,6705	0,6685	0,6666	0,6647	0,6628	0,6609	0,659	0,6571	0,6552	0,6534	0,6516	0,6498	0,6479	0,6462	0,6444	0,6426	0,6409	0,6391
69	0,6714	0,6695	0,6675	0,6655	0,6636	0,6617	0,6598	0,6579	0,6561	0,6542	0,6524	0,6505	0,6487	0,6469	0,6451	0,6433	0,6416	0,6398	0,6381
69,1	0,6704	0,6684	0,6664	0,6645	0,6626	0,6607	0,6588	0,6569	0,655	0,6531	0,6513	0,6495	0,6477	0,6459	0,6441	0,6423	0,6405	0,6388	0,637
69,2	0,6693	0,6673	0,6654	0,6634	0,6615	0,6596	0,6577	0,6558	0,6539	0,6521	0,6502	0,6484	0,6466	0,6448	0,643	0,6412	0,6395	0,6377	0,636
69,3	0,6683	0,6663	0,6643	0,6624	0,6605	0,6585	0,6566	0,6548	0,6529	0,651	0,6492	0,6474	0,6456	0,6437	0,642	0,6402	0,6384	0,6367	0,6349
69,4	0,6672	0,6652	0,6633	0,6613	0,6594	0,6575	0,6556	0,6537	0,6518	0,65	0,6481	0,6463	0,6445	0,6427	0,6409	0,6391	0,6374	0,6356	0,6339
69,5	0,6661	0,6642	0,6622	0,6603	0,6583	0,6564	0,6545	0,6527	0,6508	0,6489	0,6471	0,6453	0,6434	0,6416	0,6399	0,6381	0,6363	0,6346	0,6328
69,6	0,6651	0,6631	0,6612	0,6592	0,6573	0,6554	0,6535	0,6516	0,6497	0,6479	0,646	0,6442	0,6424	0,6406	0,6388	0,637	0,6353	0,6335	0,6318
69,7	0,664	0,6621	0,6601	0,6582	0,6562	0,6543	0,6524	0,6505	0,6487	0,6468	0,645	0,6432	0,6413	0,6395	0,6378	0,636	0,6342	0,6325	0,6307
69,8	0,663	0,661	0,659	0,6571	0,6552	0,6533	0,6514	0,6495	0,6476	0,6458	0,6439	0,6421	0,6403	0,6385	0,6367	0,6349	0,6332	0,6314	0,6297
69,9	0,6619	0,6599	0,658	0,656	0,6541	0,6522	0,6503	0,6484	0,6466	0,6447	0,6429	0,641	0,6392	0,6374	0,6356	0,6339	0,6321	0,6304	0,6286
70	0,6609	0,6589	0,6569	0,655	0,6531	0,6512	0,6493	0,6474	0,6455	0,6437	0,6418	0,64	0,6382	0,6364	0,6346	0,6328	0,6311	0,6293	0,6276
70,1	0,6598	0,6578	0,6559	0,6539	0,652	0,6501	0,6482	0,6463	0,6445	0,6426	0,6408	0,6389	0,6371	0,6353	0,6335	0,6318	0,63	0,6283	0,6265
70,2	0,6587	0,6568	0,6548	0,6529	0,6509	0,649	0,6471	0,6453	0,6434	0,6415	0,6397	0,6379	0,6361	0,6343	0,6325	0,6307	0,6289	0,6272	0,6255
70,3	0,6577	0,6557	0,6537	0,6518	0,6499	0,648	0,6461	0,6442	0,6423	0,6405	0,6386	0,6368	0,635	0,6332	0,6314	0,6297	0,6279	0,6261	0,6244
70,4	0,6566	0,6546	0,6527	0,6507	0,6488	0,6469	0,645	0,6431	0,6413	0,6394	0,6376	0,6358	0,634	0,6322	0,6304	0,6286	0,6268	0,6251	0,6234
70,5	0,6555	0,6536	0,6516	0,6497	0,6478	0,6459	0,644	0,6421	0,6402	0,6384	0,6365	0,6347	0,6329	0,6311	0,6293	0,6275	0,6258	0,624	0,6223
70,6	0,6545	0,6525	0,6506	0,6486	0,6467	0,6448	0,6429	0,641	0,6392	0,6373	0,6355	0,6336	0,6318	0,63	0,6283	0,6265	0,6247	0,623	0,6212
70,7	0,6534	0,6514	0,6495	0,6476	0,6456	0,6437	0,6418	0,64	0,6381	0,6362	0,6344	0,6326	0,6308	0,629	0,6272	0,6254	0,6237	0,6219	0,6202
70,8	0,6524	0,6504	0,6484	0,6465	0,6446	0,6427	0,6408	0,6389	0,637	0,6352	0,6333	0,6315	0,6297	0,6279	0,6261	0,6244	0,6226	0,6209	0,6191
70,9	0,6513	0,6493	0,6474	0,6454	0,6435	0,6416	0,6397	0,6378	0,636	0,6341	0,6323	0,6305	0,6287	0,6269	0,6251	0,6233	0,6215	0,6198	0,6181

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
67,5	0,652	0,6503	0,6486	0,6469	0,6452	0,6435	0,6418	0,6402
67,6	0,651	0,6492	0,6475	0,6458	0,6441	0,6425	0,6408	0,6391
67,7	0,6499	0,6482	0,6465	0,6448	0,6431	0,6414	0,6398	0,6381
67,8	0,6489	0,6471	0,6454	0,6437	0,6421	0,6404	0,6387	0,6371
67,9	0,6478	0,6461	0,6444	0,6427	0,641	0,6393	0,6377	0,636
68	0,6468	0,6451	0,6434	0,6417	0,64	0,6383	0,6366	0,635
68,1	0,6457	0,644	0,6423	0,6406	0,6389	0,6373	0,6356	0,6339
68,2	0,6447	0,643	0,6413	0,6396	0,6379	0,6362	0,6346	0,6329
68,3	0,6437	0,6419	0,6402	0,6385	0,6368	0,6352	0,6335	0,6319
68,4	0,6426	0,6409	0,6392	0,6375	0,6358	0,6341	0,6325	0,6308
68,5	0,6416	0,6399	0,6381	0,6364	0,6348	0,6331	0,6314	0,6298
68,6	0,6405	0,6388	0,6371	0,6354	0,6337	0,632	0,6304	0,6287
68,7	0,6395	0,6378	0,6361	0,6344	0,6327	0,631	0,6293	0,6277
68,8	0,6384	0,6367	0,635	0,6333	0,6316	0,63	0,6283	0,6267
68,9	0,6374	0,6357	0,634	0,6323	0,6306	0,6289	0,6273	0,6256
69	0,6363	0,6346	0,6329	0,6312	0,6295	0,6279	0,6262	0,6246
69,1	0,6353	0,6336	0,6319	0,6302	0,6285	0,6268	0,6252	0,6235
69,2	0,6342	0,6325	0,6308	0,6291	0,6275	0,6258	0,6241	0,6225
69,3	0,6332	0,6315	0,6298	0,6281	0,6264	0,6247	0,6231	0,6214
69,4	0,6322	0,6304	0,6287	0,627	0,6254	0,6237	0,622	0,6204
69,5	0,6311	0,6294	0,6277	0,626	0,6243	0,6226	0,621	0,6193
69,6	0,6301	0,6283	0,6266	0,6249	0,6233	0,6216	0,6199	0,6183
69,7	0,629	0,6273	0,6256	0,6239	0,6222	0,6205	0,6189	0,6172
69,8	0,6279	0,6262	0,6245	0,6228	0,6212	0,6195	0,6178	0,6162
69,9	0,6269	0,6252	0,6235	0,6218	0,6201	0,6184	0,6168	0,6151
70	0,6258	0,6241	0,6224	0,6207	0,6191	0,6174	0,6157	0,6141
70,1	0,6248	0,6231	0,6214	0,6197	0,618	0,6163	0,6147	0,613
70,2	0,6237	0,622	0,6203	0,6186	0,617	0,6153	0,6136	0,612
70,3	0,6227	0,621	0,6193	0,6176	0,6159	0,6142	0,6126	0,6109
70,4	0,6216	0,6199	0,6182	0,6165	0,6148	0,6132	0,6115	0,6099
70,5	0,6206	0,6189	0,6172	0,6155	0,6138	0,6121	0,6105	0,6088
70,6	0,6195	0,6178	0,6161	0,6144	0,6127	0,6111	0,6094	0,6078
70,7	0,6185	0,6167	0,615	0,6134	0,6117	0,61	0,6084	0,6067
70,8	0,6174	0,6157	0,614	0,6123	0,6106	0,609	0,6073	0,6057
70,9	0,6163	0,6146	0,6129	0,6112	0,6096	0,6079	0,6063	0,6046

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
71	1,2581	1,2353	1,2145	1,1953	1,1776	1,161	1,1456	1,131	1,1173	1,1043	1,092	1,0803	1,0691	1,0584	1,0482	1,0383	1,0289	1,0198	1,0111
71,1	1,2569	1,2341	1,2133	1,1941	1,1764	1,1599	1,1444	1,1298	1,1161	1,1031	1,0908	1,0791	1,0679	1,0572	1,047	1,0372	1,0278	1,0187	1,0099
71,2	1,2557	1,2329	1,2121	1,193	1,1752	1,1587	1,1432	1,1287	1,1149	1,102	1,0897	1,0779	1,0668	1,0561	1,0459	1,036	1,0266	1,0175	1,0088
71,3	1,2545	1,2317	1,2109	1,1918	1,174	1,1575	1,142	1,1275	1,1138	1,1008	1,0885	1,0768	1,0656	1,0549	1,0447	1,0349	1,0255	1,0164	1,0076
71,4	1,2533	1,2305	1,2097	1,1906	1,1728	1,1563	1,1408	1,1263	1,1126	1,0996	1,0873	1,0756	1,0644	1,0538	1,0435	1,0337	1,0243	1,0152	1,0065
71,5	1,2521	1,2293	1,2085	1,1894	1,1716	1,1551	1,1397	1,1251	1,1114	1,0985	1,0862	1,0745	1,0633	1,0526	1,0424	1,0326	1,0232	1,0141	1,0053
71,6	1,2509	1,2281	1,2073	1,1882	1,1705	1,1539	1,1385	1,124	1,1103	1,0973	1,085	1,0733	1,0621	1,0515	1,0412	1,0314	1,022	1,0129	1,0042
71,7	1,2497	1,2269	1,2061	1,187	1,1693	1,1528	1,1373	1,1228	1,1091	1,0961	1,0838	1,0721	1,061	1,0503	1,0401	1,0303	1,0208	1,0118	1,003
71,8	1,2485	1,2257	1,2049	1,1858	1,1681	1,1516	1,1361	1,1216	1,1079	1,095	1,0827	1,071	1,0598	1,0491	1,0389	1,0291	1,0197	1,0106	1,0019
71,9	1,2473	1,2245	1,2037	1,1846	1,1669	1,1504	1,1349	1,1204	1,1067	1,0938	1,0815	1,0698	1,0586	1,048	1,0378	1,028	1,0185	1,0095	1,0007
72	1,2461	1,2233	1,2025	1,1834	1,1657	1,1492	1,1338	1,1192	1,1056	1,0926	1,0803	1,0686	1,0575	1,0468	1,0366	1,0268	1,0174	1,0083	0,9996
72,1	1,2449	1,2221	1,2013	1,1822	1,1645	1,148	1,1326	1,1181	1,1044	1,0914	1,0791	1,0675	1,0563	1,0456	1,0354	1,0256	1,0162	1,0072	0,9984
72,2	1,2437	1,2209	1,2001	1,181	1,1633	1,1468	1,1314	1,1169	1,1032	1,0903	1,078	1,0663	1,0551	1,0445	1,0343	1,0245	1,0151	1,006	0,9973
72,3	1,2425	1,2197	1,1989	1,1798	1,1621	1,1456	1,1302	1,1157	1,102	1,0891	1,0768	1,0651	1,054	1,0433	1,0331	1,0233	1,0139	1,0049	0,9961
72,4	1,2412	1,2185	1,1977	1,1786	1,1609	1,1444	1,129	1,1145	1,1008	1,0879	1,0756	1,0639	1,0528	1,0421	1,0319	1,0222	1,0128	1,0037	0,995
72,5	1,24	1,2173	1,1965	1,1774	1,1597	1,1433	1,1278	1,1133	1,0997	1,0867	1,0745	1,0628	1,0516	1,041	1,0308	1,021	1,0116	1,0025	0,9938
72,6	1,2388	1,2161	1,1953	1,1762	1,1585	1,1421	1,1267	1,1122	1,0985	1,0856	1,0733	1,0616	1,0505	1,0398	1,0296	1,0198	1,0104	1,0014	0,9927
72,7	1,2376	1,2149	1,1941	1,175	1,1574	1,1409	1,1255	1,111	1,0973	1,0844	1,0721	1,0604	1,0493	1,0387	1,0285	1,0187	1,0093	1,0002	0,9915
72,8	1,2364	1,2137	1,1929	1,1738	1,1562	1,1397	1,1243	1,1098	1,0961	1,0832	1,0709	1,0593	1,0481	1,0375	1,0273	1,0175	1,0081	0,9991	0,9903
72,9	1,2352	1,2125	1,1917	1,1726	1,155	1,1385	1,1231	1,1086	1,0949	1,082	1,0698	1,0581	1,047	1,0363	1,0261	1,0163	1,007	0,9979	0,9892
73	1,234	1,2113	1,1905	1,1715	1,1538	1,1373	1,1219	1,1074	1,0938	1,0808	1,0686	1,0569	1,0458	1,0351	1,025	1,0152	1,0058	0,9967	0,988
73,1	1,2328	1,2101	1,1893	1,1703	1,1526	1,1361	1,1207	1,1062	1,0926	1,0797	1,0674	1,0557	1,0446	1,034	1,0238	1,014	1,0046	0,9956	0,9869
73,2	1,2315	1,2089	1,1881	1,169	1,1514	1,1349	1,1195	1,1051	1,0914	1,0785	1,0662	1,0546	1,0434	1,0328	1,0226	1,0129	1,0035	0,9944	0,9857
73,3	1,2303	1,2076	1,1869	1,1678	1,1502	1,1337	1,1183	1,1039	1,0902	1,0773	1,0651	1,0534	1,0423	1,0316	1,0215	1,0117	1,0023	0,9933	0,9846
73,4	1,2291	1,2064	1,1857	1,1666	1,149	1,1325	1,1171	1,1027	1,089	1,0761	1,0639	1,0522	1,0411	1,0305	1,0203	1,0105	1,0011	0,9921	0,9834
73,5	1,2279	1,2052	1,1845	1,1654	1,1478	1,1313	1,116	1,1015	1,0879	1,0749	1,0627	1,051	1,0399	1,0293	1,0191	1,0094	1	0,9909	0,9822
73,6	1,2267	1,204	1,1833	1,1642	1,1466	1,1301	1,1148	1,1003	1,0867	1,0738	1,0615	1,0499	1,0387	1,0281	1,0179	1,0082	0,9988	0,9898	0,9811
73,7	1,2255	1,2028	1,1821	1,163	1,1454	1,1289	1,1136	1,0991	1,0855	1,0726	1,0603	1,0487	1,0376	1,027	1,0168	1,007	0,9976	0,9886	0,9799
73,8	1,2242	1,2016	1,1809	1,1618	1,1442	1,1278	1,1124	1,0979	1,0843	1,0714	1,0592	1,0475	1,0364	1,0258	1,0156	1,0058	0,9965	0,9874	0,9787
73,9	1,223	1,2004	1,1797	1,1606	1,143	1,1266	1,1112	1,0967	1,0831	1,0702	1,058	1,0463	1,0352	1,0246	1,0144	1,0047	0,9953	0,9863	0,9776
74	1,2218	1,1992	1,1785	1,1594	1,1418	1,1254	1,11	1,0955	1,0819	1,069	1,0568	1,0451	1,034	1,0234	1,0133	1,0035	0,9941	0,9851	0,9764
74,1	1,2206	1,1979	1,1773	1,1582	1,1406	1,1242	1,1088	1,0943	1,0807	1,0678	1,0556	1,044	1,0329	1,0222	1,0121	1,0023	0,993	0,9839	0,9752
74,2	1,2194	1,1967	1,176	1,157	1,1394	1,123	1,1076	1,0932	1,0795	1,0666	1,0544	1,0428	1,0317	1,0211	1,0109	1,0012	0,9918	0,9828	0,9741
74,3	1,2181	1,1955	1,1748	1,1558	1,1382	1,1218	1,1064	1,092	1,0783	1,0655	1,0532	1,0416	1,0305	1,0199	1,0097	1	0,9906	0,9816	0,9729
74,4	1,2169	1,1943	1,1736	1,1546	1,137	1,1206	1,1052	1,0908	1,0772	1,0643	1,052	1,0404	1,0293	1,0187	1,0086	0,9988	0,9894	0,9804	0,9717

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
71	1,0026	0,9945	0,9866	0,9789	0,9715	0,9643	0,9573	0,9505	0,9439	0,9375	0,9312	0,9251	0,9191	0,9133	0,9076	0,9021	0,8966	0,8913	0,8861
71,1	1,0015	0,9933	0,9854	0,9778	0,9704	0,9632	0,9562	0,9494	0,9428	0,9363	0,9301	0,9239	0,918	0,9122	0,9065	0,9009	0,8955	0,8902	0,885
71,2	1,0003	0,9922	0,9843	0,9766	0,9692	0,962	0,955	0,9482	0,9416	0,9352	0,9289	0,9228	0,9169	0,911	0,9054	0,8998	0,8944	0,8891	0,8839
71,3	0,9992	0,991	0,9831	0,9755	0,9681	0,9609	0,9539	0,9471	0,9405	0,9341	0,9278	0,9217	0,9157	0,9099	0,9042	0,8987	0,8933	0,8879	0,8828
71,4	0,998	0,9899	0,982	0,9743	0,9669	0,9597	0,9528	0,946	0,9394	0,9329	0,9267	0,9206	0,9146	0,9088	0,9031	0,8976	0,8921	0,8868	0,8816
71,5	0,9969	0,9887	0,9808	0,9732	0,9658	0,9586	0,9516	0,9448	0,9382	0,9318	0,9255	0,9194	0,9135	0,9077	0,902	0,8964	0,891	0,8857	0,8805
71,6	0,9957	0,9876	0,9797	0,9721	0,9647	0,9575	0,9505	0,9437	0,9371	0,9307	0,9244	0,9183	0,9124	0,9065	0,9009	0,8953	0,8899	0,8846	0,8794
71,7	0,9946	0,9864	0,9786	0,9709	0,9635	0,9563	0,9494	0,9426	0,936	0,9295	0,9233	0,9172	0,9112	0,9054	0,8997	0,8942	0,8888	0,8835	0,8783
71,8	0,9935	0,9853	0,9774	0,9698	0,9624	0,9552	0,9482	0,9414	0,9348	0,9284	0,9221	0,916	0,9101	0,9043	0,8986	0,8931	0,8876	0,8823	0,8771
71,9	0,9923	0,9842	0,9763	0,9686	0,9612	0,954	0,9471	0,9403	0,9337	0,9273	0,921	0,9149	0,909	0,9032	0,8975	0,8919	0,8865	0,8812	0,876
72	0,9912	0,983	0,9751	0,9675	0,9601	0,9529	0,9459	0,9392	0,9326	0,9261	0,9199	0,9138	0,9078	0,902	0,8964	0,8908	0,8854	0,8801	0,8749
72,1	0,99	0,9819	0,974	0,9663	0,9589	0,9518	0,9448	0,938	0,9314	0,925	0,9187	0,9126	0,9067	0,9009	0,8952	0,8897	0,8843	0,879	0,8738
72,2	0,9889	0,9807	0,9728	0,9652	0,9578	0,9506	0,9437	0,9369	0,9303	0,9239	0,9176	0,9115	0,9056	0,8998	0,8941	0,8885	0,8831	0,8778	0,8726
72,3	0,9877	0,9796	0,9717	0,9641	0,9567	0,9495	0,9425	0,9357	0,9291	0,9227	0,9165	0,9104	0,9044	0,8986	0,893	0,8874	0,882	0,8767	0,8715
72,4	0,9865	0,9784	0,9705	0,9629	0,9555	0,9483	0,9414	0,9346	0,928	0,9216	0,9153	0,9092	0,9033	0,8975	0,8918	0,8863	0,8809	0,8756	0,8704
72,5	0,9854	0,9773	0,9694	0,9618	0,9544	0,9472	0,9402	0,9335	0,9269	0,9204	0,9142	0,9081	0,9022	0,8964	0,8907	0,8852	0,8797	0,8745	0,8693
72,6	0,9842	0,9761	0,9682	0,9606	0,9532	0,946	0,9391	0,9323	0,9257	0,9193	0,9131	0,907	0,901	0,8952	0,8896	0,884	0,8786	0,8733	0,8681
72,7	0,9831	0,975	0,9671	0,9595	0,9521	0,9449	0,9379	0,9312	0,9246	0,9182	0,9119	0,9058	0,8999	0,8941	0,8884	0,8829	0,8775	0,8722	0,867
72,8	0,9819	0,9738	0,9659	0,9583	0,9509	0,9438	0,9368	0,93	0,9234	0,917	0,9108	0,9047	0,8988	0,893	0,8873	0,8818	0,8764	0,8711	0,8659
72,9	0,9808	0,9726	0,9648	0,9572	0,9498	0,9426	0,9356	0,9289	0,9223	0,9159	0,9096	0,9036	0,8976	0,8918	0,8862	0,8806	0,8752	0,8699	0,8648
73	0,9796	0,9715	0,9636	0,956	0,9486	0,9415	0,9345	0,9277	0,9212	0,9147	0,9085	0,9024	0,8965	0,8907	0,885	0,8795	0,8741	0,8688	0,8636
73,1	0,9785	0,9703	0,9625	0,9549	0,9475	0,9403	0,9334	0,9266	0,92	0,9136	0,9074	0,9013	0,8953	0,8895	0,8839	0,8784	0,873	0,8677	0,8625
73,2	0,9773	0,9692	0,9613	0,9537	0,9463	0,9392	0,9322	0,9254	0,9189	0,9125	0,9062	0,9001	0,8942	0,8884	0,8828	0,8772	0,8718	0,8665	0,8614
73,3	0,9761	0,968	0,9602	0,9526	0,9452	0,938	0,9311	0,9243	0,9177	0,9113	0,9051	0,899	0,8931	0,8873	0,8816	0,8761	0,8707	0,8654	0,8602
73,4	0,975	0,9669	0,959	0,9514	0,944	0,9369	0,9299	0,9231	0,9166	0,9102	0,9039	0,8979	0,8919	0,8861	0,8805	0,875	0,8695	0,8643	0,8591
73,5	0,9738	0,9657	0,9579	0,9502	0,9429	0,9357	0,9288	0,922	0,9154	0,909	0,9028	0,8967	0,8908	0,885	0,8793	0,8738	0,8684	0,8631	0,858
73,6	0,9727	0,9646	0,9567	0,9491	0,9417	0,9346	0,9276	0,9209	0,9143	0,9079	0,9016	0,8956	0,8896	0,8839	0,8782	0,8727	0,8673	0,862	0,8568
73,7	0,9715	0,9634	0,9555	0,9479	0,9406	0,9334	0,9265	0,9197	0,9131	0,9067	0,9005	0,8944	0,8885	0,8827	0,8771	0,8715	0,8661	0,8609	0,8557
73,8	0,9703	0,9622	0,9544	0,9468	0,9394	0,9323	0,9253	0,9186	0,912	0,9056	0,8994	0,8933	0,8874	0,8816	0,8759	0,8704	0,865	0,8597	0,8545
73,9	0,9692	0,9611	0,9532	0,9456	0,9382	0,9311	0,9242	0,9174	0,9108	0,9044	0,8982	0,8921	0,8862	0,8804	0,8748	0,8693	0,8639	0,8586	0,8534
74	0,968	0,9599	0,9521	0,9445	0,9371	0,9299	0,923	0,9162	0,9097	0,9033	0,8971	0,891	0,8851	0,8793	0,8736	0,8681	0,8627	0,8574	0,8523
74,1	0,9669	0,9587	0,9509	0,9433	0,9359	0,9288	0,9218	0,9151	0,9085	0,9021	0,8959	0,8898	0,8839	0,8781	0,8725	0,867	0,8616	0,8563	0,8511
74,2	0,9657	0,9576	0,9497	0,9421	0,9348	0,9276	0,9207	0,9139	0,9074	0,901	0,8948	0,8887	0,8828	0,877	0,8713	0,8658	0,8604	0,8552	0,85
74,3	0,9645	0,9564	0,9486	0,941	0,9336	0,9265	0,9195	0,9128	0,9062	0,8998	0,8936	0,8875	0,8816	0,8758	0,8702	0,8647	0,8593	0,854	0,8488
74,4	0,9634	0,9553	0,9474	0,9398	0,9325	0,9253	0,9184	0,9116	0,9051	0,8987	0,8925	0,8864	0,8805	0,8747	0,869	0,8635	0,8581	0,8529	0,8477

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
71	0,881	0,876	0,8711	0,8663	0,8616	0,857	0,8525	0,8481	0,8437	0,8394	0,8352	0,8311	0,827	0,823	0,819	0,8152	0,8113	0,8076	0,8039
71,1	0,8799	0,8749	0,87	0,8652	0,8605	0,8559	0,8514	0,847	0,8426	0,8383	0,8341	0,83	0,8259	0,8219	0,8179	0,8141	0,8102	0,8065	0,8028
71,2	0,8788	0,8738	0,8689	0,8641	0,8594	0,8548	0,8503	0,8458	0,8415	0,8372	0,833	0,8288	0,8248	0,8208	0,8168	0,8129	0,8091	0,8054	0,8017
71,3	0,8777	0,8727	0,8678	0,863	0,8583	0,8537	0,8492	0,8447	0,8404	0,8361	0,8319	0,8277	0,8237	0,8197	0,8157	0,8118	0,808	0,8043	0,8006
71,4	0,8765	0,8716	0,8667	0,8619	0,8572	0,8526	0,8481	0,8436	0,8393	0,835	0,8308	0,8266	0,8226	0,8186	0,8146	0,8107	0,8069	0,8032	0,7995
71,5	0,8754	0,8704	0,8656	0,8608	0,8561	0,8515	0,847	0,8425	0,8382	0,8339	0,8297	0,8255	0,8215	0,8174	0,8135	0,8096	0,8058	0,8021	0,7984
71,6	0,8743	0,8693	0,8644	0,8597	0,855	0,8504	0,8458	0,8414	0,837	0,8328	0,8286	0,8244	0,8203	0,8163	0,8124	0,8085	0,8047	0,801	0,7973
71,7	0,8732	0,8682	0,8633	0,8585	0,8538	0,8492	0,8447	0,8403	0,8359	0,8316	0,8274	0,8233	0,8192	0,8152	0,8113	0,8074	0,8036	0,7999	0,7962
71,8	0,8721	0,8671	0,8622	0,8574	0,8527	0,8481	0,8436	0,8392	0,8348	0,8305	0,8263	0,8222	0,8181	0,8141	0,8102	0,8063	0,8025	0,7987	0,795
71,9	0,8709	0,866	0,8611	0,8563	0,8516	0,847	0,8425	0,8381	0,8337	0,8294	0,8252	0,8211	0,817	0,813	0,8091	0,8052	0,8014	0,7976	0,7939
72	0,8698	0,8648	0,86	0,8552	0,8505	0,8459	0,8414	0,8369	0,8326	0,8283	0,8241	0,82	0,8159	0,8119	0,808	0,8041	0,8003	0,7965	0,7928
72,1	0,8687	0,8637	0,8588	0,8541	0,8494	0,8448	0,8403	0,8358	0,8315	0,8272	0,823	0,8189	0,8148	0,8108	0,8069	0,803	0,7992	0,7954	0,7917
72,2	0,8676	0,8626	0,8577	0,8529	0,8483	0,8437	0,8391	0,8347	0,8304	0,8261	0,8219	0,8177	0,8137	0,8097	0,8058	0,8019	0,7981	0,7943	0,7906
72,3	0,8664	0,8615	0,8566	0,8518	0,8471	0,8425	0,838	0,8336	0,8292	0,825	0,8208	0,8166	0,8126	0,8086	0,8046	0,8008	0,797	0,7932	0,7895
72,4	0,8653	0,8603	0,8555	0,8507	0,846	0,8414	0,8369	0,8325	0,8281	0,8238	0,8196	0,8155	0,8115	0,8075	0,8035	0,7997	0,7958	0,7921	0,7884
72,5	0,8642	0,8592	0,8544	0,8496	0,8449	0,8403	0,8358	0,8314	0,827	0,8227	0,8185	0,8144	0,8103	0,8063	0,8024	0,7985	0,7947	0,791	0,7873
72,6	0,8631	0,8581	0,8532	0,8485	0,8438	0,8392	0,8347	0,8302	0,8259	0,8216	0,8174	0,8133	0,8092	0,8052	0,8013	0,7974	0,7936	0,7899	0,7862
72,7	0,8619	0,857	0,8521	0,8473	0,8426	0,838	0,8335	0,8291	0,8248	0,8205	0,8163	0,8122	0,8081	0,8041	0,8002	0,7963	0,7925	0,7888	0,7851
72,8	0,8608	0,8558	0,851	0,8462	0,8415	0,8369	0,8324	0,828	0,8236	0,8194	0,8152	0,811	0,807	0,803	0,7991	0,7952	0,7914	0,7877	0,784
72,9	0,8597	0,8547	0,8498	0,8451	0,8404	0,8358	0,8313	0,8269	0,8225	0,8183	0,8141	0,8099	0,8059	0,8019	0,798	0,7941	0,7903	0,7865	0,7829
73	0,8586	0,8536	0,8487	0,8439	0,8393	0,8347	0,8302	0,8257	0,8214	0,8171	0,8129	0,8088	0,8048	0,8008	0,7968	0,793	0,7892	0,7854	0,7817
73,1	0,8574	0,8525	0,8476	0,8428	0,8381	0,8336	0,829	0,8246	0,8203	0,816	0,8118	0,8077	0,8036	0,7996	0,7957	0,7919	0,7881	0,7843	0,7806
73,2	0,8563	0,8513	0,8465	0,8417	0,837	0,8324	0,8279	0,8235	0,8192	0,8149	0,8107	0,8066	0,8025	0,7985	0,7946	0,7907	0,7869	0,7832	0,7795
73,3	0,8552	0,8502	0,8453	0,8406	0,8359	0,8313	0,8268	0,8224	0,818	0,8138	0,8096	0,8054	0,8014	0,7974	0,7935	0,7896	0,7858	0,7821	0,7784
73,4	0,854	0,8491	0,8442	0,8394	0,8348	0,8302	0,8257	0,8212	0,8169	0,8126	0,8084	0,8043	0,8003	0,7963	0,7924	0,7885	0,7847	0,781	0,7773
73,5	0,8529	0,8479	0,8431	0,8383	0,8336	0,829	0,8245	0,8201	0,8158	0,8115	0,8073	0,8032	0,7992	0,7952	0,7912	0,7874	0,7836	0,7798	0,7762
73,6	0,8518	0,8468	0,8419	0,8372	0,8325	0,8279	0,8234	0,819	0,8147	0,8104	0,8062	0,8021	0,798	0,794	0,7901	0,7863	0,7825	0,7787	0,775
73,7	0,8506	0,8457	0,8408	0,836	0,8314	0,8268	0,8223	0,8179	0,8135	0,8093	0,8051	0,801	0,7969	0,7929	0,789	0,7851	0,7813	0,7776	0,7739
73,8	0,8495	0,8445	0,8397	0,8349	0,8302	0,8257	0,8212	0,8167	0,8124	0,8081	0,8039	0,7998	0,7958	0,7918	0,7879	0,784	0,7802	0,7765	0,7728
73,9	0,8483	0,8434	0,8385	0,8338	0,8291	0,8245	0,82	0,8156	0,8113	0,807	0,8028	0,7987	0,7947	0,7907	0,7868	0,7829	0,7791	0,7754	0,7717
74	0,8472	0,8423	0,8374	0,8326	0,828	0,8234	0,8189	0,8145	0,8101	0,8059	0,8017	0,7976	0,7935	0,7895	0,7856	0,7818	0,778	0,7742	0,7706
74,1	0,8461	0,8411	0,8363	0,8315	0,8268	0,8223	0,8178	0,8133	0,809	0,8047	0,8006	0,7964	0,7924	0,7884	0,7845	0,7806	0,7769	0,7731	0,7694
74,2	0,8449	0,84	0,8351	0,8304	0,8257	0,8211	0,8166	0,8122	0,8079	0,8036	0,7994	0,7953	0,7913	0,7873	0,7834	0,7795	0,7757	0,772	0,7683
74,3	0,8438	0,8388	0,834	0,8292	0,8246	0,82	0,8155	0,8111	0,8067	0,8025	0,7983	0,7942	0,7901	0,7862	0,7822	0,7784	0,7746	0,7709	0,7672
74,4	0,8426	0,8377	0,8328	0,8281	0,8234	0,8188	0,8144	0,8099	0,8056	0,8014	0,7972	0,7931	0,789	0,785	0,7811	0,7773	0,7735	0,7697	0,7661

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
71	0,8002	0,7966	0,7931	0,7896	0,7861	0,7827	0,7794	0,7761	0,7728	0,7696	0,7664	0,7633	0,7602	0,7571	0,7541	0,7511	0,7482	0,7453	0,7424
71,1	0,7991	0,7955	0,792	0,7885	0,785	0,7816	0,7783	0,775	0,7717	0,7685	0,7653	0,7622	0,7591	0,756	0,753	0,75	0,7471	0,7442	0,7413
71,2	0,798	0,7944	0,7909	0,7874	0,7839	0,7805	0,7772	0,7739	0,7706	0,7674	0,7642	0,7611	0,758	0,755	0,7519	0,7489	0,746	0,7431	0,7402
71,3	0,7969	0,7933	0,7898	0,7863	0,7828	0,7795	0,7761	0,7728	0,7695	0,7663	0,7631	0,76	0,7569	0,7539	0,7508	0,7479	0,7449	0,742	0,7391
71,4	0,7958	0,7922	0,7887	0,7852	0,7818	0,7784	0,775	0,7717	0,7684	0,7652	0,7621	0,7589	0,7558	0,7528	0,7497	0,7468	0,7438	0,7409	0,738
71,5	0,7947	0,7911	0,7876	0,7841	0,7807	0,7773	0,7739	0,7706	0,7674	0,7641	0,761	0,7578	0,7547	0,7517	0,7487	0,7457	0,7427	0,7398	0,7369
71,6	0,7936	0,79	0,7865	0,783	0,7796	0,7762	0,7728	0,7695	0,7663	0,763	0,7599	0,7567	0,7536	0,7506	0,7476	0,7446	0,7416	0,7387	0,7358
71,7	0,7925	0,7889	0,7854	0,7819	0,7785	0,7751	0,7717	0,7684	0,7652	0,7619	0,7588	0,7556	0,7525	0,7495	0,7465	0,7435	0,7405	0,7376	0,7348
71,8	0,7914	0,7878	0,7843	0,7808	0,7774	0,774	0,7706	0,7673	0,7641	0,7608	0,7577	0,7545	0,7514	0,7484	0,7454	0,7424	0,7395	0,7365	0,7337
71,9	0,7903	0,7867	0,7832	0,7797	0,7763	0,7729	0,7695	0,7662	0,763	0,7597	0,7566	0,7534	0,7504	0,7473	0,7443	0,7413	0,7384	0,7355	0,7326
72	0,7892	0,7856	0,7821	0,7786	0,7751	0,7718	0,7684	0,7651	0,7619	0,7586	0,7555	0,7523	0,7493	0,7462	0,7432	0,7402	0,7373	0,7344	0,7315
72,1	0,7881	0,7845	0,781	0,7775	0,774	0,7707	0,7673	0,764	0,7608	0,7575	0,7544	0,7512	0,7482	0,7451	0,7421	0,7391	0,7362	0,7333	0,7304
72,2	0,787	0,7834	0,7799	0,7764	0,7729	0,7696	0,7662	0,7629	0,7597	0,7564	0,7533	0,7501	0,7471	0,744	0,741	0,738	0,7351	0,7322	0,7293
72,3	0,7859	0,7823	0,7788	0,7753	0,7718	0,7684	0,7651	0,7618	0,7586	0,7553	0,7522	0,749	0,746	0,7429	0,7399	0,7369	0,734	0,7311	0,7282
72,4	0,7848	0,7812	0,7776	0,7742	0,7707	0,7673	0,764	0,7607	0,7575	0,7542	0,7511	0,7479	0,7449	0,7418	0,7388	0,7358	0,7329	0,73	0,7271
72,5	0,7837	0,7801	0,7765	0,7731	0,7696	0,7662	0,7629	0,7596	0,7564	0,7531	0,75	0,7468	0,7438	0,7407	0,7377	0,7347	0,7318	0,7289	0,726
72,6	0,7825	0,779	0,7754	0,772	0,7685	0,7651	0,7618	0,7585	0,7552	0,752	0,7489	0,7457	0,7427	0,7396	0,7366	0,7336	0,7307	0,7278	0,7249
72,7	0,7814	0,7779	0,7743	0,7708	0,7674	0,764	0,7607	0,7574	0,7541	0,7509	0,7478	0,7446	0,7416	0,7385	0,7355	0,7325	0,7296	0,7267	0,7238
72,8	0,7803	0,7767	0,7732	0,7697	0,7663	0,7629	0,7596	0,7563	0,753	0,7498	0,7467	0,7435	0,7405	0,7374	0,7344	0,7314	0,7285	0,7256	0,7227
72,9	0,7792	0,7756	0,7721	0,7686	0,7652	0,7618	0,7585	0,7552	0,7519	0,7487	0,7456	0,7424	0,7394	0,7363	0,7333	0,7303	0,7274	0,7245	0,7216
73	0,7781	0,7745	0,771	0,7675	0,7641	0,7607	0,7574	0,7541	0,7508	0,7476	0,7445	0,7413	0,7382	0,7352	0,7322	0,7292	0,7263	0,7234	0,7205
73,1	0,777	0,7734	0,7699	0,7664	0,763	0,7596	0,7563	0,753	0,7497	0,7465	0,7433	0,7402	0,7371	0,7341	0,7311	0,7281	0,7252	0,7223	0,7194
73,2	0,7759	0,7723	0,7688	0,7653	0,7619	0,7585	0,7551	0,7519	0,7486	0,7454	0,7422	0,7391	0,736	0,733	0,73	0,727	0,7241	0,7212	0,7183
73,3	0,7748	0,7712	0,7677	0,7642	0,7607	0,7574	0,754	0,7507	0,7475	0,7443	0,7411	0,738	0,7349	0,7319	0,7289	0,7259	0,723	0,7201	0,7172
73,4	0,7736	0,7701	0,7665	0,7631	0,7596	0,7563	0,7529	0,7496	0,7464	0,7432	0,74	0,7369	0,7338	0,7308	0,7278	0,7248	0,7219	0,719	0,7161
73,5	0,7725	0,769	0,7654	0,7619	0,7585	0,7551	0,7518	0,7485	0,7453	0,7421	0,7389	0,7358	0,7327	0,7297	0,7267	0,7237	0,7208	0,7179	0,715
73,6	0,7714	0,7678	0,7643	0,7608	0,7574	0,754	0,7507	0,7474	0,7442	0,741	0,7378	0,7347	0,7316	0,7286	0,7256	0,7226	0,7197	0,7168	0,7139
73,7	0,7703	0,7667	0,7632	0,7597	0,7563	0,7529	0,7496	0,7463	0,7431	0,7399	0,7367	0,7336	0,7305	0,7275	0,7244	0,7215	0,7185	0,7156	0,7128
73,8	0,7692	0,7656	0,7621	0,7586	0,7552	0,7518	0,7485	0,7452	0,7419	0,7387	0,7356	0,7325	0,7294	0,7263	0,7233	0,7204	0,7174	0,7145	0,7117
73,9	0,7681	0,7645	0,761	0,7575	0,7541	0,7507	0,7474	0,7441	0,7408	0,7376	0,7345	0,7313	0,7283	0,7252	0,7222	0,7193	0,7163	0,7134	0,7106
74	0,7669	0,7634	0,7598	0,7564	0,7529	0,7496	0,7462	0,743	0,7397	0,7365	0,7334	0,7302	0,7272	0,7241	0,7211	0,7181	0,7152	0,7123	0,7095
74,1	0,7658	0,7622	0,7587	0,7552	0,7518	0,7484	0,7451	0,7418	0,7386	0,7354	0,7322	0,7291	0,726	0,723	0,72	0,717	0,7141	0,7112	0,7083
74,2	0,7647	0,7611	0,7576	0,7541	0,7507	0,7473	0,744	0,7407	0,7375	0,7343	0,7311	0,728	0,7249	0,7219	0,7189	0,7159	0,713	0,7101	0,7072
74,3	0,7636	0,76	0,7565	0,753	0,7496	0,7462	0,7429	0,7396	0,7364	0,7332	0,73	0,7269	0,7238	0,7208	0,7178	0,7148	0,7119	0,709	0,7061
74,4	0,7624	0,7589	0,7553	0,7519	0,7485	0,7451	0,7418	0,7385	0,7352	0,732	0,7289	0,7258	0,7227	0,7197	0,7167	0,7137	0,7108	0,7079	0,705

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
71	0,7395	0,7367	0,7339	0,7312	0,7285	0,7258	0,7231	0,7205	0,7179	0,7153	0,7127	0,7102	0,7077	0,7052	0,7028	0,7004	0,6979	0,6956	0,6932
71,1	0,7384	0,7356	0,7328	0,7301	0,7274	0,7247	0,722	0,7194	0,7168	0,7142	0,7117	0,7091	0,7066	0,7042	0,7017	0,6993	0,6969	0,6945	0,6921
71,2	0,7374	0,7345	0,7318	0,729	0,7263	0,7236	0,7209	0,7183	0,7157	0,7131	0,7106	0,708	0,7055	0,7031	0,7006	0,6982	0,6958	0,6934	0,6911
71,3	0,7363	0,7335	0,7307	0,7279	0,7252	0,7225	0,7199	0,7172	0,7146	0,712	0,7095	0,707	0,7045	0,702	0,6995	0,6971	0,6947	0,6923	0,69
71,4	0,7352	0,7324	0,7296	0,7268	0,7241	0,7214	0,7188	0,7161	0,7135	0,711	0,7084	0,7059	0,7034	0,7009	0,6985	0,696	0,6936	0,6913	0,6889
71,5	0,7341	0,7313	0,7285	0,7258	0,723	0,7203	0,7177	0,7151	0,7125	0,7099	0,7073	0,7048	0,7023	0,6998	0,6974	0,695	0,6926	0,6902	0,6878
71,6	0,733	0,7302	0,7274	0,7247	0,722	0,7193	0,7166	0,714	0,7114	0,7088	0,7062	0,7037	0,7012	0,6987	0,6963	0,6939	0,6915	0,6891	0,6867
71,7	0,7319	0,7291	0,7263	0,7236	0,7209	0,7182	0,7155	0,7129	0,7103	0,7077	0,7052	0,7026	0,7001	0,6977	0,6952	0,6928	0,6904	0,688	0,6857
71,8	0,7308	0,728	0,7252	0,7225	0,7198	0,7171	0,7144	0,7118	0,7092	0,7066	0,7041	0,7016	0,6991	0,6966	0,6941	0,6917	0,6893	0,6869	0,6846
71,9	0,7297	0,7269	0,7241	0,7214	0,7187	0,716	0,7133	0,7107	0,7081	0,7055	0,703	0,7005	0,698	0,6955	0,693	0,6906	0,6882	0,6859	0,6835
72	0,7286	0,7258	0,7231	0,7203	0,7176	0,7149	0,7123	0,7096	0,707	0,7044	0,7019	0,6994	0,6969	0,6944	0,692	0,6895	0,6871	0,6848	0,6824
72,1	0,7275	0,7247	0,722	0,7192	0,7165	0,7138	0,7112	0,7085	0,7059	0,7034	0,7008	0,6983	0,6958	0,6933	0,6909	0,6885	0,6861	0,6837	0,6813
72,2	0,7265	0,7236	0,7209	0,7181	0,7154	0,7127	0,7101	0,7074	0,7048	0,7023	0,6997	0,6972	0,6947	0,6922	0,6898	0,6874	0,685	0,6826	0,6802
72,3	0,7254	0,7226	0,7198	0,717	0,7143	0,7116	0,709	0,7064	0,7038	0,7012	0,6986	0,6961	0,6936	0,6912	0,6887	0,6863	0,6839	0,6815	0,6792
72,4	0,7243	0,7215	0,7187	0,7159	0,7132	0,7105	0,7079	0,7053	0,7027	0,7001	0,6975	0,695	0,6925	0,6901	0,6876	0,6852	0,6828	0,6804	0,6781
72,5	0,7232	0,7204	0,7176	0,7148	0,7121	0,7094	0,7068	0,7042	0,7016	0,699	0,6965	0,6939	0,6914	0,689	0,6865	0,6841	0,6817	0,6793	0,677
72,6	0,7221	0,7193	0,7165	0,7138	0,711	0,7084	0,7057	0,7031	0,7005	0,6979	0,6954	0,6928	0,6904	0,6879	0,6854	0,683	0,6806	0,6783	0,6759
72,7	0,721	0,7182	0,7154	0,7127	0,7099	0,7073	0,7046	0,702	0,6994	0,6968	0,6943	0,6918	0,6893	0,6868	0,6844	0,6819	0,6795	0,6772	0,6748
72,8	0,7199	0,7171	0,7143	0,7116	0,7088	0,7062	0,7035	0,7009	0,6983	0,6957	0,6932	0,6907	0,6882	0,6857	0,6833	0,6808	0,6784	0,6761	0,6737
72,9	0,7188	0,716	0,7132	0,7105	0,7077	0,7051	0,7024	0,6998	0,6972	0,6946	0,6921	0,6896	0,6871	0,6846	0,6822	0,6798	0,6774	0,675	0,6726
73	0,7177	0,7149	0,7121	0,7094	0,7067	0,704	0,7013	0,6987	0,6961	0,6935	0,691	0,6885	0,686	0,6835	0,6811	0,6787	0,6763	0,6739	0,6715
73,1	0,7166	0,7138	0,711	0,7083	0,7056	0,7029	0,7002	0,6976	0,695	0,6924	0,6899	0,6874	0,6849	0,6824	0,68	0,6776	0,6752	0,6728	0,6705
73,2	0,7155	0,7127	0,7099	0,7072	0,7045	0,7018	0,6991	0,6965	0,6939	0,6913	0,6888	0,6863	0,6838	0,6813	0,6789	0,6765	0,6741	0,6717	0,6694
73,3	0,7144	0,7116	0,7088	0,7061	0,7034	0,7007	0,698	0,6954	0,6928	0,6902	0,6877	0,6852	0,6827	0,6802	0,6778	0,6754	0,673	0,6706	0,6683
73,4	0,7133	0,7105	0,7077	0,705	0,7023	0,6996	0,6969	0,6943	0,6917	0,6891	0,6866	0,6841	0,6816	0,6791	0,6767	0,6743	0,6719	0,6695	0,6672
73,5	0,7122	0,7094	0,7066	0,7039	0,7012	0,6985	0,6958	0,6932	0,6906	0,688	0,6855	0,683	0,6805	0,678	0,6756	0,6732	0,6708	0,6684	0,6661
73,6	0,7111	0,7083	0,7055	0,7028	0,7	0,6974	0,6947	0,6921	0,6895	0,6869	0,6844	0,6819	0,6794	0,6769	0,6745	0,6721	0,6697	0,6673	0,665
73,7	0,71	0,7072	0,7044	0,7017	0,6989	0,6963	0,6936	0,691	0,6884	0,6858	0,6833	0,6808	0,6783	0,6758	0,6734	0,671	0,6686	0,6662	0,6639
73,8	0,7088	0,706	0,7033	0,7005	0,6978	0,6952	0,6925	0,6899	0,6873	0,6847	0,6822	0,6797	0,6772	0,6747	0,6723	0,6699	0,6675	0,6651	0,6628
73,9	0,7077	0,7049	0,7022	0,6994	0,6967	0,6941	0,6914	0,6888	0,6862	0,6836	0,6811	0,6786	0,6761	0,6736	0,6712	0,6688	0,6664	0,664	0,6617
74	0,7066	0,7038	0,7011	0,6983	0,6956	0,693	0,6903	0,6877	0,6851	0,6825	0,68	0,6775	0,675	0,6725	0,6701	0,6677	0,6653	0,6629	0,6606
74,1	0,7055	0,7027	0,7	0,6972	0,6945	0,6918	0,6892	0,6866	0,684	0,6814	0,6789	0,6764	0,6739	0,6714	0,669	0,6666	0,6642	0,6618	0,6595
74,2	0,7044	0,7016	0,6988	0,6961	0,6934	0,6907	0,6881	0,6855	0,6829	0,6803	0,6778	0,6753	0,6728	0,6703	0,6679	0,6655	0,6631	0,6607	0,6584
74,3	0,7033	0,7005	0,6977	0,695	0,6923	0,6896	0,687	0,6844	0,6818	0,6792	0,6767	0,6742	0,6717	0,6692	0,6668	0,6644	0,662	0,6596	0,6573
74,4	0,7022	0,6994	0,6966	0,6939	0,6912	0,6885	0,6859	0,6833	0,6807	0,6781	0,6756	0,6731	0,6706	0,6681	0,6657	0,6633	0,6609	0,6585	0,6562

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
71	0,6909	0,6886	0,6863	0,684	0,6817	0,6795	0,6773	0,6751	0,6729	0,6708	0,6686	0,6665	0,6644	0,6624	0,6603	0,6582	0,6562	0,6542	0,6522
71,1	0,6898	0,6875	0,6852	0,6829	0,6807	0,6784	0,6762	0,674	0,6719	0,6697	0,6676	0,6655	0,6634	0,6613	0,6592	0,6572	0,6551	0,6531	0,6511
71,2	0,6887	0,6864	0,6841	0,6818	0,6796	0,6774	0,6752	0,673	0,6708	0,6686	0,6665	0,6644	0,6623	0,6602	0,6581	0,6561	0,6541	0,6521	0,6501
71,3	0,6876	0,6853	0,683	0,6808	0,6785	0,6763	0,6741	0,6719	0,6697	0,6676	0,6654	0,6633	0,6612	0,6591	0,6571	0,655	0,653	0,651	0,649
71,4	0,6866	0,6843	0,682	0,6797	0,6774	0,6752	0,673	0,6708	0,6686	0,6665	0,6644	0,6622	0,6601	0,6581	0,656	0,654	0,6519	0,6499	0,6479
71,5	0,6855	0,6832	0,6809	0,6786	0,6764	0,6741	0,6719	0,6697	0,6676	0,6654	0,6633	0,6612	0,6591	0,657	0,6549	0,6529	0,6509	0,6489	0,6469
71,6	0,6844	0,6821	0,6798	0,6775	0,6753	0,6731	0,6709	0,6687	0,6665	0,6643	0,6622	0,6601	0,658	0,6559	0,6539	0,6518	0,6498	0,6478	0,6458
71,7	0,6833	0,681	0,6787	0,6765	0,6742	0,672	0,6698	0,6676	0,6654	0,6633	0,6611	0,659	0,6569	0,6548	0,6528	0,6507	0,6487	0,6467	0,6447
71,8	0,6822	0,6799	0,6776	0,6754	0,6731	0,6709	0,6687	0,6665	0,6643	0,6622	0,6601	0,6579	0,6559	0,6538	0,6517	0,6497	0,6476	0,6456	0,6436
71,9	0,6812	0,6789	0,6766	0,6743	0,6721	0,6698	0,6676	0,6654	0,6633	0,6611	0,659	0,6569	0,6548	0,6527	0,6506	0,6486	0,6466	0,6446	0,6426
72	0,6801	0,6778	0,6755	0,6732	0,671	0,6687	0,6665	0,6644	0,6622	0,66	0,6579	0,6558	0,6537	0,6516	0,6496	0,6475	0,6455	0,6435	0,6415
72,1	0,679	0,6767	0,6744	0,6721	0,6699	0,6677	0,6655	0,6633	0,6611	0,659	0,6568	0,6547	0,6526	0,6505	0,6485	0,6464	0,6444	0,6424	0,6404
72,2	0,6779	0,6756	0,6733	0,6711	0,6688	0,6666	0,6644	0,6622	0,66	0,6579	0,6557	0,6536	0,6515	0,6495	0,6474	0,6454	0,6433	0,6413	0,6393
72,3	0,6768	0,6745	0,6722	0,67	0,6677	0,6655	0,6633	0,6611	0,6589	0,6568	0,6547	0,6526	0,6505	0,6484	0,6463	0,6443	0,6423	0,6403	0,6383
72,4	0,6757	0,6734	0,6712	0,6689	0,6666	0,6644	0,6622	0,66	0,6579	0,6557	0,6536	0,6515	0,6494	0,6473	0,6453	0,6432	0,6412	0,6392	0,6372
72,5	0,6747	0,6724	0,6701	0,6678	0,6656	0,6633	0,6611	0,6589	0,6568	0,6546	0,6525	0,6504	0,6483	0,6462	0,6442	0,6421	0,6401	0,6381	0,6361
72,6	0,6736	0,6713	0,669	0,6667	0,6645	0,6623	0,66	0,6579	0,6557	0,6536	0,6514	0,6493	0,6472	0,6451	0,6431	0,6411	0,639	0,637	0,635
72,7	0,6725	0,6702	0,6679	0,6656	0,6634	0,6612	0,659	0,6568	0,6546	0,6525	0,6503	0,6482	0,6461	0,6441	0,642	0,64	0,6379	0,6359	0,634
72,8	0,6714	0,6691	0,6668	0,6645	0,6623	0,6601	0,6579	0,6557	0,6535	0,6514	0,6493	0,6471	0,6451	0,643	0,6409	0,6389	0,6369	0,6349	0,6329
72,9	0,6703	0,668	0,6657	0,6635	0,6612	0,659	0,6568	0,6546	0,6524	0,6503	0,6482	0,6461	0,644	0,6419	0,6398	0,6378	0,6358	0,6338	0,6318
73	0,6692	0,6669	0,6646	0,6624	0,6601	0,6579	0,6557	0,6535	0,6514	0,6492	0,6471	0,645	0,6429	0,6408	0,6388	0,6367	0,6347	0,6327	0,6307
73,1	0,6681	0,6658	0,6635	0,6613	0,659	0,6568	0,6546	0,6524	0,6503	0,6481	0,646	0,6439	0,6418	0,6397	0,6377	0,6356	0,6336	0,6316	0,6296
73,2	0,667	0,6647	0,6625	0,6602	0,6579	0,6557	0,6535	0,6513	0,6492	0,647	0,6449	0,6428	0,6407	0,6386	0,6366	0,6346	0,6325	0,6305	0,6285
73,3	0,6659	0,6636	0,6614	0,6591	0,6569	0,6546	0,6524	0,6503	0,6481	0,646	0,6438	0,6417	0,6396	0,6376	0,6355	0,6335	0,6314	0,6294	0,6275
73,4	0,6649	0,6625	0,6603	0,658	0,6558	0,6535	0,6513	0,6492	0,647	0,6449	0,6427	0,6406	0,6385	0,6365	0,6344	0,6324	0,6304	0,6284	0,6264
73,5	0,6638	0,6615	0,6592	0,6569	0,6547	0,6525	0,6503	0,6481	0,6459	0,6438	0,6416	0,6395	0,6375	0,6354	0,6333	0,6313	0,6293	0,6273	0,6253
73,6	0,6627	0,6604	0,6581	0,6558	0,6536	0,6514	0,6492	0,647	0,6448	0,6427	0,6406	0,6385	0,6364	0,6343	0,6322	0,6302	0,6282	0,6262	0,6242
73,7	0,6616	0,6593	0,657	0,6547	0,6525	0,6503	0,6481	0,6459	0,6437	0,6416	0,6395	0,6374	0,6353	0,6332	0,6312	0,6291	0,6271	0,6251	0,6231
73,8	0,6605	0,6582	0,6559	0,6536	0,6514	0,6492	0,647	0,6448	0,6426	0,6405	0,6384	0,6363	0,6342	0,6321	0,6301	0,628	0,626	0,624	0,622
73,9	0,6594	0,6571	0,6548	0,6525	0,6503	0,6481	0,6459	0,6437	0,6415	0,6394	0,6373	0,6352	0,6331	0,631	0,629	0,6269	0,6249	0,6229	0,6209
74	0,6583	0,656	0,6537	0,6514	0,6492	0,647	0,6448	0,6426	0,6404	0,6383	0,6362	0,6341	0,632	0,6299	0,6279	0,6258	0,6238	0,6218	0,6198
74,1	0,6572	0,6549	0,6526	0,6503	0,6481	0,6459	0,6437	0,6415	0,6394	0,6372	0,6351	0,633	0,6309	0,6288	0,6268	0,6247	0,6227	0,6207	0,6187
74,2	0,6561	0,6538	0,6515	0,6492	0,647	0,6448	0,6426	0,6404	0,6383	0,6361	0,634	0,6319	0,6298	0,6277	0,6257	0,6237	0,6216	0,6196	0,6177
74,3	0,655	0,6527	0,6504	0,6481	0,6459	0,6437	0,6415	0,6393	0,6372	0,635	0,6329	0,6308	0,6287	0,6266	0,6246	0,6226	0,6205	0,6185	0,6166
74,4	0,6539	0,6516	0,6493	0,647	0,6448	0,6426	0,6404	0,6382	0,6361	0,6339	0,6318	0,6297	0,6276	0,6255	0,6235	0,6215	0,6194	0,6174	0,6155

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
71	0,6502	0,6483	0,6463	0,6444	0,6424	0,6405	0,6386	0,6368	0,6349	0,6331	0,6312	0,6294	0,6276	0,6258	0,624	0,6222	0,6205	0,6187	0,617
71,1	0,6491	0,6472	0,6452	0,6433	0,6414	0,6395	0,6376	0,6357	0,6338	0,632	0,6302	0,6283	0,6265	0,6247	0,623	0,6212	0,6194	0,6177	0,6159
71,2	0,6481	0,6461	0,6442	0,6422	0,6403	0,6384	0,6365	0,6346	0,6328	0,6309	0,6291	0,6273	0,6255	0,6237	0,6219	0,6201	0,6184	0,6166	0,6149
71,3	0,647	0,645	0,6431	0,6412	0,6392	0,6373	0,6355	0,6336	0,6317	0,6299	0,628	0,6262	0,6244	0,6226	0,6208	0,6191	0,6173	0,6156	0,6138
71,4	0,6459	0,644	0,642	0,6401	0,6382	0,6363	0,6344	0,6325	0,6306	0,6288	0,627	0,6251	0,6233	0,6215	0,6198	0,618	0,6162	0,6145	0,6128
71,5	0,6449	0,6429	0,641	0,639	0,6371	0,6352	0,6333	0,6314	0,6296	0,6277	0,6259	0,6241	0,6223	0,6205	0,6187	0,6169	0,6152	0,6134	0,6117
71,6	0,6438	0,6418	0,6399	0,638	0,636	0,6341	0,6322	0,6304	0,6285	0,6267	0,6248	0,623	0,6212	0,6194	0,6176	0,6159	0,6141	0,6124	0,6106
71,7	0,6427	0,6408	0,6388	0,6369	0,635	0,6331	0,6312	0,6293	0,6274	0,6256	0,6238	0,6219	0,6201	0,6183	0,6166	0,6148	0,613	0,6113	0,6096
71,8	0,6417	0,6397	0,6377	0,6358	0,6339	0,632	0,6301	0,6282	0,6264	0,6245	0,6227	0,6209	0,6191	0,6173	0,6155	0,6137	0,612	0,6102	0,6085
71,9	0,6406	0,6386	0,6367	0,6347	0,6328	0,6309	0,629	0,6272	0,6253	0,6235	0,6216	0,6198	0,618	0,6162	0,6144	0,6127	0,6109	0,6092	0,6074
72	0,6395	0,6376	0,6356	0,6337	0,6318	0,6299	0,628	0,6261	0,6242	0,6224	0,6206	0,6187	0,6169	0,6151	0,6134	0,6116	0,6098	0,6081	0,6064
72,1	0,6384	0,6365	0,6345	0,6326	0,6307	0,6288	0,6269	0,625	0,6232	0,6213	0,6195	0,6177	0,6159	0,6141	0,6123	0,6105	0,6088	0,607	0,6053
72,2	0,6374	0,6354	0,6335	0,6315	0,6296	0,6277	0,6258	0,624	0,6221	0,6202	0,6184	0,6166	0,6148	0,613	0,6112	0,6095	0,6077	0,606	0,6042
72,3	0,6363	0,6343	0,6324	0,6305	0,6285	0,6266	0,6247	0,6229	0,621	0,6192	0,6173	0,6155	0,6137	0,6119	0,6102	0,6084	0,6066	0,6049	0,6032
72,4	0,6352	0,6333	0,6313	0,6294	0,6275	0,6256	0,6237	0,6218	0,6199	0,6181	0,6163	0,6145	0,6127	0,6109	0,6091	0,6073	0,6056	0,6038	0,6021
72,5	0,6341	0,6322	0,6302	0,6283	0,6264	0,6245	0,6226	0,6207	0,6189	0,617	0,6152	0,6134	0,6116	0,6098	0,608	0,6062	0,6045	0,6028	0,601
72,6	0,6331	0,6311	0,6292	0,6272	0,6253	0,6234	0,6215	0,6197	0,6178	0,616	0,6141	0,6123	0,6105	0,6087	0,6069	0,6052	0,6034	0,6017	0,6
72,7	0,632	0,63	0,6281	0,6261	0,6242	0,6223	0,6204	0,6186	0,6167	0,6149	0,613	0,6112	0,6094	0,6076	0,6059	0,6041	0,6023	0,6006	0,5989
72,8	0,6309	0,6289	0,627	0,6251	0,6232	0,6213	0,6194	0,6175	0,6156	0,6138	0,612	0,6102	0,6084	0,6066	0,6048	0,603	0,6013	0,5995	0,5978
72,9	0,6298	0,6279	0,6259	0,624	0,6221	0,6202	0,6183	0,6164	0,6146	0,6127	0,6109	0,6091	0,6073	0,6055	0,6037	0,6019	0,6002	0,5985	0,5967
73	0,6287	0,6268	0,6248	0,6229	0,621	0,6191	0,6172	0,6153	0,6135	0,6116	0,6098	0,608	0,6062	0,6044	0,6026	0,6009	0,5991	0,5974	0,5957
73,1	0,6277	0,6257	0,6238	0,6218	0,6199	0,618	0,6161	0,6143	0,6124	0,6106	0,6087	0,6069	0,6051	0,6033	0,6016	0,5998	0,598	0,5963	0,5946
73,2	0,6266	0,6246	0,6227	0,6207	0,6188	0,6169	0,6151	0,6132	0,6113	0,6095	0,6077	0,6058	0,604	0,6023	0,6005	0,5987	0,597	0,5952	0,5935
73,3	0,6255	0,6235	0,6216	0,6197	0,6177	0,6158	0,614	0,6121	0,6102	0,6084	0,6066	0,6048	0,603	0,6012	0,5994	0,5976	0,5959	0,5942	0,5924
73,4	0,6244	0,6224	0,6205	0,6186	0,6167	0,6148	0,6129	0,611	0,6092	0,6073	0,6055	0,6037	0,6019	0,6001	0,5983	0,5966	0,5948	0,5931	0,5913
73,5	0,6233	0,6214	0,6194	0,6175	0,6156	0,6137	0,6118	0,6099	0,6081	0,6062	0,6044	0,6026	0,6008	0,599	0,5972	0,5955	0,5937	0,592	0,5903
73,6	0,6222	0,6203	0,6183	0,6164	0,6145	0,6126	0,6107	0,6088	0,607	0,6052	0,6033	0,6015	0,5997	0,5979	0,5962	0,5944	0,5927	0,5909	0,5892
73,7	0,6211	0,6192	0,6172	0,6153	0,6134	0,6115	0,6096	0,6078	0,6059	0,6041	0,6022	0,6004	0,5986	0,5968	0,5951	0,5933	0,5916	0,5898	0,5881
73,8	0,62	0,6181	0,6162	0,6142	0,6123	0,6104	0,6085	0,6067	0,6048	0,603	0,6012	0,5993	0,5976	0,5958	0,594	0,5922	0,5905	0,5887	0,587
73,9	0,619	0,617	0,6151	0,6131	0,6112	0,6093	0,6075	0,6056	0,6037	0,6019	0,6001	0,5983	0,5965	0,5947	0,5929	0,5911	0,5894	0,5877	0,5859
74	0,6179	0,6159	0,614	0,6121	0,6101	0,6082	0,6064	0,6045	0,6027	0,6008	0,599	0,5972	0,5954	0,5936	0,5918	0,5901	0,5883	0,5866	0,5849
74,1	0,6168	0,6148	0,6129	0,611	0,6091	0,6072	0,6053	0,6034	0,6016	0,5997	0,5979	0,5961	0,5943	0,5925	0,5907	0,589	0,5872	0,5855	0,5838
74,2	0,6157	0,6137	0,6118	0,6099	0,608	0,6061	0,6042	0,6023	0,6005	0,5986	0,5968	0,595	0,5932	0,5914	0,5896	0,5879	0,5861	0,5844	0,5827
74,3	0,6146	0,6126	0,6107	0,6088	0,6069	0,605	0,6031	0,6012	0,5994	0,5975	0,5957	0,5939	0,5921	0,5903	0,5886	0,5868	0,5851	0,5833	0,5816
74,4	0,6135	0,6115	0,6096	0,6077	0,6058	0,6039	0,602	0,6001	0,5983	0,5965	0,5946	0,5928	0,591	0,5892	0,5875	0,5857	0,584	0,5822	0,5805

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	**14,3**	**14,4**	**14,5**	**14,6**	**14,7**	**14,8**	**14,9**	**15**	**15,1**
71	0,6153	0,6136	0,6119	0,6102	0,6085	0,6068	0,6052	0,6036	0,6019
71,1	0,6142	0,6125	0,6108	0,6091	0,6075	0,6058	0,6041	0,6025	0,6009
71,2	0,6132	0,6115	0,6098	0,6081	0,6064	0,6047	0,6031	0,6014	0,5998
71,3	0,6121	0,6104	0,6087	0,607	0,6053	0,6037	0,602	0,6004	0,5987
71,4	0,611	0,6093	0,6076	0,6059	0,6043	0,6026	0,601	0,5993	0,5977
71,5	0,61	0,6083	0,6066	0,6049	0,6032	0,6016	0,5999	0,5983	0,5966
71,6	0,6089	0,6072	0,6055	0,6038	0,6022	0,6005	0,5988	0,5972	0,5956
71,7	0,6078	0,6061	0,6044	0,6028	0,6011	0,5994	0,5978	0,5961	0,5945
71,8	0,6068	0,6051	0,6034	0,6017	0,6	0,5984	0,5967	0,5951	0,5934
71,9	0,6057	0,604	0,6023	0,6006	0,599	0,5973	0,5957	0,594	0,5924
72	0,6047	0,6029	0,6013	0,5996	0,5979	0,5962	0,5946	0,5929	0,5913
72,1	0,6036	0,6019	0,6002	0,5985	0,5968	0,5952	0,5935	0,5919	0,5903
72,2	0,6025	0,6008	0,5991	0,5974	0,5958	0,5941	0,5925	0,5908	0,5892
72,3	0,6014	0,5997	0,598	0,5964	0,5947	0,593	0,5914	0,5898	0,5881
72,4	0,6004	0,5987	0,597	0,5953	0,5936	0,592	0,5903	0,5887	0,5871
72,5	0,5993	0,5976	0,5959	0,5942	0,5926	0,5909	0,5893	0,5876	0,586
72,6	0,5982	0,5965	0,5948	0,5932	0,5915	0,5898	0,5882	0,5865	0,5849
72,7	0,5972	0,5955	0,5938	0,5921	0,5904	0,5888	0,5871	0,5855	0,5838
72,8	0,5961	0,5944	0,5927	0,591	0,5893	0,5877	0,586	0,5844	0,5828
72,9	0,595	0,5933	0,5916	0,5899	0,5883	0,5866	0,585	0,5833	0,5817
73	0,5939	0,5922	0,5905	0,5889	0,5872	0,5855	0,5839	0,5823	0,5806
73,1	0,5929	0,5912	0,5895	0,5878	0,5861	0,5845	0,5828	0,5812	0,5796
73,2	0,5918	0,5901	0,5884	0,5867	0,5851	0,5834	0,5817	0,5801	0,5785
73,3	0,5907	0,589	0,5873	0,5856	0,584	0,5823	0,5807	0,579	0,5774
73,4	0,5896	0,5879	0,5862	0,5846	0,5829	0,5812	0,5796	0,578	0,5763
73,5	0,5886	0,5869	0,5852	0,5835	0,5818	0,5802	0,5785	0,5769	0,5753
73,6	0,5875	0,5858	0,5841	0,5824	0,5807	0,5791	0,5774	0,5758	0,5742
73,7	0,5864	0,5847	0,583	0,5813	0,5797	0,578	0,5764	0,5747	0,5731
73,8	0,5853	0,5836	0,5819	0,5802	0,5786	0,5769	0,5753	0,5736	0,572
73,9	0,5842	0,5825	0,5808	0,5792	0,5775	0,5758	0,5742	0,5726	0,5709
74	0,5831	0,5814	0,5798	0,5781	0,5764	0,5748	0,5731	0,5715	0,5699
74,1	0,5821	0,5804	0,5787	0,577	0,5753	0,5737	0,572	0,5704	0,5688
74,2	0,581	0,5793	0,5776	0,5759	0,5742	0,5726	0,571	0,5693	0,5677
74,3	0,5799	0,5782	0,5765	0,5748	0,5732	0,5715	0,5699	0,5682	0,5666
74,4	0,5788	0,5771	0,5754	0,5737	0,5721	0,5704	0,5688	0,5672	0,5655

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
74,5	1,2157	1,1931	1,1724	1,1534	1,1358	1,1194	1,104	1,0896	1,076	1,0631	1,0509	1,0392	1,0281	1,0175	1,0074	0,9976	0,9883	0,9793	0,9706
74,6	1,2145	1,1919	1,1712	1,1522	1,1346	1,1182	1,1028	1,0884	1,0748	1,0619	1,0497	1,038	1,027	1,0164	1,0062	0,9965	0,9871	0,9781	0,9694
74,7	1,2132	1,1906	1,17	1,151	1,1334	1,1169	1,1016	1,0872	1,0736	1,0607	1,0485	1,0369	1,0258	1,0152	1,005	0,9953	0,9859	0,9769	0,9682
74,8	1,212	1,1894	1,1688	1,1497	1,1321	1,1157	1,1004	1,086	1,0724	1,0595	1,0473	1,0357	1,0246	1,014	1,0038	0,9941	0,9847	0,9757	0,9671
74,9	1,2108	1,1882	1,1675	1,1485	1,1309	1,1145	1,0992	1,0848	1,0712	1,0583	1,0461	1,0345	1,0234	1,0128	1,0027	0,9929	0,9836	0,9746	0,9659
75	1,2096	1,187	1,1663	1,1473	1,1297	1,1133	1,098	1,0836	1,07	1,0571	1,0449	1,0333	1,0222	1,0116	1,0015	0,9917	0,9824	0,9734	0,9647
75,1	1,2083	1,1857	1,1651	1,1461	1,1285	1,1121	1,0968	1,0824	1,0688	1,0559	1,0437	1,0321	1,021	1,0104	1,0003	0,9906	0,9812	0,9722	0,9635
75,2	1,2071	1,1845	1,1639	1,1449	1,1273	1,1109	1,0956	1,0812	1,0676	1,0547	1,0425	1,0309	1,0198	1,0093	0,9991	0,9894	0,98	0,971	0,9624
75,3	1,2059	1,1833	1,1627	1,1437	1,1261	1,1097	1,0944	1,08	1,0664	1,0535	1,0413	1,0297	1,0187	1,0081	0,9979	0,9882	0,9789	0,9699	0,9612
75,4	1,2047	1,1821	1,1614	1,1425	1,1249	1,1085	1,0932	1,0788	1,0652	1,0523	1,0401	1,0285	1,0175	1,0069	0,9967	0,987	0,9777	0,9687	0,96
75,5	1,2034	1,1808	1,1602	1,1412	1,1237	1,1073	1,092	1,0776	1,064	1,0511	1,0389	1,0273	1,0163	1,0057	0,9956	0,9858	0,9765	0,9675	0,9588
75,6	1,2022	1,1796	1,159	1,14	1,1225	1,1061	1,0908	1,0764	1,0628	1,0499	1,0377	1,0261	1,0151	1,0045	0,9944	0,9846	0,9753	0,9663	0,9576
75,7	1,201	1,1784	1,1578	1,1388	1,1212	1,1049	1,0896	1,0752	1,0616	1,0487	1,0366	1,0249	1,0139	1,0033	0,9932	0,9835	0,9741	0,9651	0,9565
75,8	1,1997	1,1772	1,1566	1,1376	1,12	1,1037	1,0883	1,074	1,0604	1,0475	1,0354	1,0238	1,0127	1,0021	0,992	0,9823	0,9729	0,964	0,9553
75,9	1,1985	1,1759	1,1553	1,1364	1,1188	1,1024	1,0871	1,0727	1,0592	1,0463	1,0342	1,0226	1,0115	1,0009	0,9908	0,9811	0,9718	0,9628	0,9541
76	1,1973	1,1747	1,1541	1,1351	1,1176	1,1012	1,0859	1,0715	1,058	1,0451	1,033	1,0214	1,0103	0,9997	0,9896	0,9799	0,9706	0,9616	0,9529
76,1	1,196	1,1735	1,1529	1,1339	1,1164	1,1	1,0847	1,0703	1,0568	1,0439	1,0318	1,0202	1,0091	0,9985	0,9884	0,9787	0,9694	0,9604	0,9517
76,2	1,1948	1,1722	1,1516	1,1327	1,1151	1,0988	1,0835	1,0691	1,0556	1,0427	1,0305	1,019	1,0079	0,9973	0,9872	0,9775	0,9682	0,9592	0,9506
76,3	1,1935	1,171	1,1504	1,1315	1,1139	1,0976	1,0823	1,0679	1,0544	1,0415	1,0293	1,0178	1,0067	0,9961	0,986	0,9763	0,967	0,958	0,9494
76,4	1,1923	1,1698	1,1492	1,1302	1,1127	1,0964	1,0811	1,0667	1,0531	1,0403	1,0281	1,0166	1,0055	0,995	0,9848	0,9751	0,9658	0,9568	0,9482
76,5	1,1911	1,1685	1,148	1,129	1,1115	1,0951	1,0799	1,0655	1,0519	1,0391	1,0269	1,0154	1,0043	0,9938	0,9836	0,9739	0,9646	0,9556	0,947
76,6	1,1898	1,1673	1,1467	1,1278	1,1103	1,0939	1,0786	1,0643	1,0507	1,0379	1,0257	1,0142	1,0031	0,9926	0,9824	0,9727	0,9634	0,9545	0,9458
76,7	1,1886	1,1661	1,1455	1,1266	1,109	1,0927	1,0774	1,0631	1,0495	1,0367	1,0245	1,0129	1,0019	0,9914	0,9812	0,9715	0,9622	0,9533	0,9446
76,8	1,1873	1,1648	1,1443	1,1253	1,1078	1,0915	1,0762	1,0618	1,0483	1,0355	1,0233	1,0117	1,0007	0,9902	0,98	0,9704	0,961	0,9521	0,9434
76,9	1,1861	1,1636	1,143	1,1241	1,1066	1,0903	1,075	1,0606	1,0471	1,0343	1,0221	1,0105	0,9995	0,9889	0,9788	0,9692	0,9598	0,9509	0,9422
77	1,1848	1,1623	1,1418	1,1229	1,1053	1,089	1,0738	1,0594	1,0459	1,0331	1,0209	1,0093	0,9983	0,9877	0,9776	0,968	0,9586	0,9497	0,941
77,1	1,1836	1,1611	1,1406	1,1216	1,1041	1,0878	1,0725	1,0582	1,0446	1,0318	1,0197	1,0081	0,9971	0,9865	0,9764	0,9668	0,9574	0,9485	0,9398
77,2	1,1824	1,1599	1,1393	1,1204	1,1029	1,0866	1,0713	1,057	1,0434	1,0306	1,0185	1,0069	0,9959	0,9853	0,9752	0,9656	0,9562	0,9473	0,9386
77,3	1,1811	1,1586	1,1381	1,1192	1,1017	1,0853	1,0701	1,0557	1,0422	1,0294	1,0173	1,0057	0,9947	0,9841	0,974	0,9643	0,955	0,9461	0,9374
77,4	1,1799	1,1574	1,1368	1,1179	1,1004	1,0841	1,0689	1,0545	1,041	1,0282	1,016	1,0045	0,9935	0,9829	0,9728	0,9631	0,9538	0,9449	0,9362
77,5	1,1786	1,1561	1,1356	1,1167	1,0992	1,0829	1,0676	1,0533	1,0398	1,027	1,0148	1,0033	0,9922	0,9817	0,9716	0,9619	0,9526	0,9437	0,935
77,6	1,1774	1,1549	1,1344	1,1155	1,098	1,0817	1,0664	1,0521	1,0385	1,0258	1,0136	1,0021	0,991	0,9805	0,9704	0,9607	0,9514	0,9425	0,9338
77,7	1,1761	1,1536	1,1331	1,1142	1,0967	1,0804	1,0652	1,0508	1,0373	1,0245	1,0124	1,0008	0,9898	0,9793	0,9692	0,9595	0,9502	0,9413	0,9326
77,8	1,1749	1,1524	1,1319	1,113	1,0955	1,0792	1,0639	1,0496	1,0361	1,0233	1,0112	0,9996	0,9886	0,9781	0,968	0,9583	0,949	0,9401	0,9314
77,9	1,1736	1,1511	1,1306	1,1117	1,0942	1,078	1,0627	1,0484	1,0349	1,0221	1,01	0,9984	0,9874	0,9769	0,9668	0,9571	0,9478	0,9389	0,9302

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
74,5	0,9622	0,9541	0,9462	0,9387	0,9313	0,9242	0,9172	0,9105	0,9039	0,8975	0,8913	0,8852	0,8793	0,8735	0,8679	0,8624	0,857	0,8517	0,8466
74,6	0,961	0,9529	0,9451	0,9375	0,9301	0,923	0,9161	0,9093	0,9028	0,8964	0,8901	0,8841	0,8782	0,8724	0,8668	0,8612	0,8558	0,8506	0,8454
74,7	0,9599	0,9518	0,9439	0,9363	0,929	0,9218	0,9149	0,9082	0,9016	0,8952	0,889	0,8829	0,877	0,8712	0,8656	0,8601	0,8547	0,8494	0,8443
74,8	0,9587	0,9506	0,9427	0,9352	0,9278	0,9207	0,9137	0,907	0,9004	0,8941	0,8878	0,8818	0,8759	0,8701	0,8645	0,8589	0,8536	0,8483	0,8431
74,9	0,9575	0,9494	0,9416	0,934	0,9266	0,9195	0,9126	0,9058	0,8993	0,8929	0,8867	0,8806	0,8747	0,8689	0,8633	0,8578	0,8524	0,8471	0,842
75	0,9563	0,9482	0,9404	0,9328	0,9255	0,9183	0,9114	0,9047	0,8981	0,8917	0,8855	0,8795	0,8736	0,8678	0,8621	0,8566	0,8513	0,846	0,8408
75,1	0,9552	0,9471	0,9392	0,9317	0,9243	0,9172	0,9102	0,9035	0,897	0,8906	0,8844	0,8783	0,8724	0,8666	0,861	0,8555	0,8501	0,8448	0,8397
75,2	0,954	0,9459	0,9381	0,9305	0,9231	0,916	0,9091	0,9023	0,8958	0,8894	0,8832	0,8771	0,8712	0,8655	0,8598	0,8543	0,849	0,8437	0,8385
75,3	0,9528	0,9447	0,9369	0,9293	0,922	0,9148	0,9079	0,9012	0,8946	0,8883	0,882	0,876	0,8701	0,8643	0,8587	0,8532	0,8478	0,8425	0,8374
75,4	0,9516	0,9436	0,9357	0,9281	0,9208	0,9137	0,9068	0,9	0,8935	0,8871	0,8809	0,8748	0,8689	0,8632	0,8575	0,852	0,8466	0,8414	0,8362
75,5	0,9505	0,9424	0,9346	0,927	0,9196	0,9125	0,9056	0,8989	0,8923	0,8859	0,8797	0,8737	0,8678	0,862	0,8564	0,8509	0,8455	0,8402	0,8351
75,6	0,9493	0,9412	0,9334	0,9258	0,9185	0,9113	0,9044	0,8977	0,8911	0,8848	0,8786	0,8725	0,8666	0,8608	0,8552	0,8497	0,8443	0,8391	0,8339
75,7	0,9481	0,94	0,9322	0,9246	0,9173	0,9102	0,9032	0,8965	0,89	0,8836	0,8774	0,8713	0,8654	0,8597	0,8541	0,8486	0,8432	0,8379	0,8328
75,8	0,9469	0,9388	0,931	0,9235	0,9161	0,909	0,9021	0,8953	0,8888	0,8824	0,8762	0,8702	0,8643	0,8585	0,8529	0,8474	0,842	0,8368	0,8316
75,9	0,9457	0,9377	0,9299	0,9223	0,9149	0,9078	0,9009	0,8942	0,8876	0,8813	0,8751	0,869	0,8631	0,8574	0,8517	0,8462	0,8409	0,8356	0,8305
76	0,9446	0,9365	0,9287	0,9211	0,9138	0,9066	0,8997	0,893	0,8865	0,8801	0,8739	0,8679	0,862	0,8562	0,8506	0,8451	0,8397	0,8344	0,8293
76,1	0,9434	0,9353	0,9275	0,9199	0,9126	0,9055	0,8986	0,8918	0,8853	0,8789	0,8727	0,8667	0,8608	0,855	0,8494	0,8439	0,8385	0,8333	0,8281
76,2	0,9422	0,9341	0,9263	0,9187	0,9114	0,9043	0,8974	0,8907	0,8841	0,8778	0,8716	0,8655	0,8596	0,8539	0,8482	0,8427	0,8374	0,8321	0,827
76,3	0,941	0,9329	0,9251	0,9176	0,9102	0,9031	0,8962	0,8895	0,883	0,8766	0,8704	0,8643	0,8585	0,8527	0,8471	0,8416	0,8362	0,831	0,8258
76,4	0,9398	0,9318	0,9239	0,9164	0,9091	0,9019	0,895	0,8883	0,8818	0,8754	0,8692	0,8632	0,8573	0,8515	0,8459	0,8404	0,835	0,8298	0,8247
76,5	0,9386	0,9306	0,9228	0,9152	0,9079	0,9008	0,8939	0,8871	0,8806	0,8742	0,868	0,862	0,8561	0,8504	0,8447	0,8393	0,8339	0,8286	0,8235
76,6	0,9375	0,9294	0,9216	0,914	0,9067	0,8996	0,8927	0,886	0,8794	0,8731	0,8669	0,8608	0,8549	0,8492	0,8436	0,8381	0,8327	0,8275	0,8223
76,7	0,9363	0,9282	0,9204	0,9128	0,9055	0,8984	0,8915	0,8848	0,8783	0,8719	0,8657	0,8597	0,8538	0,848	0,8424	0,8369	0,8315	0,8263	0,8212
76,8	0,9351	0,927	0,9192	0,9117	0,9043	0,8972	0,8903	0,8836	0,8771	0,8707	0,8645	0,8585	0,8526	0,8468	0,8412	0,8357	0,8304	0,8251	0,82
76,9	0,9339	0,9258	0,918	0,9105	0,9031	0,896	0,8891	0,8824	0,8759	0,8695	0,8633	0,8573	0,8514	0,8457	0,8401	0,8346	0,8292	0,824	0,8188
77	0,9327	0,9246	0,9168	0,9093	0,902	0,8949	0,8879	0,8812	0,8747	0,8684	0,8622	0,8561	0,8502	0,8445	0,8389	0,8334	0,828	0,8228	0,8177
77,1	0,9315	0,9234	0,9156	0,9081	0,9008	0,8937	0,8868	0,8801	0,8735	0,8672	0,861	0,855	0,8491	0,8433	0,8377	0,8322	0,8269	0,8216	0,8165
77,2	0,9303	0,9222	0,9144	0,9069	0,8996	0,8925	0,8856	0,8789	0,8724	0,866	0,8598	0,8538	0,8479	0,8421	0,8365	0,8311	0,8257	0,8204	0,8153
77,3	0,9291	0,9211	0,9133	0,9057	0,8984	0,8913	0,8844	0,8777	0,8712	0,8648	0,8586	0,8526	0,8467	0,841	0,8354	0,8299	0,8245	0,8193	0,8141
77,4	0,9279	0,9199	0,9121	0,9045	0,8972	0,8901	0,8832	0,8765	0,87	0,8636	0,8574	0,8514	0,8455	0,8398	0,8342	0,8287	0,8233	0,8181	0,813
77,5	0,9267	0,9187	0,9109	0,9033	0,896	0,8889	0,882	0,8753	0,8688	0,8624	0,8563	0,8502	0,8444	0,8386	0,833	0,8275	0,8222	0,8169	0,8118
77,6	0,9255	0,9175	0,9097	0,9021	0,8948	0,8877	0,8808	0,8741	0,8676	0,8613	0,8551	0,8491	0,8432	0,8374	0,8318	0,8263	0,821	0,8157	0,8106
77,7	0,9243	0,9163	0,9085	0,9009	0,8936	0,8865	0,8796	0,8729	0,8664	0,8601	0,8539	0,8479	0,842	0,8362	0,8306	0,8252	0,8198	0,8146	0,8094
77,8	0,9231	0,9151	0,9073	0,8997	0,8924	0,8853	0,8784	0,8717	0,8652	0,8589	0,8527	0,8467	0,8408	0,8351	0,8295	0,824	0,8186	0,8134	0,8083
77,9	0,9219	0,9139	0,9061	0,8985	0,8912	0,8841	0,8772	0,8706	0,864	0,8577	0,8515	0,8455	0,8396	0,8339	0,8283	0,8228	0,8174	0,8122	0,8071

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
74,5	0,8415	0,8366	0,8317	0,827	0,8223	0,8177	0,8132	0,8088	0,8045	0,8002	0,796	0,7919	0,7879	0,7839	0,78	0,7761	0,7723	0,7686	0,7649
74,6	0,8404	0,8354	0,8306	0,8258	0,8211	0,8166	0,8121	0,8077	0,8033	0,7991	0,7949	0,7908	0,7867	0,7828	0,7789	0,775	0,7712	0,7675	0,7638
74,7	0,8392	0,8343	0,8294	0,8247	0,82	0,8154	0,8109	0,8065	0,8022	0,7979	0,7938	0,7897	0,7856	0,7816	0,7777	0,7739	0,7701	0,7664	0,7627
74,8	0,8381	0,8331	0,8283	0,8235	0,8189	0,8143	0,8098	0,8054	0,8011	0,7968	0,7926	0,7885	0,7845	0,7805	0,7766	0,7727	0,769	0,7652	0,7615
74,9	0,8369	0,832	0,8271	0,8224	0,8177	0,8132	0,8087	0,8043	0,7999	0,7957	0,7915	0,7874	0,7833	0,7794	0,7755	0,7716	0,7678	0,7641	0,7604
75	0,8358	0,8308	0,826	0,8212	0,8166	0,812	0,8075	0,8031	0,7988	0,7945	0,7904	0,7863	0,7822	0,7782	0,7743	0,7705	0,7667	0,763	0,7593
75,1	0,8346	0,8297	0,8248	0,8201	0,8154	0,8109	0,8064	0,802	0,7976	0,7934	0,7892	0,7851	0,7811	0,7771	0,7732	0,7693	0,7656	0,7618	0,7582
75,2	0,8335	0,8285	0,8237	0,8189	0,8143	0,8097	0,8052	0,8008	0,7965	0,7923	0,7881	0,784	0,7799	0,776	0,7721	0,7682	0,7644	0,7607	0,757
75,3	0,8323	0,8274	0,8226	0,8178	0,8131	0,8086	0,8041	0,7997	0,7954	0,7911	0,7869	0,7828	0,7788	0,7748	0,7709	0,7671	0,7633	0,7596	0,7559
75,4	0,8312	0,8262	0,8214	0,8167	0,812	0,8074	0,8029	0,7985	0,7942	0,79	0,7858	0,7817	0,7777	0,7737	0,7698	0,7659	0,7622	0,7584	0,7548
75,5	0,83	0,8251	0,8203	0,8155	0,8109	0,8063	0,8018	0,7974	0,7931	0,7888	0,7847	0,7806	0,7765	0,7725	0,7686	0,7648	0,761	0,7573	0,7536
75,6	0,8289	0,8239	0,8191	0,8144	0,8097	0,8051	0,8007	0,7963	0,7919	0,7877	0,7835	0,7794	0,7754	0,7714	0,7675	0,7637	0,7599	0,7561	0,7525
75,7	0,8277	0,8228	0,8179	0,8132	0,8086	0,804	0,7995	0,7951	0,7908	0,7865	0,7824	0,7783	0,7742	0,7703	0,7664	0,7625	0,7587	0,755	0,7513
75,8	0,8266	0,8216	0,8168	0,8121	0,8074	0,8028	0,7984	0,794	0,7896	0,7854	0,7812	0,7771	0,7731	0,7691	0,7652	0,7614	0,7576	0,7539	0,7502
75,9	0,8254	0,8205	0,8156	0,8109	0,8062	0,8017	0,7972	0,7928	0,7885	0,7842	0,7801	0,776	0,7719	0,768	0,7641	0,7602	0,7565	0,7527	0,7491
76	0,8243	0,8193	0,8145	0,8097	0,8051	0,8005	0,7961	0,7917	0,7873	0,7831	0,7789	0,7748	0,7708	0,7668	0,7629	0,7591	0,7553	0,7516	0,7479
76,1	0,8231	0,8182	0,8133	0,8086	0,8039	0,7994	0,7949	0,7905	0,7862	0,7819	0,7778	0,7737	0,7696	0,7657	0,7618	0,7579	0,7542	0,7504	0,7468
76,2	0,8219	0,817	0,8122	0,8074	0,8028	0,7982	0,7938	0,7894	0,785	0,7808	0,7766	0,7725	0,7685	0,7645	0,7606	0,7568	0,753	0,7493	0,7456
76,3	0,8208	0,8159	0,811	0,8063	0,8016	0,7971	0,7926	0,7882	0,7839	0,7796	0,7755	0,7714	0,7674	0,7634	0,7595	0,7557	0,7519	0,7482	0,7445
76,4	0,8196	0,8147	0,8099	0,8051	0,8005	0,7959	0,7914	0,787	0,7827	0,7785	0,7743	0,7702	0,7662	0,7622	0,7583	0,7545	0,7507	0,747	0,7433
76,5	0,8185	0,8135	0,8087	0,804	0,7993	0,7948	0,7903	0,7859	0,7816	0,7773	0,7732	0,7691	0,765	0,7611	0,7572	0,7534	0,7496	0,7459	0,7422
76,6	0,8173	0,8124	0,8075	0,8028	0,7982	0,7936	0,7891	0,7847	0,7804	0,7762	0,772	0,7679	0,7639	0,7599	0,756	0,7522	0,7484	0,7447	0,741
76,7	0,8161	0,8112	0,8064	0,8016	0,797	0,7924	0,788	0,7836	0,7793	0,775	0,7709	0,7668	0,7627	0,7588	0,7549	0,7511	0,7473	0,7436	0,7399
76,8	0,815	0,81	0,8052	0,8005	0,7958	0,7913	0,7868	0,7824	0,7781	0,7739	0,7697	0,7656	0,7616	0,7576	0,7537	0,7499	0,7461	0,7424	0,7387
76,9	0,8138	0,8089	0,804	0,7993	0,7947	0,7901	0,7856	0,7813	0,7769	0,7727	0,7685	0,7645	0,7604	0,7565	0,7526	0,7487	0,745	0,7413	0,7376
77	0,8126	0,8077	0,8029	0,7981	0,7935	0,789	0,7845	0,7801	0,7758	0,7716	0,7674	0,7633	0,7593	0,7553	0,7514	0,7476	0,7438	0,7401	0,7364
77,1	0,8115	0,8065	0,8017	0,797	0,7923	0,7878	0,7833	0,7789	0,7746	0,7704	0,7662	0,7621	0,7581	0,7542	0,7503	0,7464	0,7427	0,7389	0,7353
77,2	0,8103	0,8054	0,8005	0,7958	0,7912	0,7866	0,7822	0,7778	0,7735	0,7692	0,7651	0,761	0,757	0,753	0,7491	0,7453	0,7415	0,7378	0,7341
77,3	0,8091	0,8042	0,7994	0,7946	0,79	0,7855	0,781	0,7766	0,7723	0,7681	0,7639	0,7598	0,7558	0,7518	0,7479	0,7441	0,7403	0,7366	0,733
77,4	0,8079	0,803	0,7982	0,7935	0,7888	0,7843	0,7798	0,7754	0,7711	0,7669	0,7627	0,7587	0,7546	0,7507	0,7468	0,743	0,7392	0,7355	0,7318
77,5	0,8068	0,8019	0,797	0,7923	0,7877	0,7831	0,7787	0,7743	0,77	0,7657	0,7616	0,7575	0,7535	0,7495	0,7456	0,7418	0,738	0,7343	0,7307
77,6	0,8056	0,8007	0,7959	0,7911	0,7865	0,7819	0,7775	0,7731	0,7688	0,7646	0,7604	0,7563	0,7523	0,7484	0,7445	0,7406	0,7369	0,7332	0,7295
77,7	0,8044	0,7995	0,7947	0,79	0,7853	0,7808	0,7763	0,7719	0,7676	0,7634	0,7592	0,7552	0,7511	0,7472	0,7433	0,7395	0,7357	0,732	0,7283
77,8	0,8032	0,7983	0,7935	0,7888	0,7842	0,7796	0,7751	0,7708	0,7665	0,7622	0,7581	0,754	0,75	0,746	0,7421	0,7383	0,7345	0,7308	0,7272
77,9	0,8021	0,7972	0,7923	0,7876	0,783	0,7784	0,774	0,7696	0,7653	0,7611	0,7569	0,7528	0,7488	0,7449	0,741	0,7371	0,7334	0,7297	0,726

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
74,5	0,7613	0,7577	0,7542	0,7508	0,7473	0,744	0,7406	0,7374	0,7341	0,7309	0,7278	0,7247	0,7216	0,7185	0,7155	0,7126	0,7097	0,7068	0,7039
74,6	0,7602	0,7566	0,7531	0,7496	0,7462	0,7428	0,7395	0,7362	0,733	0,7298	0,7266	0,7235	0,7205	0,7174	0,7144	0,7115	0,7085	0,7056	0,7028
74,7	0,7591	0,7555	0,752	0,7485	0,7451	0,7417	0,7384	0,7351	0,7319	0,7287	0,7255	0,7224	0,7193	0,7163	0,7133	0,7103	0,7074	0,7045	0,7017
74,8	0,7579	0,7544	0,7508	0,7474	0,744	0,7406	0,7373	0,734	0,7308	0,7276	0,7244	0,7213	0,7182	0,7152	0,7122	0,7092	0,7063	0,7034	0,7006
74,9	0,7568	0,7532	0,7497	0,7463	0,7428	0,7395	0,7361	0,7329	0,7296	0,7264	0,7233	0,7202	0,7171	0,7141	0,7111	0,7081	0,7052	0,7023	0,6994
75	0,7557	0,7521	0,7486	0,7451	0,7417	0,7383	0,735	0,7317	0,7285	0,7253	0,7222	0,719	0,716	0,7129	0,7099	0,707	0,7041	0,7012	0,6983
75,1	0,7545	0,751	0,7475	0,744	0,7406	0,7372	0,7339	0,7306	0,7274	0,7242	0,721	0,7179	0,7149	0,7118	0,7088	0,7059	0,7029	0,7	0,6972
75,2	0,7534	0,7498	0,7463	0,7429	0,7395	0,7361	0,7328	0,7295	0,7263	0,7231	0,7199	0,7168	0,7137	0,7107	0,7077	0,7047	0,7018	0,6989	0,6961
75,3	0,7523	0,7487	0,7452	0,7417	0,7383	0,735	0,7316	0,7284	0,7251	0,7219	0,7188	0,7157	0,7126	0,7096	0,7066	0,7036	0,7007	0,6978	0,695
75,4	0,7511	0,7476	0,7441	0,7406	0,7372	0,7338	0,7305	0,7272	0,724	0,7208	0,7177	0,7145	0,7115	0,7084	0,7055	0,7025	0,6996	0,6967	0,6938
75,5	0,75	0,7464	0,7429	0,7395	0,7361	0,7327	0,7294	0,7261	0,7229	0,7197	0,7165	0,7134	0,7103	0,7073	0,7043	0,7014	0,6984	0,6956	0,6927
75,6	0,7489	0,7453	0,7418	0,7383	0,7349	0,7316	0,7282	0,725	0,7217	0,7185	0,7154	0,7123	0,7092	0,7062	0,7032	0,7002	0,6973	0,6944	0,6916
75,7	0,7477	0,7442	0,7407	0,7372	0,7338	0,7304	0,7271	0,7238	0,7206	0,7174	0,7143	0,7112	0,7081	0,7051	0,7021	0,6991	0,6962	0,6933	0,6905
75,8	0,7466	0,743	0,7395	0,7361	0,7327	0,7293	0,726	0,7227	0,7195	0,7163	0,7131	0,71	0,707	0,7039	0,7009	0,698	0,6951	0,6922	0,6893
75,9	0,7455	0,7419	0,7384	0,7349	0,7315	0,7282	0,7248	0,7216	0,7183	0,7151	0,712	0,7089	0,7058	0,7028	0,6998	0,6969	0,6939	0,691	0,6882
76	0,7443	0,7407	0,7372	0,7338	0,7304	0,727	0,7237	0,7204	0,7172	0,714	0,7109	0,7078	0,7047	0,7017	0,6987	0,6957	0,6928	0,6899	0,6871
76,1	0,7432	0,7396	0,7361	0,7326	0,7292	0,7259	0,7226	0,7193	0,7161	0,7129	0,7097	0,7066	0,7036	0,7005	0,6975	0,6946	0,6917	0,6888	0,6859
76,2	0,742	0,7385	0,735	0,7315	0,7281	0,7247	0,7214	0,7182	0,7149	0,7117	0,7086	0,7055	0,7024	0,6994	0,6964	0,6935	0,6905	0,6877	0,6848
76,3	0,7409	0,7373	0,7338	0,7304	0,727	0,7236	0,7203	0,717	0,7138	0,7106	0,7075	0,7044	0,7013	0,6983	0,6953	0,6923	0,6894	0,6865	0,6837
76,4	0,7397	0,7362	0,7327	0,7292	0,7258	0,7225	0,7191	0,7159	0,7126	0,7095	0,7063	0,7032	0,7002	0,6971	0,6941	0,6912	0,6883	0,6854	0,6825
76,5	0,7386	0,735	0,7315	0,7281	0,7247	0,7213	0,718	0,7147	0,7115	0,7083	0,7052	0,7021	0,699	0,696	0,693	0,6901	0,6871	0,6843	0,6814
76,6	0,7374	0,7339	0,7304	0,7269	0,7235	0,7202	0,7169	0,7136	0,7104	0,7072	0,704	0,7009	0,6979	0,6949	0,6919	0,6889	0,686	0,6831	0,6803
76,7	0,7363	0,7327	0,7292	0,7258	0,7224	0,719	0,7157	0,7124	0,7092	0,706	0,7029	0,6998	0,6967	0,6937	0,6907	0,6878	0,6849	0,682	0,6791
76,8	0,7351	0,7316	0,7281	0,7246	0,7212	0,7179	0,7146	0,7113	0,7081	0,7049	0,7018	0,6987	0,6956	0,6926	0,6896	0,6866	0,6837	0,6808	0,678
76,9	0,734	0,7304	0,7269	0,7235	0,7201	0,7167	0,7134	0,7102	0,7069	0,7037	0,7006	0,6975	0,6944	0,6914	0,6884	0,6855	0,6826	0,6797	0,6769
77	0,7328	0,7293	0,7258	0,7223	0,7189	0,7156	0,7123	0,709	0,7058	0,7026	0,6995	0,6964	0,6933	0,6903	0,6873	0,6844	0,6814	0,6786	0,6757
77,1	0,7317	0,7281	0,7246	0,7212	0,7178	0,7144	0,7111	0,7079	0,7046	0,7015	0,6983	0,6952	0,6922	0,6891	0,6862	0,6832	0,6803	0,6774	0,6746
77,2	0,7305	0,727	0,7235	0,72	0,7166	0,7133	0,71	0,7067	0,7035	0,7003	0,6972	0,6941	0,691	0,688	0,685	0,6821	0,6791	0,6763	0,6734
77,3	0,7294	0,7258	0,7223	0,7189	0,7155	0,7121	0,7088	0,7056	0,7023	0,6992	0,696	0,6929	0,6899	0,6868	0,6839	0,6809	0,678	0,6751	0,6723
77,4	0,7282	0,7247	0,7212	0,7177	0,7143	0,711	0,7077	0,7044	0,7012	0,698	0,6949	0,6918	0,6887	0,6857	0,6827	0,6798	0,6769	0,674	0,6711
77,5	0,7271	0,7235	0,72	0,7166	0,7132	0,7098	0,7065	0,7032	0,7	0,6969	0,6937	0,6906	0,6876	0,6845	0,6816	0,6786	0,6757	0,6728	0,67
77,6	0,7259	0,7224	0,7189	0,7154	0,712	0,7087	0,7054	0,7021	0,6989	0,6957	0,6926	0,6895	0,6864	0,6834	0,6804	0,6775	0,6746	0,6717	0,6688
77,7	0,7247	0,7212	0,7177	0,7143	0,7109	0,7075	0,7042	0,7009	0,6977	0,6945	0,6914	0,6883	0,6853	0,6822	0,6793	0,6763	0,6734	0,6705	0,6677
77,8	0,7236	0,72	0,7165	0,7131	0,7097	0,7063	0,703	0,6998	0,6966	0,6934	0,6903	0,6872	0,6841	0,6811	0,6781	0,6752	0,6723	0,6694	0,6665
77,9	0,7224	0,7189	0,7154	0,7119	0,7085	0,7052	0,7019	0,6986	0,6954	0,6922	0,6891	0,686	0,683	0,6799	0,677	0,674	0,6711	0,6682	0,6654

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
74,5	0,7011	0,6983	0,6955	0,6928	0,6901	0,6874	0,6848	0,6822	0,6796	0,677	0,6745	0,672	0,6695	0,667	0,6646	0,6622	0,6598	0,6574	0,6551
74,6	0,7	0,6972	0,6944	0,6917	0,689	0,6863	0,6837	0,681	0,6785	0,6759	0,6734	0,6709	0,6684	0,6659	0,6635	0,6611	0,6587	0,6563	0,654
74,7	0,6988	0,696	0,6933	0,6906	0,6879	0,6852	0,6825	0,6799	0,6773	0,6748	0,6722	0,6697	0,6673	0,6648	0,6624	0,66	0,6576	0,6552	0,6529
74,8	0,6977	0,6949	0,6922	0,6894	0,6867	0,6841	0,6814	0,6788	0,6762	0,6737	0,6711	0,6686	0,6661	0,6637	0,6613	0,6589	0,6565	0,6541	0,6518
74,9	0,6966	0,6938	0,6911	0,6883	0,6856	0,683	0,6803	0,6777	0,6751	0,6726	0,67	0,6675	0,665	0,6626	0,6601	0,6577	0,6554	0,653	0,6507
75	0,6955	0,6927	0,6899	0,6872	0,6845	0,6818	0,6792	0,6766	0,674	0,6714	0,6689	0,6664	0,6639	0,6615	0,659	0,6566	0,6542	0,6519	0,6495
75,1	0,6944	0,6916	0,6888	0,6861	0,6834	0,6807	0,6781	0,6755	0,6729	0,6703	0,6678	0,6653	0,6628	0,6604	0,6579	0,6555	0,6531	0,6508	0,6484
75,2	0,6933	0,6905	0,6877	0,685	0,6823	0,6796	0,677	0,6744	0,6718	0,6692	0,6667	0,6642	0,6617	0,6592	0,6568	0,6544	0,652	0,6497	0,6473
75,3	0,6921	0,6893	0,6866	0,6839	0,6812	0,6785	0,6758	0,6732	0,6707	0,6681	0,6656	0,6631	0,6606	0,6581	0,6557	0,6533	0,6509	0,6486	0,6462
75,4	0,691	0,6882	0,6855	0,6827	0,68	0,6774	0,6747	0,6721	0,6695	0,667	0,6645	0,6619	0,6595	0,657	0,6546	0,6522	0,6498	0,6474	0,6451
75,5	0,6899	0,6871	0,6843	0,6816	0,6789	0,6762	0,6736	0,671	0,6684	0,6659	0,6633	0,6608	0,6584	0,6559	0,6535	0,6511	0,6487	0,6463	0,644
75,6	0,6888	0,686	0,6832	0,6805	0,6778	0,6751	0,6725	0,6699	0,6673	0,6647	0,6622	0,6597	0,6572	0,6548	0,6524	0,6499	0,6476	0,6452	0,6429
75,7	0,6876	0,6848	0,6821	0,6794	0,6767	0,674	0,6714	0,6688	0,6662	0,6636	0,6611	0,6586	0,6561	0,6537	0,6512	0,6488	0,6464	0,6441	0,6418
75,8	0,6865	0,6837	0,681	0,6782	0,6755	0,6729	0,6702	0,6676	0,6651	0,6625	0,66	0,6575	0,655	0,6525	0,6501	0,6477	0,6453	0,643	0,6406
75,9	0,6854	0,6826	0,6798	0,6771	0,6744	0,6718	0,6691	0,6665	0,6639	0,6614	0,6588	0,6563	0,6539	0,6514	0,649	0,6466	0,6442	0,6419	0,6395
76	0,6843	0,6815	0,6787	0,676	0,6733	0,6706	0,668	0,6654	0,6628	0,6603	0,6577	0,6552	0,6527	0,6503	0,6479	0,6455	0,6431	0,6407	0,6384
76,1	0,6831	0,6803	0,6776	0,6749	0,6722	0,6695	0,6669	0,6643	0,6617	0,6591	0,6566	0,6541	0,6516	0,6492	0,6467	0,6443	0,642	0,6396	0,6373
76,2	0,682	0,6792	0,6765	0,6737	0,671	0,6684	0,6657	0,6631	0,6606	0,658	0,6555	0,653	0,6505	0,648	0,6456	0,6432	0,6408	0,6385	0,6362
76,3	0,6809	0,6781	0,6753	0,6726	0,6699	0,6672	0,6646	0,662	0,6594	0,6569	0,6543	0,6518	0,6494	0,6469	0,6445	0,6421	0,6397	0,6374	0,635
76,4	0,6797	0,6769	0,6742	0,6715	0,6688	0,6661	0,6635	0,6609	0,6583	0,6557	0,6532	0,6507	0,6482	0,6458	0,6434	0,641	0,6386	0,6362	0,6339
76,5	0,6786	0,6758	0,6731	0,6703	0,6676	0,665	0,6623	0,6597	0,6572	0,6546	0,6521	0,6496	0,6471	0,6447	0,6422	0,6398	0,6375	0,6351	0,6328
76,6	0,6775	0,6747	0,6719	0,6692	0,6665	0,6638	0,6612	0,6586	0,656	0,6535	0,651	0,6485	0,646	0,6435	0,6411	0,6387	0,6363	0,634	0,6317
76,7	0,6763	0,6735	0,6708	0,6681	0,6654	0,6627	0,6601	0,6575	0,6549	0,6524	0,6498	0,6473	0,6449	0,6424	0,64	0,6376	0,6352	0,6329	0,6305
76,8	0,6752	0,6724	0,6696	0,6669	0,6642	0,6616	0,6589	0,6563	0,6538	0,6512	0,6487	0,6462	0,6437	0,6413	0,6389	0,6365	0,6341	0,6317	0,6294
76,9	0,674	0,6713	0,6685	0,6658	0,6631	0,6604	0,6578	0,6552	0,6526	0,6501	0,6476	0,6451	0,6426	0,6401	0,6377	0,6353	0,633	0,6306	0,6283
77	0,6729	0,6701	0,6674	0,6647	0,662	0,6593	0,6567	0,6541	0,6515	0,6489	0,6464	0,6439	0,6415	0,639	0,6366	0,6342	0,6318	0,6295	0,6271
77,1	0,6718	0,669	0,6662	0,6635	0,6608	0,6582	0,6555	0,6529	0,6504	0,6478	0,6453	0,6428	0,6403	0,6379	0,6355	0,6331	0,6307	0,6283	0,626
77,2	0,6706	0,6678	0,6651	0,6624	0,6597	0,657	0,6544	0,6518	0,6492	0,6467	0,6442	0,6417	0,6392	0,6367	0,6343	0,6319	0,6295	0,6272	0,6249
77,3	0,6695	0,6667	0,6639	0,6612	0,6585	0,6559	0,6533	0,6507	0,6481	0,6455	0,643	0,6405	0,638	0,6356	0,6332	0,6308	0,6284	0,6261	0,6237
77,4	0,6683	0,6655	0,6628	0,6601	0,6574	0,6547	0,6521	0,6495	0,6469	0,6444	0,6419	0,6394	0,6369	0,6345	0,632	0,6296	0,6273	0,6249	0,6226
77,5	0,6672	0,6644	0,6617	0,6589	0,6563	0,6536	0,651	0,6484	0,6458	0,6432	0,6407	0,6382	0,6358	0,6333	0,6309	0,6285	0,6261	0,6238	0,6215
77,6	0,666	0,6633	0,6605	0,6578	0,6551	0,6525	0,6498	0,6472	0,6447	0,6421	0,6396	0,6371	0,6346	0,6322	0,6298	0,6274	0,625	0,6226	0,6203
77,7	0,6649	0,6621	0,6594	0,6566	0,654	0,6513	0,6487	0,6461	0,6435	0,641	0,6384	0,636	0,6335	0,631	0,6286	0,6262	0,6239	0,6215	0,6192
77,8	0,6637	0,661	0,6582	0,6555	0,6528	0,6502	0,6475	0,6449	0,6424	0,6398	0,6373	0,6348	0,6323	0,6299	0,6275	0,6251	0,6227	0,6204	0,618
77,9	0,6626	0,6598	0,6571	0,6543	0,6517	0,649	0,6464	0,6438	0,6412	0,6387	0,6362	0,6337	0,6312	0,6287	0,6263	0,6239	0,6216	0,6192	0,6169

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
74,5	0,6528	0,6505	0,6482	0,6459	0,6437	0,6415	0,6393	0,6371	0,635	0,6328	0,6307	0,6286	0,6265	0,6244	0,6224	0,6204	0,6183	0,6163	0,6144
74,6	0,6517	0,6494	0,6471	0,6448	0,6426	0,6404	0,6382	0,636	0,6339	0,6317	0,6296	0,6275	0,6254	0,6233	0,6213	0,6193	0,6173	0,6153	0,6133
74,7	0,6506	0,6483	0,646	0,6437	0,6415	0,6393	0,6371	0,6349	0,6328	0,6306	0,6285	0,6264	0,6243	0,6222	0,6202	0,6182	0,6162	0,6142	0,6122
74,8	0,6494	0,6471	0,6449	0,6426	0,6404	0,6382	0,636	0,6338	0,6316	0,6295	0,6274	0,6253	0,6232	0,6211	0,6191	0,6171	0,6151	0,6131	0,6111
74,9	0,6483	0,646	0,6438	0,6415	0,6393	0,6371	0,6349	0,6327	0,6305	0,6284	0,6263	0,6242	0,6221	0,62	0,618	0,616	0,614	0,612	0,61
75	0,6472	0,6449	0,6427	0,6404	0,6382	0,636	0,6338	0,6316	0,6294	0,6273	0,6252	0,6231	0,621	0,6189	0,6169	0,6149	0,6128	0,6109	0,6089
75,1	0,6461	0,6438	0,6416	0,6393	0,6371	0,6349	0,6327	0,6305	0,6283	0,6262	0,6241	0,622	0,6199	0,6178	0,6158	0,6138	0,6117	0,6098	0,6078
75,2	0,645	0,6427	0,6404	0,6382	0,636	0,6337	0,6316	0,6294	0,6272	0,6251	0,623	0,6209	0,6188	0,6167	0,6147	0,6127	0,6106	0,6086	0,6067
75,3	0,6439	0,6416	0,6393	0,6371	0,6348	0,6326	0,6304	0,6283	0,6261	0,624	0,6219	0,6198	0,6177	0,6156	0,6136	0,6116	0,6095	0,6075	0,6056
75,4	0,6428	0,6405	0,6382	0,636	0,6337	0,6315	0,6293	0,6272	0,625	0,6229	0,6208	0,6187	0,6166	0,6145	0,6125	0,6104	0,6084	0,6064	0,6045
75,5	0,6417	0,6394	0,6371	0,6349	0,6326	0,6304	0,6282	0,6261	0,6239	0,6218	0,6197	0,6176	0,6155	0,6134	0,6114	0,6093	0,6073	0,6053	0,6033
75,6	0,6406	0,6383	0,636	0,6337	0,6315	0,6293	0,6271	0,6249	0,6228	0,6207	0,6185	0,6164	0,6144	0,6123	0,6103	0,6082	0,6062	0,6042	0,6022
75,7	0,6394	0,6371	0,6349	0,6326	0,6304	0,6282	0,626	0,6238	0,6217	0,6195	0,6174	0,6153	0,6133	0,6112	0,6091	0,6071	0,6051	0,6031	0,6011
75,8	0,6383	0,636	0,6338	0,6315	0,6293	0,6271	0,6249	0,6227	0,6206	0,6184	0,6163	0,6142	0,6121	0,6101	0,608	0,606	0,604	0,602	0,6
75,9	0,6372	0,6349	0,6326	0,6304	0,6282	0,626	0,6238	0,6216	0,6194	0,6173	0,6152	0,6131	0,611	0,609	0,6069	0,6049	0,6029	0,6009	0,5989
76	0,6361	0,6338	0,6315	0,6293	0,627	0,6248	0,6227	0,6205	0,6183	0,6162	0,6141	0,612	0,6099	0,6079	0,6058	0,6038	0,6018	0,5998	0,5978
76,1	0,635	0,6327	0,6304	0,6282	0,6259	0,6237	0,6215	0,6194	0,6172	0,6151	0,613	0,6109	0,6088	0,6067	0,6047	0,6027	0,6007	0,5987	0,5967
76,2	0,6338	0,6316	0,6293	0,627	0,6248	0,6226	0,6204	0,6182	0,6161	0,614	0,6119	0,6098	0,6077	0,6056	0,6036	0,6016	0,5995	0,5975	0,5956
76,3	0,6327	0,6304	0,6282	0,6259	0,6237	0,6215	0,6193	0,6171	0,615	0,6128	0,6107	0,6086	0,6066	0,6045	0,6025	0,6004	0,5984	0,5964	0,5945
76,4	0,6316	0,6293	0,627	0,6248	0,6226	0,6204	0,6182	0,616	0,6139	0,6117	0,6096	0,6075	0,6054	0,6034	0,6013	0,5993	0,5973	0,5953	0,5933
76,5	0,6305	0,6282	0,6259	0,6237	0,6214	0,6192	0,617	0,6149	0,6127	0,6106	0,6085	0,6064	0,6043	0,6023	0,6002	0,5982	0,5962	0,5942	0,5922
76,6	0,6293	0,6271	0,6248	0,6225	0,6203	0,6181	0,6159	0,6138	0,6116	0,6095	0,6074	0,6053	0,6032	0,6011	0,5991	0,5971	0,5951	0,5931	0,5911
76,7	0,6282	0,6259	0,6237	0,6214	0,6192	0,617	0,6148	0,6126	0,6105	0,6084	0,6062	0,6042	0,6021	0,6	0,598	0,596	0,5939	0,592	0,59
76,8	0,6271	0,6248	0,6225	0,6203	0,6181	0,6159	0,6137	0,6115	0,6094	0,6072	0,6051	0,603	0,601	0,5989	0,5969	0,5948	0,5928	0,5908	0,5889
76,9	0,626	0,6237	0,6214	0,6192	0,6169	0,6147	0,6125	0,6104	0,6082	0,6061	0,604	0,6019	0,5998	0,5978	0,5957	0,5937	0,5917	0,5897	0,5877
77	0,6248	0,6225	0,6203	0,618	0,6158	0,6136	0,6114	0,6093	0,6071	0,605	0,6029	0,6008	0,5987	0,5966	0,5946	0,5926	0,5906	0,5886	0,5866
77,1	0,6237	0,6214	0,6191	0,6169	0,6147	0,6125	0,6103	0,6081	0,606	0,6038	0,6017	0,5997	0,5976	0,5955	0,5935	0,5915	0,5895	0,5875	0,5855
77,2	0,6226	0,6203	0,618	0,6158	0,6135	0,6113	0,6092	0,607	0,6048	0,6027	0,6006	0,5985	0,5964	0,5944	0,5924	0,5903	0,5883	0,5863	0,5844
77,3	0,6214	0,6191	0,6169	0,6146	0,6124	0,6102	0,608	0,6059	0,6037	0,6016	0,5995	0,5974	0,5953	0,5933	0,5912	0,5892	0,5872	0,5852	0,5832
77,4	0,6203	0,618	0,6157	0,6135	0,6113	0,6091	0,6069	0,6047	0,6026	0,6005	0,5983	0,5963	0,5942	0,5921	0,5901	0,5881	0,5861	0,5841	0,5821
77,5	0,6192	0,6169	0,6146	0,6124	0,6101	0,6079	0,6058	0,6036	0,6014	0,5993	0,5972	0,5951	0,5931	0,591	0,589	0,5869	0,5849	0,5829	0,581
77,6	0,618	0,6157	0,6135	0,6112	0,609	0,6068	0,6046	0,6025	0,6003	0,5982	0,5961	0,594	0,5919	0,5899	0,5878	0,5858	0,5838	0,5818	0,5798
77,7	0,6169	0,6146	0,6123	0,6101	0,6079	0,6057	0,6035	0,6013	0,5992	0,5971	0,5949	0,5929	0,5908	0,5887	0,5867	0,5847	0,5827	0,5807	0,5787
77,8	0,6157	0,6134	0,6112	0,6089	0,6067	0,6045	0,6023	0,6002	0,598	0,5959	0,5938	0,5917	0,5896	0,5876	0,5856	0,5835	0,5815	0,5795	0,5776
77,9	0,6146	0,6123	0,61	0,6078	0,6056	0,6034	0,6012	0,599	0,5969	0,5948	0,5927	0,5906	0,5885	0,5865	0,5844	0,5824	0,5804	0,5784	0,5764

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
74,5	0,6124	0,6104	0,6085	0,6066	0,6047	0,6028	0,6009	0,599	0,5972	0,5954	0,5935	0,5917	0,5899	0,5882	0,5864	0,5846	0,5829	0,5811	0,5794
74,6	0,6113	0,6094	0,6074	0,6055	0,6036	0,6017	0,5998	0,598	0,5961	0,5943	0,5924	0,5906	0,5888	0,5871	0,5853	0,5835	0,5818	0,5801	0,5783
74,7	0,6102	0,6083	0,6063	0,6044	0,6025	0,6006	0,5987	0,5969	0,595	0,5932	0,5914	0,5895	0,5877	0,586	0,5842	0,5824	0,5807	0,579	0,5772
74,8	0,6091	0,6072	0,6052	0,6033	0,6014	0,5995	0,5976	0,5958	0,5939	0,5921	0,5903	0,5884	0,5867	0,5849	0,5831	0,5813	0,5796	0,5779	0,5761
74,9	0,608	0,6061	0,6041	0,6022	0,6003	0,5984	0,5965	0,5947	0,5928	0,591	0,5892	0,5874	0,5856	0,5838	0,582	0,5803	0,5785	0,5768	0,5751
75	0,6069	0,605	0,603	0,6011	0,5992	0,5973	0,5954	0,5936	0,5917	0,5899	0,5881	0,5863	0,5845	0,5827	0,5809	0,5792	0,5774	0,5757	0,574
75,1	0,6058	0,6039	0,6019	0,6	0,5981	0,5962	0,5943	0,5925	0,5906	0,5888	0,587	0,5852	0,5834	0,5816	0,5798	0,5781	0,5763	0,5746	0,5729
75,2	0,6047	0,6028	0,6008	0,5989	0,597	0,5951	0,5932	0,5914	0,5895	0,5877	0,5859	0,5841	0,5823	0,5805	0,5787	0,577	0,5752	0,5735	0,5718
75,3	0,6036	0,6016	0,5997	0,5978	0,5959	0,594	0,5921	0,5903	0,5884	0,5866	0,5848	0,583	0,5812	0,5794	0,5776	0,5759	0,5741	0,5724	0,5707
75,4	0,6025	0,6005	0,5986	0,5967	0,5948	0,5929	0,591	0,5892	0,5873	0,5855	0,5837	0,5819	0,5801	0,5783	0,5765	0,5748	0,573	0,5713	0,5696
75,5	0,6014	0,5994	0,5975	0,5956	0,5937	0,5918	0,5899	0,5881	0,5862	0,5844	0,5826	0,5808	0,579	0,5772	0,5754	0,5737	0,5719	0,5702	0,5685
75,6	0,6003	0,5983	0,5964	0,5945	0,5926	0,5907	0,5888	0,587	0,5851	0,5833	0,5815	0,5797	0,5779	0,5761	0,5743	0,5726	0,5708	0,5691	0,5674
75,7	0,5992	0,5972	0,5953	0,5934	0,5915	0,5896	0,5877	0,5859	0,584	0,5822	0,5804	0,5785	0,5768	0,575	0,5732	0,5715	0,5697	0,568	0,5663
75,8	0,5981	0,5961	0,5942	0,5923	0,5904	0,5885	0,5866	0,5847	0,5829	0,5811	0,5792	0,5774	0,5757	0,5739	0,5721	0,5704	0,5686	0,5669	0,5652
75,9	0,597	0,595	0,5931	0,5912	0,5893	0,5874	0,5855	0,5836	0,5818	0,58	0,5781	0,5763	0,5745	0,5728	0,571	0,5693	0,5675	0,5658	0,5641
76	0,5958	0,5939	0,592	0,59	0,5881	0,5863	0,5844	0,5825	0,5807	0,5789	0,577	0,5752	0,5734	0,5717	0,5699	0,5681	0,5664	0,5647	0,563
76,1	0,5947	0,5928	0,5908	0,5889	0,587	0,5851	0,5833	0,5814	0,5796	0,5777	0,5759	0,5741	0,5723	0,5706	0,5688	0,567	0,5653	0,5636	0,5619
76,2	0,5936	0,5917	0,5897	0,5878	0,5859	0,584	0,5822	0,5803	0,5785	0,5766	0,5748	0,573	0,5712	0,5694	0,5677	0,5659	0,5642	0,5625	0,5607
76,3	0,5925	0,5906	0,5886	0,5867	0,5848	0,5829	0,581	0,5792	0,5773	0,5755	0,5737	0,5719	0,5701	0,5683	0,5666	0,5648	0,5631	0,5614	0,5596
76,4	0,5914	0,5894	0,5875	0,5856	0,5837	0,5818	0,5799	0,5781	0,5762	0,5744	0,5726	0,5708	0,569	0,5672	0,5655	0,5637	0,562	0,5602	0,5585
76,5	0,5903	0,5883	0,5864	0,5845	0,5826	0,5807	0,5788	0,577	0,5751	0,5733	0,5715	0,5697	0,5679	0,5661	0,5643	0,5626	0,5609	0,5591	0,5574
76,6	0,5891	0,5872	0,5853	0,5834	0,5815	0,5796	0,5777	0,5758	0,574	0,5722	0,5704	0,5686	0,5668	0,565	0,5632	0,5615	0,5597	0,558	0,5563
76,7	0,588	0,5861	0,5842	0,5822	0,5803	0,5785	0,5766	0,5747	0,5729	0,5711	0,5692	0,5674	0,5657	0,5639	0,5621	0,5604	0,5586	0,5569	0,5552
76,8	0,5869	0,585	0,583	0,5811	0,5792	0,5773	0,5755	0,5736	0,5718	0,5699	0,5681	0,5663	0,5645	0,5628	0,561	0,5593	0,5575	0,5558	0,5541
76,9	0,5858	0,5838	0,5819	0,58	0,5781	0,5762	0,5743	0,5725	0,5706	0,5688	0,567	0,5652	0,5634	0,5616	0,5599	0,5581	0,5564	0,5547	0,553
77	0,5847	0,5827	0,5808	0,5789	0,577	0,5751	0,5732	0,5714	0,5695	0,5677	0,5659	0,5641	0,5623	0,5605	0,5588	0,557	0,5553	0,5536	0,5518
77,1	0,5835	0,5816	0,5797	0,5778	0,5759	0,574	0,5721	0,5702	0,5684	0,5666	0,5648	0,563	0,5612	0,5594	0,5576	0,5559	0,5542	0,5524	0,5507
77,2	0,5824	0,5805	0,5785	0,5766	0,5747	0,5728	0,571	0,5691	0,5673	0,5655	0,5636	0,5618	0,5601	0,5583	0,5565	0,5548	0,553	0,5513	0,5496
77,3	0,5813	0,5793	0,5774	0,5755	0,5736	0,5717	0,5699	0,568	0,5662	0,5643	0,5625	0,5607	0,5589	0,5572	0,5554	0,5537	0,5519	0,5502	0,5485
77,4	0,5802	0,5782	0,5763	0,5744	0,5725	0,5706	0,5687	0,5669	0,565	0,5632	0,5614	0,5596	0,5578	0,556	0,5543	0,5525	0,5508	0,5491	0,5474
77,5	0,579	0,5771	0,5752	0,5732	0,5713	0,5695	0,5676	0,5657	0,5639	0,5621	0,5603	0,5585	0,5567	0,5549	0,5532	0,5514	0,5497	0,5479	0,5462
77,6	0,5779	0,5759	0,574	0,5721	0,5702	0,5683	0,5665	0,5646	0,5628	0,561	0,5591	0,5573	0,5556	0,5538	0,552	0,5503	0,5485	0,5468	0,5451
77,7	0,5768	0,5748	0,5729	0,571	0,5691	0,5672	0,5653	0,5635	0,5616	0,5598	0,558	0,5562	0,5544	0,5527	0,5509	0,5491	0,5474	0,5457	0,544
77,8	0,5756	0,5737	0,5718	0,5699	0,568	0,5661	0,5642	0,5624	0,5605	0,5587	0,5569	0,5551	0,5533	0,5515	0,5498	0,548	0,5463	0,5446	0,5429
77,9	0,5745	0,5725	0,5706	0,5687	0,5668	0,5649	0,5631	0,5612	0,5594	0,5576	0,5557	0,554	0,5522	0,5504	0,5486	0,5469	0,5452	0,5434	0,5417

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	**14,3**	**14,4**	**14,5**	**14,6**	**14,7**	**14,8**	**14,9**	**15**
74,5	0,5777	0,576	0,5743	0,5727	0,571	0,5693	0,5677	0,5661
74,6	0,5766	0,5749	0,5732	0,5716	0,5699	0,5682	0,5666	0,565
74,7	0,5755	0,5738	0,5721	0,5705	0,5688	0,5672	0,5655	0,5639
74,8	0,5744	0,5727	0,5711	0,5694	0,5677	0,5661	0,5644	0,5628
74,9	0,5733	0,5716	0,57	0,5683	0,5666	0,565	0,5633	0,5617
75	0,5723	0,5706	0,5689	0,5672	0,5655	0,5639	0,5622	0,5606
75,1	0,5712	0,5695	0,5678	0,5661	0,5644	0,5628	0,5612	0,5595
75,2	0,5701	0,5684	0,5667	0,565	0,5633	0,5617	0,5601	0,5584
75,3	0,569	0,5673	0,5656	0,5639	0,5623	0,5606	0,559	0,5573
75,4	0,5679	0,5662	0,5645	0,5628	0,5612	0,5595	0,5579	0,5562
75,5	0,5668	0,5651	0,5634	0,5617	0,5601	0,5584	0,5568	0,5551
75,6	0,5657	0,564	0,5623	0,5606	0,559	0,5573	0,5557	0,554
75,7	0,5646	0,5629	0,5612	0,5595	0,5579	0,5562	0,5546	0,5529
75,8	0,5635	0,5618	0,5601	0,5584	0,5568	0,5551	0,5535	0,5518
75,9	0,5624	0,5607	0,559	0,5573	0,5557	0,554	0,5524	0,5507
76	0,5613	0,5596	0,5579	0,5562	0,5545	0,5529	0,5513	0,5496
76,1	0,5601	0,5585	0,5568	0,5551	0,5534	0,5518	0,5502	0,5485
76,2	0,559	0,5573	0,5557	0,554	0,5523	0,5507	0,5491	0,5474
76,3	0,5579	0,5562	0,5546	0,5529	0,5512	0,5496	0,5479	0,5463
76,4	0,5568	0,5551	0,5535	0,5518	0,5501	0,5485	0,5468	0,5452
76,5	0,5557	0,554	0,5523	0,5507	0,549	0,5474	0,5457	0,5441
76,6	0,5546	0,5529	0,5512	0,5496	0,5479	0,5463	0,5446	0,543
76,7	0,5535	0,5518	0,5501	0,5484	0,5468	0,5451	0,5435	0,5419
76,8	0,5524	0,5507	0,549	0,5473	0,5457	0,544	0,5424	0,5408
76,9	0,5513	0,5496	0,5479	0,5462	0,5446	0,5429	0,5413	0,5397
77	0,5501	0,5484	0,5468	0,5451	0,5434	0,5418	0,5402	0,5385
77,1	0,549	0,5473	0,5457	0,544	0,5423	0,5407	0,5391	0,5374
77,2	0,5479	0,5462	0,5445	0,5429	0,5412	0,5396	0,5379	0,5363
77,3	0,5468	0,5451	0,5434	0,5417	0,5401	0,5384	0,5368	0,5352
77,4	0,5457	0,544	0,5423	0,5406	0,539	0,5373	0,5357	0,5341
77,5	0,5445	0,5428	0,5412	0,5395	0,5378	0,5362	0,5346	0,533
77,6	0,5434	0,5417	0,54	0,5384	0,5367	0,5351	0,5335	0,5318
77,7	0,5423	0,5406	0,5389	0,5373	0,5356	0,534	0,5323	0,5307
77,8	0,5412	0,5395	0,5378	0,5361	0,5345	0,5328	0,5312	0,5296
77,9	0,54	0,5383	0,5367	0,535	0,5333	0,5317	0,5301	0,5285

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
78	1,1723	1,1499	1,1294	1,1105	1,093	1,0767	1,0615	1,0472	1,0336	1,0209	1,0087	0,9972	0,9862	0,9756	0,9656	0,9559	0,9466	0,9377	0,929
78,1	1,1711	1,1486	1,1281	1,1093	1,0918	1,0755	1,0602	1,0459	1,0324	1,0196	1,0075	0,996	0,985	0,9744	0,9644	0,9547	0,9454	0,9364	0,9278
78,2	1,1698	1,1474	1,1269	1,108	1,0905	1,0742	1,059	1,0447	1,0312	1,0184	1,0063	0,9947	0,9837	0,9732	0,9631	0,9535	0,9442	0,9352	0,9266
78,3	1,1686	1,1461	1,1256	1,1068	1,0893	1,073	1,0578	1,0435	1,03	1,0172	1,0051	0,9935	0,9825	0,972	0,9619	0,9523	0,943	0,934	0,9254
78,4	1,1673	1,1449	1,1244	1,1055	1,088	1,0718	1,0565	1,0422	1,0287	1,016	1,0038	0,9923	0,9813	0,9708	0,9607	0,951	0,9418	0,9328	0,9242
78,5	1,166	1,1436	1,1231	1,1043	1,0868	1,0705	1,0553	1,041	1,0275	1,0147	1,0026	0,9911	0,9801	0,9696	0,9595	0,9498	0,9405	0,9316	0,923
78,6	1,1648	1,1424	1,1219	1,103	1,0855	1,0693	1,0541	1,0398	1,0263	1,0135	1,0014	0,9898	0,9788	0,9683	0,9583	0,9486	0,9393	0,9304	0,9218
78,7	1,1635	1,1411	1,1206	1,1018	1,0843	1,068	1,0528	1,0385	1,025	1,0123	1,0001	0,9886	0,9776	0,9671	0,957	0,9474	0,9381	0,9292	0,9206
78,8	1,1623	1,1398	1,1194	1,1005	1,0831	1,0668	1,0516	1,0373	1,0238	1,011	0,9989	0,9874	0,9764	0,9659	0,9558	0,9462	0,9369	0,928	0,9193
78,9	1,161	1,1386	1,1181	1,0993	1,0818	1,0655	1,0503	1,036	1,0225	1,0098	0,9977	0,9862	0,9752	0,9647	0,9546	0,9449	0,9357	0,9267	0,9181
79	1,1597	1,1373	1,1168	1,098	1,0805	1,0643	1,0491	1,0348	1,0213	1,0086	0,9964	0,9849	0,9739	0,9634	0,9534	0,9437	0,9344	0,9255	0,9169
79,1	1,1584	1,136	1,1156	1,0967	1,0793	1,063	1,0478	1,0335	1,0201	1,0073	0,9952	0,9837	0,9727	0,9622	0,9521	0,9425	0,9332	0,9243	0,9157
79,2	1,1572	1,1348	1,1143	1,0955	1,078	1,0618	1,0466	1,0323	1,0188	1,0061	0,994	0,9825	0,9715	0,961	0,9509	0,9413	0,932	0,9231	0,9145
79,3	1,1559	1,1335	1,1131	1,0942	1,0768	1,0605	1,0453	1,0311	1,0176	1,0048	0,9927	0,9812	0,9702	0,9597	0,9497	0,94	0,9308	0,9218	0,9132
79,4	1,1546	1,1322	1,1118	1,093	1,0755	1,0593	1,0441	1,0298	1,0163	1,0036	0,9915	0,98	0,969	0,9585	0,9485	0,9388	0,9295	0,9206	0,912
79,5	1,1534	1,131	1,1105	1,0917	1,0743	1,058	1,0428	1,0286	1,0151	1,0023	0,9903	0,9787	0,9678	0,9573	0,9472	0,9376	0,9283	0,9194	0,9108
79,6	1,1521	1,1297	1,1093	1,0904	1,073	1,0568	1,0416	1,0273	1,0138	1,0011	0,989	0,9775	0,9665	0,956	0,946	0,9363	0,9271	0,9182	0,9096
79,7	1,1508	1,1284	1,108	1,0892	1,0718	1,0555	1,0403	1,0261	1,0126	0,9999	0,9878	0,9763	0,9653	0,9548	0,9447	0,9351	0,9258	0,9169	0,9083
79,8	1,1495	1,1272	1,1067	1,0879	1,0705	1,0543	1,0391	1,0248	1,0113	0,9986	0,9865	0,975	0,964	0,9536	0,9435	0,9339	0,9246	0,9157	0,9071
79,9	1,1482	1,1259	1,1054	1,0866	1,0692	1,053	1,0378	1,0236	1,0101	0,9974	0,9853	0,9738	0,9628	0,9523	0,9423	0,9326	0,9234	0,9145	0,9059
80	1,147	1,1246	1,1042	1,0854	1,068	1,0517	1,0366	1,0223	1,0088	0,9961	0,984	0,9725	0,9616	0,9511	0,941	0,9314	0,9221	0,9132	0,9046
80,1	1,1457	1,1233	1,1029	1,0841	1,0667	1,0505	1,0353	1,021	1,0076	0,9949	0,9828	0,9713	0,9603	0,9498	0,9398	0,9302	0,9209	0,912	0,9034
80,2	1,1444	1,122	1,1016	1,0828	1,0654	1,0492	1,034	1,0198	1,0063	0,9936	0,9815	0,97	0,9591	0,9486	0,9386	0,9289	0,9197	0,9108	0,9022
80,3	1,1431	1,1208	1,1004	1,0816	1,0642	1,0479	1,0328	1,0185	1,0051	0,9923	0,9803	0,9688	0,9578	0,9473	0,9373	0,9277	0,9184	0,9095	0,9009
80,4	1,1418	1,1195	1,0991	1,0803	1,0629	1,0467	1,0315	1,0173	1,0038	0,9911	0,979	0,9675	0,9566	0,9461	0,9361	0,9264	0,9172	0,9083	0,8997
80,5	1,1405	1,1182	1,0978	1,079	1,0616	1,0454	1,0302	1,016	1,0026	0,9898	0,9778	0,9663	0,9553	0,9448	0,9348	0,9252	0,9159	0,907	0,8985
80,6	1,1393	1,1169	1,0965	1,0777	1,0603	1,0441	1,029	1,0147	1,0013	0,9886	0,9765	0,965	0,9541	0,9436	0,9336	0,9239	0,9147	0,9058	0,8972
80,7	1,138	1,1156	1,0952	1,0765	1,0591	1,0429	1,0277	1,0135	1	0,9873	0,9752	0,9638	0,9528	0,9423	0,9323	0,9227	0,9134	0,9045	0,896
80,8	1,1367	1,1143	1,0939	1,0752	1,0578	1,0416	1,0264	1,0122	0,9988	0,986	0,974	0,9625	0,9516	0,9411	0,9311	0,9214	0,9122	0,9033	0,8947
80,9	1,1354	1,1131	1,0927	1,0739	1,0565	1,0403	1,0252	1,0109	0,9975	0,9848	0,9727	0,9612	0,9503	0,9398	0,9298	0,9202	0,9109	0,9021	0,8935
81	1,1341	1,1118	1,0914	1,0726	1,0552	1,039	1,0239	1,0097	0,9962	0,9835	0,9715	0,96	0,949	0,9386	0,9286	0,9189	0,9097	0,9008	0,8922
81,1	1,1328	1,1105	1,0901	1,0713	1,0539	1,0378	1,0226	1,0084	0,995	0,9823	0,9702	0,9587	0,9478	0,9373	0,9273	0,9177	0,9084	0,8996	0,891
81,2	1,1315	1,1092	1,0888	1,07	1,0527	1,0365	1,0213	1,0071	0,9937	0,981	0,9689	0,9575	0,9465	0,9361	0,926	0,9164	0,9072	0,8983	0,8897
81,3	1,1302	1,1079	1,0875	1,0688	1,0514	1,0352	1,0201	1,0058	0,9924	0,9797	0,9677	0,9562	0,9452	0,9348	0,9248	0,9152	0,9059	0,897	0,8885
81,4	1,1289	1,1066	1,0862	1,0675	1,0501	1,0339	1,0188	1,0046	0,9911	0,9784	0,9664	0,9549	0,944	0,9335	0,9235	0,9139	0,9047	0,8958	0,8872

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
78	0,9207	0,9127	0,9049	0,8973	0,89	0,8829	0,8761	0,8694	0,8628	0,8565	0,8503	0,8443	0,8384	0,8327	0,8271	0,8216	0,8163	0,811	0,8059
78,1	0,9195	0,9115	0,9037	0,8961	0,8888	0,8817	0,8749	0,8682	0,8617	0,8553	0,8491	0,8431	0,8372	0,8315	0,8259	0,8204	0,8151	0,8098	0,8047
78,2	0,9183	0,9103	0,9025	0,8949	0,8876	0,8805	0,8737	0,867	0,8605	0,8541	0,8479	0,8419	0,836	0,8303	0,8247	0,8192	0,8139	0,8087	0,8035
78,3	0,9171	0,909	0,9013	0,8937	0,8864	0,8793	0,8725	0,8658	0,8593	0,8529	0,8467	0,8407	0,8349	0,8291	0,8235	0,8181	0,8127	0,8075	0,8024
78,4	0,9159	0,9078	0,9001	0,8925	0,8852	0,8781	0,8713	0,8646	0,8581	0,8517	0,8456	0,8395	0,8337	0,8279	0,8223	0,8169	0,8115	0,8063	0,8012
78,5	0,9147	0,9066	0,8989	0,8913	0,884	0,8769	0,8701	0,8634	0,8569	0,8505	0,8444	0,8383	0,8325	0,8267	0,8211	0,8157	0,8103	0,8051	0,8
78,6	0,9135	0,9054	0,8976	0,8901	0,8828	0,8757	0,8689	0,8622	0,8557	0,8493	0,8432	0,8371	0,8313	0,8255	0,82	0,8145	0,8091	0,8039	0,7988
78,7	0,9122	0,9042	0,8964	0,8889	0,8816	0,8745	0,8677	0,861	0,8545	0,8481	0,842	0,8359	0,8301	0,8244	0,8188	0,8133	0,8079	0,8027	0,7976
78,8	0,911	0,903	0,8952	0,8877	0,8804	0,8733	0,8664	0,8598	0,8533	0,8469	0,8408	0,8347	0,8289	0,8232	0,8176	0,8121	0,8068	0,8015	0,7964
78,9	0,9098	0,9018	0,894	0,8865	0,8792	0,8721	0,8652	0,8586	0,8521	0,8457	0,8396	0,8335	0,8277	0,822	0,8164	0,8109	0,8056	0,8003	0,7952
79	0,9086	0,9006	0,8928	0,8853	0,878	0,8709	0,864	0,8574	0,8509	0,8445	0,8384	0,8323	0,8265	0,8208	0,8152	0,8097	0,8044	0,7991	0,794
79,1	0,9074	0,8994	0,8916	0,8841	0,8768	0,8697	0,8628	0,8561	0,8496	0,8433	0,8372	0,8311	0,8253	0,8196	0,814	0,8085	0,8032	0,7979	0,7928
79,2	0,9062	0,8981	0,8904	0,8828	0,8756	0,8685	0,8616	0,8549	0,8484	0,8421	0,8359	0,8299	0,8241	0,8184	0,8128	0,8073	0,802	0,7967	0,7916
79,3	0,9049	0,8969	0,8892	0,8816	0,8743	0,8673	0,8604	0,8537	0,8472	0,8409	0,8347	0,8287	0,8229	0,8171	0,8116	0,8061	0,8008	0,7955	0,7904
79,4	0,9037	0,8957	0,8879	0,8804	0,8731	0,8661	0,8592	0,8525	0,846	0,8397	0,8335	0,8275	0,8217	0,8159	0,8104	0,8049	0,7996	0,7943	0,7892
79,5	0,9025	0,8945	0,8867	0,8792	0,8719	0,8648	0,858	0,8513	0,8448	0,8385	0,8323	0,8263	0,8205	0,8147	0,8092	0,8037	0,7984	0,7931	0,788
79,6	0,9013	0,8932	0,8855	0,878	0,8707	0,8636	0,8568	0,8501	0,8436	0,8373	0,8311	0,8251	0,8192	0,8135	0,8079	0,8025	0,7972	0,7919	0,7868
79,7	0,9	0,892	0,8843	0,8768	0,8695	0,8624	0,8555	0,8489	0,8424	0,8361	0,8299	0,8239	0,818	0,8123	0,8067	0,8013	0,7959	0,7907	0,7856
79,8	0,8988	0,8908	0,883	0,8755	0,8682	0,8612	0,8543	0,8476	0,8412	0,8348	0,8287	0,8227	0,8168	0,8111	0,8055	0,8001	0,7947	0,7895	0,7844
79,9	0,8976	0,8896	0,8818	0,8743	0,867	0,86	0,8531	0,8464	0,8399	0,8336	0,8275	0,8215	0,8156	0,8099	0,8043	0,7989	0,7935	0,7883	0,7832
80	0,8963	0,8883	0,8806	0,8731	0,8658	0,8587	0,8519	0,8452	0,8387	0,8324	0,8262	0,8202	0,8144	0,8087	0,8031	0,7976	0,7923	0,7871	0,782
80,1	0,8951	0,8871	0,8794	0,8718	0,8646	0,8575	0,8506	0,844	0,8375	0,8312	0,825	0,819	0,8132	0,8075	0,8019	0,7964	0,7911	0,7859	0,7808
80,2	0,8939	0,8859	0,8781	0,8706	0,8633	0,8563	0,8494	0,8428	0,8363	0,83	0,8238	0,8178	0,812	0,8062	0,8007	0,7952	0,7899	0,7847	0,7796
80,3	0,8926	0,8846	0,8769	0,8694	0,8621	0,8551	0,8482	0,8415	0,835	0,8287	0,8226	0,8166	0,8107	0,805	0,7995	0,794	0,7887	0,7835	0,7784
80,4	0,8914	0,8834	0,8757	0,8682	0,8609	0,8538	0,847	0,8403	0,8338	0,8275	0,8214	0,8154	0,8095	0,8038	0,7982	0,7928	0,7875	0,7822	0,7771
80,5	0,8902	0,8822	0,8744	0,8669	0,8596	0,8526	0,8457	0,8391	0,8326	0,8263	0,8201	0,8141	0,8083	0,8026	0,797	0,7916	0,7862	0,781	0,7759
80,6	0,8889	0,8809	0,8732	0,8657	0,8584	0,8514	0,8445	0,8378	0,8314	0,8251	0,8189	0,8129	0,8071	0,8014	0,7958	0,7903	0,785	0,7798	0,7747
80,7	0,8877	0,8797	0,8719	0,8644	0,8572	0,8501	0,8433	0,8366	0,8301	0,8238	0,8177	0,8117	0,8058	0,8001	0,7946	0,7891	0,7838	0,7786	0,7735
80,8	0,8864	0,8784	0,8707	0,8632	0,8559	0,8489	0,842	0,8354	0,8289	0,8226	0,8164	0,8105	0,8046	0,7989	0,7933	0,7879	0,7826	0,7774	0,7723
80,9	0,8852	0,8772	0,8695	0,862	0,8547	0,8477	0,8408	0,8341	0,8277	0,8214	0,8152	0,8092	0,8034	0,7977	0,7921	0,7867	0,7813	0,7761	0,771
81	0,884	0,876	0,8682	0,8607	0,8535	0,8464	0,8396	0,8329	0,8264	0,8201	0,814	0,808	0,8022	0,7965	0,7909	0,7854	0,7801	0,7749	0,7698
81,1	0,8827	0,8747	0,867	0,8595	0,8522	0,8452	0,8383	0,8317	0,8252	0,8189	0,8128	0,8068	0,8009	0,7952	0,7897	0,7842	0,7789	0,7737	0,7686
81,2	0,8815	0,8735	0,8657	0,8582	0,851	0,8439	0,8371	0,8304	0,824	0,8177	0,8115	0,8055	0,7997	0,794	0,7884	0,783	0,7777	0,7725	0,7674
81,3	0,8802	0,8722	0,8645	0,857	0,8497	0,8427	0,8358	0,8292	0,8227	0,8164	0,8103	0,8043	0,7985	0,7928	0,7872	0,7817	0,7764	0,7712	0,7661
81,4	0,879	0,871	0,8632	0,8557	0,8485	0,8414	0,8346	0,8279	0,8215	0,8152	0,809	0,8031	0,7972	0,7915	0,786	0,7805	0,7752	0,77	0,7649

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
78	0,8009	0,796	0,7912	0,7864	0,7818	0,7773	0,7728	0,7684	0,7641	0,7599	0,7557	0,7516	0,7476	0,7437	0,7398	0,736	0,7322	0,7285	0,7248
78,1	0,7997	0,7948	0,79	0,7853	0,7806	0,7761	0,7716	0,7672	0,7629	0,7587	0,7546	0,7505	0,7465	0,7425	0,7386	0,7348	0,731	0,7273	0,7237
78,2	0,7985	0,7936	0,7888	0,7841	0,7794	0,7749	0,7704	0,7661	0,7618	0,7575	0,7534	0,7493	0,7453	0,7413	0,7375	0,7336	0,7299	0,7262	0,7225
78,3	0,7973	0,7924	0,7876	0,7829	0,7783	0,7737	0,7693	0,7649	0,7606	0,7564	0,7522	0,7481	0,7441	0,7402	0,7363	0,7325	0,7287	0,725	0,7213
78,4	0,7962	0,7912	0,7864	0,7817	0,7771	0,7725	0,7681	0,7637	0,7594	0,7552	0,751	0,747	0,7429	0,739	0,7351	0,7313	0,7275	0,7238	0,7202
78,5	0,795	0,7901	0,7852	0,7805	0,7759	0,7714	0,7669	0,7625	0,7582	0,754	0,7499	0,7458	0,7418	0,7378	0,7339	0,7301	0,7264	0,7227	0,719
78,6	0,7938	0,7889	0,7841	0,7793	0,7747	0,7702	0,7657	0,7613	0,757	0,7528	0,7487	0,7446	0,7406	0,7366	0,7328	0,7289	0,7252	0,7215	0,7178
78,7	0,7926	0,7877	0,7829	0,7782	0,7735	0,769	0,7645	0,7602	0,7559	0,7516	0,7475	0,7434	0,7394	0,7355	0,7316	0,7278	0,724	0,7203	0,7167
78,8	0,7914	0,7865	0,7817	0,777	0,7723	0,7678	0,7634	0,759	0,7547	0,7505	0,7463	0,7422	0,7382	0,7343	0,7304	0,7266	0,7228	0,7191	0,7155
78,9	0,7902	0,7853	0,7805	0,7758	0,7712	0,7666	0,7622	0,7578	0,7535	0,7493	0,7451	0,7411	0,737	0,7331	0,7292	0,7254	0,7216	0,7179	0,7143
79	0,789	0,7841	0,7793	0,7746	0,77	0,7654	0,761	0,7566	0,7523	0,7481	0,7439	0,7399	0,7359	0,7319	0,728	0,7242	0,7205	0,7168	0,7131
79,1	0,7878	0,7829	0,7781	0,7734	0,7688	0,7642	0,7598	0,7554	0,7511	0,7469	0,7428	0,7387	0,7347	0,7307	0,7269	0,723	0,7193	0,7156	0,7119
79,2	0,7866	0,7817	0,7769	0,7722	0,7676	0,763	0,7586	0,7542	0,7499	0,7457	0,7416	0,7375	0,7335	0,7296	0,7257	0,7219	0,7181	0,7144	0,7108
79,3	0,7854	0,7805	0,7757	0,771	0,7664	0,7619	0,7574	0,753	0,7487	0,7445	0,7404	0,7363	0,7323	0,7284	0,7245	0,7207	0,7169	0,7132	0,7096
79,4	0,7842	0,7793	0,7745	0,7698	0,7652	0,7607	0,7562	0,7518	0,7476	0,7433	0,7392	0,7351	0,7311	0,7272	0,7233	0,7195	0,7157	0,712	0,7084
79,5	0,783	0,7781	0,7733	0,7686	0,764	0,7595	0,755	0,7506	0,7464	0,7421	0,738	0,7339	0,7299	0,726	0,7221	0,7183	0,7145	0,7108	0,7072
79,6	0,7818	0,7769	0,7721	0,7674	0,7628	0,7583	0,7538	0,7495	0,7452	0,7409	0,7368	0,7327	0,7287	0,7248	0,7209	0,7171	0,7134	0,7097	0,706
79,7	0,7806	0,7757	0,7709	0,7662	0,7616	0,7571	0,7526	0,7483	0,744	0,7398	0,7356	0,7315	0,7275	0,7236	0,7197	0,7159	0,7122	0,7085	0,7048
79,8	0,7794	0,7745	0,7697	0,765	0,7604	0,7559	0,7514	0,7471	0,7428	0,7386	0,7344	0,7303	0,7263	0,7224	0,7185	0,7147	0,711	0,7073	0,7036
79,9	0,7782	0,7733	0,7685	0,7638	0,7592	0,7547	0,7502	0,7459	0,7416	0,7374	0,7332	0,7292	0,7251	0,7212	0,7173	0,7135	0,7098	0,7061	0,7024
80	0,777	0,7721	0,7673	0,7626	0,758	0,7535	0,749	0,7447	0,7404	0,7362	0,732	0,728	0,724	0,72	0,7161	0,7123	0,7086	0,7049	0,7013
80,1	0,7758	0,7709	0,7661	0,7614	0,7568	0,7523	0,7478	0,7434	0,7392	0,735	0,7308	0,7268	0,7228	0,7188	0,7149	0,7111	0,7074	0,7037	0,7001
80,2	0,7746	0,7697	0,7649	0,7602	0,7556	0,751	0,7466	0,7422	0,738	0,7338	0,7296	0,7255	0,7216	0,7176	0,7137	0,7099	0,7062	0,7025	0,6989
80,3	0,7734	0,7685	0,7637	0,759	0,7544	0,7498	0,7454	0,741	0,7368	0,7325	0,7284	0,7243	0,7203	0,7164	0,7125	0,7087	0,705	0,7013	0,6977
80,4	0,7721	0,7673	0,7625	0,7578	0,7532	0,7486	0,7442	0,7398	0,7355	0,7313	0,7272	0,7231	0,7191	0,7152	0,7113	0,7075	0,7038	0,7001	0,6965
80,5	0,7709	0,766	0,7612	0,7565	0,7519	0,7474	0,743	0,7386	0,7343	0,7301	0,726	0,7219	0,7179	0,714	0,7101	0,7063	0,7026	0,6989	0,6953
80,6	0,7697	0,7648	0,76	0,7553	0,7507	0,7462	0,7418	0,7374	0,7331	0,7289	0,7248	0,7207	0,7167	0,7128	0,7089	0,7051	0,7014	0,6977	0,6941
80,7	0,7685	0,7636	0,7588	0,7541	0,7495	0,745	0,7406	0,7362	0,7319	0,7277	0,7236	0,7195	0,7155	0,7116	0,7077	0,7039	0,7002	0,6965	0,6929
80,8	0,7673	0,7624	0,7576	0,7529	0,7483	0,7438	0,7393	0,735	0,7307	0,7265	0,7224	0,7183	0,7143	0,7104	0,7065	0,7027	0,699	0,6953	0,6916
80,9	0,7661	0,7612	0,7564	0,7517	0,7471	0,7426	0,7381	0,7338	0,7295	0,7253	0,7212	0,7171	0,7131	0,7092	0,7053	0,7015	0,6978	0,6941	0,6904
81	0,7648	0,7599	0,7552	0,7505	0,7459	0,7413	0,7369	0,7325	0,7283	0,7241	0,7199	0,7159	0,7119	0,708	0,7041	0,7003	0,6965	0,6929	0,6892
81,1	0,7636	0,7587	0,7539	0,7492	0,7446	0,7401	0,7357	0,7313	0,727	0,7228	0,7187	0,7147	0,7107	0,7067	0,7029	0,6991	0,6953	0,6916	0,688
81,2	0,7624	0,7575	0,7527	0,748	0,7434	0,7389	0,7345	0,7301	0,7258	0,7216	0,7175	0,7134	0,7094	0,7055	0,7017	0,6979	0,6941	0,6904	0,6868
81,3	0,7611	0,7563	0,7515	0,7468	0,7422	0,7377	0,7332	0,7289	0,7246	0,7204	0,7163	0,7122	0,7082	0,7043	0,7004	0,6966	0,6929	0,6892	0,6856
81,4	0,7599	0,755	0,7502	0,7456	0,741	0,7364	0,732	0,7277	0,7234	0,7192	0,7151	0,711	0,707	0,7031	0,6992	0,6954	0,6917	0,688	0,6844

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
78	0,7213	0,7177	0,7142	0,7108	0,7074	0,704	0,7007	0,6975	0,6942	0,6911	0,6879	0,6848	0,6818	0,6788	0,6758	0,6729	0,6699	0,6671	0,6642
78,1	0,7201	0,7165	0,713	0,7096	0,7062	0,7029	0,6996	0,6963	0,6931	0,6899	0,6868	0,6837	0,6806	0,6776	0,6746	0,6717	0,6688	0,6659	0,6631
78,2	0,7189	0,7154	0,7119	0,7084	0,705	0,7017	0,6984	0,6951	0,6919	0,6888	0,6856	0,6825	0,6795	0,6765	0,6735	0,6705	0,6676	0,6648	0,6619
78,3	0,7177	0,7142	0,7107	0,7073	0,7039	0,7005	0,6972	0,694	0,6908	0,6876	0,6845	0,6814	0,6783	0,6753	0,6723	0,6694	0,6665	0,6636	0,6608
78,4	0,7166	0,713	0,7095	0,7061	0,7027	0,6994	0,6961	0,6928	0,6896	0,6864	0,6833	0,6802	0,6772	0,6741	0,6712	0,6682	0,6653	0,6624	0,6596
78,5	0,7154	0,7119	0,7084	0,7049	0,7015	0,6982	0,6949	0,6916	0,6884	0,6853	0,6821	0,679	0,676	0,673	0,67	0,6671	0,6642	0,6613	0,6584
78,6	0,7142	0,7107	0,7072	0,7038	0,7004	0,697	0,6937	0,6905	0,6873	0,6841	0,681	0,6779	0,6748	0,6718	0,6688	0,6659	0,663	0,6601	0,6573
78,7	0,7131	0,7095	0,706	0,7026	0,6992	0,6959	0,6926	0,6893	0,6861	0,6829	0,6798	0,6767	0,6737	0,6706	0,6677	0,6647	0,6618	0,659	0,6561
78,8	0,7119	0,7083	0,7049	0,7014	0,698	0,6947	0,6914	0,6881	0,6849	0,6818	0,6786	0,6755	0,6725	0,6695	0,6665	0,6636	0,6607	0,6578	0,655
78,9	0,7107	0,7072	0,7037	0,7002	0,6969	0,6935	0,6902	0,687	0,6838	0,6806	0,6775	0,6744	0,6713	0,6683	0,6653	0,6624	0,6595	0,6566	0,6538
79	0,7095	0,706	0,7025	0,6991	0,6957	0,6923	0,689	0,6858	0,6826	0,6794	0,6763	0,6732	0,6701	0,6671	0,6642	0,6612	0,6583	0,6555	0,6526
79,1	0,7084	0,7048	0,7013	0,6979	0,6945	0,6912	0,6879	0,6846	0,6814	0,6782	0,6751	0,672	0,669	0,666	0,663	0,6601	0,6572	0,6543	0,6515
79,2	0,7072	0,7036	0,7001	0,6967	0,6933	0,69	0,6867	0,6834	0,6802	0,6771	0,6739	0,6708	0,6678	0,6648	0,6618	0,6589	0,656	0,6531	0,6503
79,3	0,706	0,7025	0,699	0,6955	0,6921	0,6888	0,6855	0,6823	0,679	0,6759	0,6728	0,6697	0,6666	0,6636	0,6606	0,6577	0,6548	0,6519	0,6491
79,4	0,7048	0,7013	0,6978	0,6943	0,691	0,6876	0,6843	0,6811	0,6779	0,6747	0,6716	0,6685	0,6655	0,6624	0,6595	0,6565	0,6536	0,6508	0,6479
79,5	0,7036	0,7001	0,6966	0,6932	0,6898	0,6864	0,6831	0,6799	0,6767	0,6735	0,6704	0,6673	0,6643	0,6613	0,6583	0,6554	0,6525	0,6496	0,6468
79,6	0,7024	0,6989	0,6954	0,692	0,6886	0,6853	0,682	0,6787	0,6755	0,6723	0,6692	0,6661	0,6631	0,6601	0,6571	0,6542	0,6513	0,6484	0,6456
79,7	0,7012	0,6977	0,6942	0,6908	0,6874	0,6841	0,6808	0,6775	0,6743	0,6712	0,668	0,665	0,6619	0,6589	0,6559	0,653	0,6501	0,6472	0,6444
79,8	0,7001	0,6965	0,693	0,6896	0,6862	0,6829	0,6796	0,6763	0,6731	0,67	0,6669	0,6638	0,6607	0,6577	0,6548	0,6518	0,6489	0,6461	0,6432
79,9	0,6989	0,6953	0,6918	0,6884	0,685	0,6817	0,6784	0,6752	0,672	0,6688	0,6657	0,6626	0,6595	0,6565	0,6536	0,6506	0,6477	0,6449	0,642
80	0,6977	0,6941	0,6907	0,6872	0,6838	0,6805	0,6772	0,674	0,6708	0,6676	0,6645	0,6614	0,6584	0,6554	0,6524	0,6495	0,6466	0,6437	0,6409
80,1	0,6965	0,6929	0,6895	0,686	0,6827	0,6793	0,676	0,6728	0,6696	0,6664	0,6633	0,6602	0,6572	0,6542	0,6512	0,6483	0,6454	0,6425	0,6397
80,2	0,6953	0,6917	0,6883	0,6848	0,6815	0,6781	0,6748	0,6716	0,6684	0,6652	0,6621	0,659	0,656	0,653	0,65	0,6471	0,6442	0,6413	0,6385
80,3	0,6941	0,6905	0,6871	0,6836	0,6803	0,6769	0,6736	0,6704	0,6672	0,664	0,6609	0,6578	0,6548	0,6518	0,6488	0,6459	0,643	0,6401	0,6373
80,4	0,6929	0,6894	0,6859	0,6824	0,6791	0,6757	0,6724	0,6692	0,666	0,6628	0,6597	0,6566	0,6536	0,6506	0,6476	0,6447	0,6418	0,6389	0,6361
80,5	0,6917	0,6882	0,6847	0,6812	0,6779	0,6745	0,6712	0,668	0,6648	0,6616	0,6585	0,6554	0,6524	0,6494	0,6464	0,6435	0,6406	0,6378	0,6349
80,6	0,6905	0,6869	0,6835	0,68	0,6767	0,6733	0,67	0,6668	0,6636	0,6604	0,6573	0,6542	0,6512	0,6482	0,6452	0,6423	0,6394	0,6366	0,6337
80,7	0,6893	0,6857	0,6823	0,6788	0,6755	0,6721	0,6688	0,6656	0,6624	0,6592	0,6561	0,6531	0,65	0,647	0,644	0,6411	0,6382	0,6354	0,6325
80,8	0,6881	0,6845	0,6811	0,6776	0,6743	0,6709	0,6676	0,6644	0,6612	0,658	0,6549	0,6519	0,6488	0,6458	0,6429	0,6399	0,637	0,6342	0,6313
80,9	0,6869	0,6833	0,6799	0,6764	0,6731	0,6697	0,6664	0,6632	0,66	0,6568	0,6537	0,6507	0,6476	0,6446	0,6417	0,6387	0,6358	0,633	0,6301
81	0,6856	0,6821	0,6786	0,6752	0,6718	0,6685	0,6652	0,662	0,6588	0,6556	0,6525	0,6494	0,6464	0,6434	0,6404	0,6375	0,6346	0,6318	0,629
81,1	0,6844	0,6809	0,6774	0,674	0,6706	0,6673	0,664	0,6608	0,6576	0,6544	0,6513	0,6482	0,6452	0,6422	0,6392	0,6363	0,6334	0,6306	0,6277
81,2	0,6832	0,6797	0,6762	0,6728	0,6694	0,6661	0,6628	0,6596	0,6564	0,6532	0,6501	0,647	0,644	0,641	0,638	0,6351	0,6322	0,6294	0,6265
81,3	0,682	0,6785	0,675	0,6716	0,6682	0,6649	0,6616	0,6584	0,6552	0,652	0,6489	0,6458	0,6428	0,6398	0,6368	0,6339	0,631	0,6282	0,6253
81,4	0,6808	0,6773	0,6738	0,6704	0,667	0,6637	0,6604	0,6572	0,654	0,6508	0,6477	0,6446	0,6416	0,6386	0,6356	0,6327	0,6298	0,627	0,6241

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
78	0,6614	0,6587	0,6559	0,6532	0,6505	0,6479	0,6452	0,6426	0,6401	0,6375	0,635	0,6325	0,63	0,6276	0,6252	0,6228	0,6204	0,6181	0,6157
78,1	0,6603	0,6575	0,6548	0,652	0,6494	0,6467	0,6441	0,6415	0,6389	0,6364	0,6339	0,6314	0,6289	0,6265	0,624	0,6216	0,6193	0,6169	0,6146
78,2	0,6591	0,6563	0,6536	0,6509	0,6482	0,6456	0,6429	0,6403	0,6378	0,6352	0,6327	0,6302	0,6277	0,6253	0,6229	0,6205	0,6181	0,6158	0,6135
78,3	0,658	0,6552	0,6524	0,6497	0,6471	0,6444	0,6418	0,6392	0,6366	0,6341	0,6316	0,6291	0,6266	0,6242	0,6217	0,6193	0,617	0,6146	0,6123
78,4	0,6568	0,654	0,6513	0,6486	0,6459	0,6432	0,6406	0,638	0,6355	0,6329	0,6304	0,6279	0,6254	0,623	0,6206	0,6182	0,6158	0,6135	0,6112
78,5	0,6556	0,6529	0,6501	0,6474	0,6447	0,6421	0,6395	0,6369	0,6343	0,6318	0,6292	0,6268	0,6243	0,6218	0,6194	0,617	0,6147	0,6123	0,61
78,6	0,6545	0,6517	0,649	0,6463	0,6436	0,6409	0,6383	0,6357	0,6331	0,6306	0,6281	0,6256	0,6231	0,6207	0,6183	0,6159	0,6135	0,6112	0,6089
78,7	0,6533	0,6505	0,6478	0,6451	0,6424	0,6398	0,6371	0,6345	0,632	0,6294	0,6269	0,6244	0,622	0,6195	0,6171	0,6147	0,6124	0,61	0,6077
78,8	0,6522	0,6494	0,6466	0,6439	0,6413	0,6386	0,636	0,6334	0,6308	0,6283	0,6258	0,6233	0,6208	0,6184	0,616	0,6136	0,6112	0,6089	0,6065
78,9	0,651	0,6482	0,6455	0,6428	0,6401	0,6374	0,6348	0,6322	0,6297	0,6271	0,6246	0,6221	0,6197	0,6172	0,6148	0,6124	0,6101	0,6077	0,6054
79	0,6498	0,6471	0,6443	0,6416	0,6389	0,6363	0,6337	0,6311	0,6285	0,626	0,6234	0,621	0,6185	0,6161	0,6136	0,6113	0,6089	0,6065	0,6042
79,1	0,6487	0,6459	0,6431	0,6404	0,6378	0,6351	0,6325	0,6299	0,6273	0,6248	0,6223	0,6198	0,6173	0,6149	0,6125	0,6101	0,6077	0,6054	0,6031
79,2	0,6475	0,6447	0,642	0,6393	0,6366	0,6339	0,6313	0,6287	0,6262	0,6236	0,6211	0,6186	0,6162	0,6137	0,6113	0,6089	0,6066	0,6042	0,6019
79,3	0,6463	0,6435	0,6408	0,6381	0,6354	0,6328	0,6302	0,6276	0,625	0,6225	0,62	0,6175	0,615	0,6126	0,6102	0,6078	0,6054	0,6031	0,6007
79,4	0,6451	0,6424	0,6396	0,6369	0,6342	0,6316	0,629	0,6264	0,6238	0,6213	0,6188	0,6163	0,6138	0,6114	0,609	0,6066	0,6042	0,6019	0,5996
79,5	0,644	0,6412	0,6385	0,6358	0,6331	0,6304	0,6278	0,6252	0,6227	0,6201	0,6176	0,6151	0,6127	0,6102	0,6078	0,6054	0,6031	0,6007	0,5984
79,6	0,6428	0,64	0,6373	0,6346	0,6319	0,6293	0,6266	0,6241	0,6215	0,619	0,6164	0,614	0,6115	0,6091	0,6067	0,6043	0,6019	0,5996	0,5972
79,7	0,6416	0,6388	0,6361	0,6334	0,6307	0,6281	0,6255	0,6229	0,6203	0,6178	0,6153	0,6128	0,6103	0,6079	0,6055	0,6031	0,6007	0,5984	0,5961
79,8	0,6404	0,6377	0,6349	0,6322	0,6296	0,6269	0,6243	0,6217	0,6191	0,6166	0,6141	0,6116	0,6092	0,6067	0,6043	0,6019	0,5996	0,5972	0,5949
79,9	0,6392	0,6365	0,6338	0,631	0,6284	0,6257	0,6231	0,6205	0,618	0,6154	0,6129	0,6104	0,608	0,6055	0,6031	0,6008	0,5984	0,596	0,5937
80	0,6381	0,6353	0,6326	0,6299	0,6272	0,6245	0,6219	0,6193	0,6168	0,6143	0,6117	0,6093	0,6068	0,6044	0,602	0,5996	0,5972	0,5949	0,5926
80,1	0,6369	0,6341	0,6314	0,6287	0,626	0,6234	0,6208	0,6182	0,6156	0,6131	0,6106	0,6081	0,6056	0,6032	0,6008	0,5984	0,596	0,5937	0,5914
80,2	0,6357	0,6329	0,6302	0,6275	0,6248	0,6222	0,6196	0,617	0,6144	0,6119	0,6094	0,6069	0,6044	0,602	0,5996	0,5972	0,5949	0,5925	0,5902
80,3	0,6345	0,6317	0,629	0,6263	0,6236	0,621	0,6184	0,6158	0,6132	0,6107	0,6082	0,6057	0,6033	0,6008	0,5984	0,596	0,5937	0,5913	0,589
80,4	0,6333	0,6306	0,6278	0,6251	0,6225	0,6198	0,6172	0,6146	0,6121	0,6095	0,607	0,6045	0,6021	0,5997	0,5972	0,5949	0,5925	0,5902	0,5878
80,5	0,6321	0,6294	0,6266	0,6239	0,6213	0,6186	0,616	0,6134	0,6109	0,6083	0,6058	0,6034	0,6009	0,5985	0,5961	0,5937	0,5913	0,589	0,5867
80,6	0,6309	0,6282	0,6255	0,6227	0,6201	0,6174	0,6148	0,6122	0,6097	0,6072	0,6046	0,6022	0,5997	0,5973	0,5949	0,5925	0,5901	0,5878	0,5855
80,7	0,6297	0,627	0,6243	0,6216	0,6189	0,6162	0,6136	0,611	0,6085	0,606	0,6035	0,601	0,5985	0,5961	0,5937	0,5913	0,5889	0,5866	0,5843
80,8	0,6286	0,6258	0,6231	0,6204	0,6177	0,6151	0,6124	0,6099	0,6073	0,6048	0,6023	0,5998	0,5973	0,5949	0,5925	0,5901	0,5878	0,5854	0,5831
80,9	0,6274	0,6246	0,6219	0,6192	0,6165	0,6139	0,6112	0,6087	0,6061	0,6036	0,6011	0,5986	0,5961	0,5937	0,5913	0,5889	0,5866	0,5842	0,5819
81	0,6262	0,6234	0,6207	0,618	0,6153	0,6127	0,6101	0,6075	0,6049	0,6024	0,5999	0,5974	0,5949	0,5925	0,5901	0,5877	0,5854	0,583	0,5807
81,1	0,625	0,6222	0,6195	0,6168	0,6141	0,6115	0,6089	0,6063	0,6037	0,6012	0,5987	0,5962	0,5938	0,5913	0,5889	0,5865	0,5842	0,5819	0,5795
81,2	0,6238	0,621	0,6183	0,6156	0,6129	0,6103	0,6077	0,6051	0,6025	0,6	0,5975	0,595	0,5926	0,5901	0,5877	0,5853	0,583	0,5807	0,5783
81,3	0,6226	0,6198	0,6171	0,6144	0,6117	0,6091	0,6065	0,6039	0,6013	0,5988	0,5963	0,5938	0,5914	0,5889	0,5865	0,5842	0,5818	0,5795	0,5771
81,4	0,6213	0,6186	0,6159	0,6132	0,6105	0,6079	0,6053	0,6027	0,6001	0,5976	0,5951	0,5926	0,5902	0,5877	0,5853	0,583	0,5806	0,5783	0,576

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
78	0,6134	0,6112	0,6089	0,6067	0,6044	0,6022	0,6001	0,5979	0,5958	0,5936	0,5915	0,5894	0,5874	0,5853	0,5833	0,5813	0,5793	0,5773	0,5753
78,1	0,6123	0,61	0,6078	0,6055	0,6033	0,6011	0,5989	0,5968	0,5946	0,5925	0,5904	0,5883	0,5862	0,5842	0,5821	0,5801	0,5781	0,5761	0,5742
78,2	0,6112	0,6089	0,6066	0,6044	0,6022	0,6	0,5978	0,5956	0,5935	0,5913	0,5892	0,5872	0,5851	0,583	0,581	0,579	0,577	0,575	0,573
78,3	0,61	0,6077	0,6055	0,6032	0,601	0,5988	0,5966	0,5945	0,5923	0,5902	0,5881	0,586	0,5839	0,5819	0,5799	0,5778	0,5758	0,5739	0,5719
78,4	0,6089	0,6066	0,6043	0,6021	0,5999	0,5977	0,5955	0,5933	0,5912	0,5891	0,587	0,5849	0,5828	0,5808	0,5787	0,5767	0,5747	0,5727	0,5707
78,5	0,6077	0,6054	0,6032	0,6009	0,5987	0,5965	0,5943	0,5922	0,59	0,5879	0,5858	0,5837	0,5817	0,5796	0,5776	0,5756	0,5736	0,5716	0,5696
78,6	0,6066	0,6043	0,602	0,5998	0,5976	0,5954	0,5932	0,591	0,5889	0,5868	0,5847	0,5826	0,5805	0,5785	0,5764	0,5744	0,5724	0,5704	0,5685
78,7	0,6054	0,6031	0,6009	0,5986	0,5964	0,5942	0,592	0,5899	0,5877	0,5856	0,5835	0,5814	0,5794	0,5773	0,5753	0,5733	0,5713	0,5693	0,5673
78,8	0,6042	0,602	0,5997	0,5975	0,5953	0,5931	0,5909	0,5887	0,5866	0,5845	0,5824	0,5803	0,5782	0,5762	0,5741	0,5721	0,5701	0,5681	0,5662
78,9	0,6031	0,6008	0,5986	0,5963	0,5941	0,5919	0,5897	0,5876	0,5854	0,5833	0,5812	0,5791	0,5771	0,575	0,573	0,571	0,569	0,567	0,565
79	0,6019	0,5997	0,5974	0,5952	0,5929	0,5907	0,5886	0,5864	0,5843	0,5822	0,5801	0,578	0,5759	0,5739	0,5718	0,5698	0,5678	0,5658	0,5639
79,1	0,6008	0,5985	0,5962	0,594	0,5918	0,5896	0,5874	0,5853	0,5831	0,581	0,5789	0,5768	0,5747	0,5727	0,5707	0,5687	0,5667	0,5647	0,5627
79,2	0,5996	0,5973	0,5951	0,5928	0,5906	0,5884	0,5863	0,5841	0,582	0,5798	0,5777	0,5757	0,5736	0,5715	0,5695	0,5675	0,5655	0,5635	0,5616
79,3	0,5984	0,5962	0,5939	0,5917	0,5895	0,5873	0,5851	0,5829	0,5808	0,5787	0,5766	0,5745	0,5724	0,5704	0,5684	0,5663	0,5643	0,5624	0,5604
79,4	0,5973	0,595	0,5927	0,5905	0,5883	0,5861	0,5839	0,5818	0,5796	0,5775	0,5754	0,5733	0,5713	0,5692	0,5672	0,5652	0,5632	0,5612	0,5592
79,5	0,5961	0,5938	0,5916	0,5894	0,5871	0,5849	0,5828	0,5806	0,5785	0,5764	0,5743	0,5722	0,5701	0,5681	0,566	0,564	0,562	0,56	0,5581
79,6	0,5949	0,5927	0,5904	0,5882	0,586	0,5838	0,5816	0,5794	0,5773	0,5752	0,5731	0,571	0,569	0,5669	0,5649	0,5629	0,5609	0,5589	0,5569
79,7	0,5938	0,5915	0,5893	0,587	0,5848	0,5826	0,5804	0,5783	0,5761	0,574	0,5719	0,5699	0,5678	0,5657	0,5637	0,5617	0,5597	0,5577	0,5558
79,8	0,5926	0,5903	0,5881	0,5858	0,5836	0,5814	0,5793	0,5771	0,575	0,5729	0,5708	0,5687	0,5666	0,5646	0,5625	0,5605	0,5585	0,5566	0,5546
79,9	0,5914	0,5892	0,5869	0,5847	0,5825	0,5803	0,5781	0,5759	0,5738	0,5717	0,5696	0,5675	0,5655	0,5634	0,5614	0,5594	0,5574	0,5554	0,5534
80	0,5903	0,588	0,5857	0,5835	0,5813	0,5791	0,5769	0,5748	0,5726	0,5705	0,5684	0,5663	0,5643	0,5622	0,5602	0,5582	0,5562	0,5542	0,5523
80,1	0,5891	0,5868	0,5846	0,5823	0,5801	0,5779	0,5758	0,5736	0,5715	0,5694	0,5673	0,5652	0,5631	0,5611	0,559	0,557	0,555	0,5531	0,5511
80,2	0,5879	0,5856	0,5834	0,5812	0,5789	0,5768	0,5746	0,5724	0,5703	0,5682	0,5661	0,564	0,5619	0,5599	0,5579	0,5559	0,5539	0,5519	0,5499
80,3	0,5867	0,5845	0,5822	0,58	0,5778	0,5756	0,5734	0,5713	0,5691	0,567	0,5649	0,5628	0,5608	0,5587	0,5567	0,5547	0,5527	0,5507	0,5488
80,4	0,5856	0,5833	0,581	0,5788	0,5766	0,5744	0,5722	0,5701	0,5679	0,5658	0,5637	0,5617	0,5596	0,5576	0,5555	0,5535	0,5515	0,5495	0,5476
80,5	0,5844	0,5821	0,5799	0,5776	0,5754	0,5732	0,571	0,5689	0,5668	0,5647	0,5626	0,5605	0,5584	0,5564	0,5543	0,5523	0,5503	0,5484	0,5464
80,6	0,5832	0,5809	0,5787	0,5764	0,5742	0,572	0,5699	0,5677	0,5656	0,5635	0,5614	0,5593	0,5572	0,5552	0,5532	0,5512	0,5492	0,5472	0,5452
80,7	0,582	0,5797	0,5775	0,5753	0,573	0,5709	0,5687	0,5665	0,5644	0,5623	0,5602	0,5581	0,5561	0,554	0,552	0,55	0,548	0,546	0,5441
80,8	0,5808	0,5785	0,5763	0,5741	0,5719	0,5697	0,5675	0,5654	0,5632	0,5611	0,559	0,5569	0,5549	0,5528	0,5508	0,5488	0,5468	0,5448	0,5429
80,9	0,5796	0,5774	0,5751	0,5729	0,5707	0,5685	0,5663	0,5642	0,562	0,5599	0,5578	0,5558	0,5537	0,5517	0,5496	0,5476	0,5456	0,5437	0,5417
81	0,5784	0,5762	0,5739	0,5717	0,5695	0,5673	0,5651	0,563	0,5608	0,5587	0,5566	0,5546	0,5525	0,5505	0,5484	0,5464	0,5444	0,5425	0,5405
81,1	0,5772	0,575	0,5727	0,5705	0,5683	0,5661	0,5639	0,5618	0,5597	0,5575	0,5555	0,5534	0,5513	0,5493	0,5473	0,5452	0,5433	0,5413	0,5393
81,2	0,5761	0,5738	0,5715	0,5693	0,5671	0,5649	0,5627	0,5606	0,5585	0,5564	0,5543	0,5522	0,5501	0,5481	0,5461	0,5441	0,5421	0,5401	0,5381
81,3	0,5749	0,5726	0,5703	0,5681	0,5659	0,5637	0,5616	0,5594	0,5573	0,5552	0,5531	0,551	0,5489	0,5469	0,5449	0,5429	0,5409	0,5389	0,5369
81,4	0,5737	0,5714	0,5691	0,5669	0,5647	0,5625	0,5604	0,5582	0,5561	0,554	0,5519	0,5498	0,5477	0,5457	0,5437	0,5417	0,5397	0,5377	0,5358

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
78	0,5734	0,5714	0,5695	0,5676	0,5657	0,5638	0,5619	0,5601	0,5583	0,5564	0,5546	0,5528	0,551	0,5493	0,5475	0,5458	0,544	0,5423	0,5406
78,1	0,5722	0,5703	0,5684	0,5664	0,5645	0,5627	0,5608	0,559	0,5571	0,5553	0,5535	0,5517	0,5499	0,5481	0,5464	0,5446	0,5429	0,5412	0,5395
78,2	0,5711	0,5691	0,5672	0,5653	0,5634	0,5615	0,5597	0,5578	0,556	0,5542	0,5523	0,5506	0,5488	0,547	0,5452	0,5435	0,5418	0,54	0,5383
78,3	0,5699	0,568	0,5661	0,5642	0,5623	0,5604	0,5585	0,5567	0,5548	0,553	0,5512	0,5494	0,5476	0,5459	0,5441	0,5424	0,5406	0,5389	0,5372
78,4	0,5688	0,5669	0,5649	0,563	0,5611	0,5593	0,5574	0,5555	0,5537	0,5519	0,5501	0,5483	0,5465	0,5447	0,543	0,5412	0,5395	0,5378	0,5361
78,5	0,5676	0,5657	0,5638	0,5619	0,56	0,5581	0,5562	0,5544	0,5526	0,5507	0,5489	0,5471	0,5454	0,5436	0,5418	0,5401	0,5383	0,5366	0,5349
78,6	0,5665	0,5646	0,5626	0,5607	0,5588	0,557	0,5551	0,5533	0,5514	0,5496	0,5478	0,546	0,5442	0,5424	0,5407	0,5389	0,5372	0,5355	0,5338
78,7	0,5654	0,5634	0,5615	0,5596	0,5577	0,5558	0,554	0,5521	0,5503	0,5485	0,5466	0,5449	0,5431	0,5413	0,5395	0,5378	0,5361	0,5343	0,5326
78,8	0,5642	0,5623	0,5604	0,5584	0,5566	0,5547	0,5528	0,551	0,5491	0,5473	0,5455	0,5437	0,5419	0,5402	0,5384	0,5367	0,5349	0,5332	0,5315
78,9	0,5631	0,5611	0,5592	0,5573	0,5554	0,5535	0,5517	0,5498	0,548	0,5462	0,5444	0,5426	0,5408	0,539	0,5373	0,5355	0,5338	0,5321	0,5304
79	0,5619	0,56	0,5581	0,5561	0,5543	0,5524	0,5505	0,5487	0,5468	0,545	0,5432	0,5414	0,5396	0,5379	0,5361	0,5344	0,5326	0,5309	0,5292
79,1	0,5608	0,5588	0,5569	0,555	0,5531	0,5512	0,5494	0,5475	0,5457	0,5439	0,5421	0,5403	0,5385	0,5367	0,535	0,5332	0,5315	0,5298	0,5281
79,2	0,5596	0,5577	0,5557	0,5538	0,552	0,5501	0,5482	0,5464	0,5445	0,5427	0,5409	0,5391	0,5373	0,5356	0,5338	0,5321	0,5303	0,5286	0,5269
79,3	0,5584	0,5565	0,5546	0,5527	0,5508	0,5489	0,5471	0,5452	0,5434	0,5416	0,5398	0,538	0,5362	0,5344	0,5327	0,5309	0,5292	0,5275	0,5258
79,4	0,5573	0,5554	0,5534	0,5515	0,5496	0,5478	0,5459	0,5441	0,5422	0,5404	0,5386	0,5368	0,535	0,5333	0,5315	0,5298	0,528	0,5263	0,5246
79,5	0,5561	0,5542	0,5523	0,5504	0,5485	0,5466	0,5448	0,5429	0,5411	0,5393	0,5374	0,5357	0,5339	0,5321	0,5304	0,5286	0,5269	0,5252	0,5235
79,6	0,555	0,553	0,5511	0,5492	0,5473	0,5455	0,5436	0,5417	0,5399	0,5381	0,5363	0,5345	0,5327	0,531	0,5292	0,5275	0,5257	0,524	0,5223
79,7	0,5538	0,5519	0,55	0,5481	0,5462	0,5443	0,5424	0,5406	0,5388	0,5369	0,5351	0,5333	0,5316	0,5298	0,528	0,5263	0,5246	0,5229	0,5212
79,8	0,5526	0,5507	0,5488	0,5469	0,545	0,5431	0,5413	0,5394	0,5376	0,5358	0,534	0,5322	0,5304	0,5286	0,5269	0,5251	0,5234	0,5217	0,52
79,9	0,5515	0,5496	0,5476	0,5457	0,5438	0,542	0,5401	0,5383	0,5364	0,5346	0,5328	0,531	0,5292	0,5275	0,5257	0,524	0,5223	0,5205	0,5188
80	0,5503	0,5484	0,5465	0,5446	0,5427	0,5408	0,5389	0,5371	0,5353	0,5335	0,5317	0,5299	0,5281	0,5263	0,5246	0,5228	0,5211	0,5194	0,5177
80,1	0,5491	0,5472	0,5453	0,5434	0,5415	0,5396	0,5378	0,5359	0,5341	0,5323	0,5305	0,5287	0,5269	0,5252	0,5234	0,5217	0,5199	0,5182	0,5165
80,2	0,548	0,546	0,5441	0,5422	0,5403	0,5385	0,5366	0,5348	0,5329	0,5311	0,5293	0,5275	0,5258	0,524	0,5222	0,5205	0,5188	0,5171	0,5154
80,3	0,5468	0,5449	0,543	0,5411	0,5392	0,5373	0,5354	0,5336	0,5318	0,53	0,5282	0,5264	0,5246	0,5228	0,5211	0,5193	0,5176	0,5159	0,5142
80,4	0,5456	0,5437	0,5418	0,5399	0,538	0,5361	0,5343	0,5324	0,5306	0,5288	0,527	0,5252	0,5234	0,5217	0,5199	0,5182	0,5164	0,5147	0,513
80,5	0,5445	0,5425	0,5406	0,5387	0,5368	0,535	0,5331	0,5313	0,5294	0,5276	0,5258	0,524	0,5222	0,5205	0,5187	0,517	0,5153	0,5136	0,5118
80,6	0,5433	0,5414	0,5394	0,5375	0,5357	0,5338	0,5319	0,5301	0,5283	0,5264	0,5246	0,5228	0,5211	0,5193	0,5176	0,5158	0,5141	0,5124	0,5107
80,7	0,5421	0,5402	0,5383	0,5364	0,5345	0,5326	0,5308	0,5289	0,5271	0,5253	0,5235	0,5217	0,5199	0,5181	0,5164	0,5146	0,5129	0,5112	0,5095
80,8	0,5409	0,539	0,5371	0,5352	0,5333	0,5314	0,5296	0,5277	0,5259	0,5241	0,5223	0,5205	0,5187	0,517	0,5152	0,5135	0,5117	0,51	0,5083
80,9	0,5397	0,5378	0,5359	0,534	0,5321	0,5303	0,5284	0,5266	0,5247	0,5229	0,5211	0,5193	0,5175	0,5158	0,514	0,5123	0,5106	0,5089	0,5072
81	0,5386	0,5366	0,5347	0,5328	0,5309	0,5291	0,5272	0,5254	0,5235	0,5217	0,5199	0,5181	0,5164	0,5146	0,5129	0,5111	0,5094	0,5077	0,506
81,1	0,5374	0,5355	0,5335	0,5316	0,5298	0,5279	0,526	0,5242	0,5224	0,5206	0,5187	0,517	0,5152	0,5134	0,5117	0,5099	0,5082	0,5065	0,5048
81,2	0,5362	0,5343	0,5324	0,5305	0,5286	0,5267	0,5248	0,523	0,5212	0,5194	0,5176	0,5158	0,514	0,5122	0,5105	0,5088	0,507	0,5053	0,5036
81,3	0,535	0,5331	0,5312	0,5293	0,5274	0,5255	0,5237	0,5218	0,52	0,5182	0,5164	0,5146	0,5128	0,5111	0,5093	0,5076	0,5059	0,5041	0,5024
81,4	0,5338	0,5319	0,53	0,5281	0,5262	0,5243	0,5225	0,5206	0,5188	0,517	0,5152	0,5134	0,5116	0,5099	0,5081	0,5064	0,5047	0,503	0,5013

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
78	0,5389	0,5372	0,5355	0,5339	0,5322	0,5306	0,5289	0,5273
78,1	0,5378	0,5361	0,5344	0,5327	0,5311	0,5294	0,5278	0,5262
78,2	0,5366	0,5349	0,5333	0,5316	0,53	0,5283	0,5267	0,5251
78,3	0,5355	0,5338	0,5321	0,5305	0,5288	0,5272	0,5256	0,5239
78,4	0,5344	0,5327	0,531	0,5293	0,5277	0,526	0,5244	0,5228
78,5	0,5332	0,5315	0,5299	0,5282	0,5266	0,5249	0,5233	0,5217
78,6	0,5321	0,5304	0,5287	0,5271	0,5254	0,5238	0,5221	0,5205
78,7	0,5309	0,5293	0,5276	0,5259	0,5243	0,5226	0,521	0,5194
78,8	0,5298	0,5281	0,5264	0,5248	0,5231	0,5215	0,5199	0,5182
78,9	0,5287	0,527	0,5253	0,5236	0,522	0,5204	0,5187	0,5171
79	0,5275	0,5258	0,5242	0,5225	0,5208	0,5192	0,5176	0,516
79,1	0,5264	0,5247	0,523	0,5214	0,5197	0,5181	0,5164	0,5148
79,2	0,5252	0,5235	0,5219	0,5202	0,5186	0,5169	0,5153	0,5137
79,3	0,5241	0,5224	0,5207	0,5191	0,5174	0,5158	0,5141	0,5125
79,4	0,5229	0,5212	0,5196	0,5179	0,5163	0,5146	0,513	0,5114
79,5	0,5218	0,5201	0,5184	0,5168	0,5151	0,5135	0,5118	0,5102
79,6	0,5206	0,5189	0,5173	0,5156	0,514	0,5123	0,5107	0,5091
79,7	0,5195	0,5178	0,5161	0,5144	0,5128	0,5112	0,5095	0,5079
79,8	0,5183	0,5166	0,515	0,5133	0,5116	0,51	0,5084	0,5068
79,9	0,5171	0,5155	0,5138	0,5121	0,5105	0,5089	0,5072	0,5056
80	0,516	0,5143	0,5126	0,511	0,5093	0,5077	0,5061	0,5045
80,1	0,5148	0,5131	0,5115	0,5098	0,5082	0,5065	0,5049	0,5033
80,2	0,5137	0,512	0,5103	0,5087	0,507	0,5054	0,5037	0,5021
80,3	0,5125	0,5108	0,5091	0,5075	0,5058	0,5042	0,5026	0,501
80,4	0,5113	0,5096	0,508	0,5063	0,5047	0,503	0,5014	0,4998
80,5	0,5102	0,5085	0,5068	0,5052	0,5035	0,5019	0,5003	0,4986
80,6	0,509	0,5073	0,5056	0,504	0,5023	0,5007	0,4991	0,4975
80,7	0,5078	0,5061	0,5045	0,5028	0,5012	0,4995	0,4979	0,4963
80,8	0,5066	0,505	0,5033	0,5016	0,5	0,4984	0,4967	0,4951
80,9	0,5055	0,5038	0,5021	0,5005	0,4988	0,4972	0,4956	0,494
81	0,5043	0,5026	0,5009	0,4993	0,4977	0,496	0,4944	0,4928
81,1	0,5031	0,5014	0,4998	0,4981	0,4965	0,4948	0,4932	0,4916
81,2	0,5019	0,5003	0,4986	0,4969	0,4953	0,4937	0,492	0,4904
81,3	0,5008	0,4991	0,4974	0,4958	0,4941	0,4925	0,4909	0,4892
81,4	0,4996	0,4979	0,4962	0,4946	0,4929	0,4913	0,4897	0,4881

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
81,5	1,1276	1,1053	1,0849	1,0662	1,0488	1,0326	1,0175	1,0033	0,9899	0,9772	0,9651	0,9537	0,9427	0,9323	0,9223	0,9126	0,9034	0,8945	0,886
81,6	1,1263	1,104	1,0836	1,0649	1,0475	1,0313	1,0162	1,002	0,9886	0,9759	0,9638	0,9524	0,9414	0,931	0,921	0,9114	0,9022	0,8933	0,8847
81,7	1,125	1,1027	1,0823	1,0636	1,0462	1,0301	1,0149	1,0007	0,9873	0,9746	0,9626	0,9511	0,9402	0,9297	0,9197	0,9101	0,9009	0,892	0,8834
81,8	1,1237	1,1014	1,081	1,0623	1,0449	1,0288	1,0136	0,9994	0,986	0,9733	0,9613	0,9498	0,9389	0,9285	0,9185	0,9089	0,8996	0,8907	0,8822
81,9	1,1223	1,1001	1,0797	1,061	1,0436	1,0275	1,0124	0,9981	0,9847	0,9721	0,96	0,9486	0,9376	0,9272	0,9172	0,9076	0,8984	0,8895	0,8809
82	1,121	1,0988	1,0784	1,0597	1,0423	1,0262	1,0111	0,9969	0,9835	0,9708	0,9587	0,9473	0,9364	0,9259	0,9159	0,9063	0,8971	0,8882	0,8797
82,1	1,1197	1,0975	1,0771	1,0584	1,041	1,0249	1,0098	0,9956	0,9822	0,9695	0,9574	0,946	0,9351	0,9246	0,9146	0,905	0,8958	0,8869	0,8784
82,2	1,1184	1,0961	1,0758	1,0571	1,0397	1,0236	1,0085	0,9943	0,9809	0,9682	0,9562	0,9447	0,9338	0,9234	0,9134	0,9038	0,8945	0,8857	0,8771
82,3	1,1171	1,0948	1,0745	1,0558	1,0384	1,0223	1,0072	0,993	0,9796	0,9669	0,9549	0,9434	0,9325	0,9221	0,9121	0,9025	0,8933	0,8844	0,8758
82,4	1,1158	1,0935	1,0732	1,0545	1,0371	1,021	1,0059	0,9917	0,9783	0,9656	0,9536	0,9421	0,9312	0,9208	0,9108	0,9012	0,892	0,8831	0,8746
82,5	1,1145	1,0922	1,0719	1,0532	1,0358	1,0197	1,0046	0,9904	0,977	0,9643	0,9523	0,9409	0,9299	0,9195	0,9095	0,8999	0,8907	0,8819	0,8733
82,6	1,1131	1,0909	1,0706	1,0519	1,0345	1,0184	1,0033	0,9891	0,9757	0,963	0,951	0,9396	0,9287	0,9182	0,9082	0,8987	0,8894	0,8806	0,872
82,7	1,1118	1,0896	1,0692	1,0505	1,0332	1,0171	1,002	0,9878	0,9744	0,9617	0,9497	0,9383	0,9274	0,9169	0,907	0,8974	0,8882	0,8793	0,8707
82,8	1,1105	1,0882	1,0679	1,0492	1,0319	1,0158	1,0007	0,9865	0,9731	0,9604	0,9484	0,937	0,9261	0,9157	0,9057	0,8961	0,8869	0,878	0,8695
82,9	1,1092	1,0869	1,0666	1,0479	1,0306	1,0145	0,9994	0,9852	0,9718	0,9591	0,9471	0,9357	0,9248	0,9144	0,9044	0,8948	0,8856	0,8767	0,8682
83	1,1078	1,0856	1,0653	1,0466	1,0293	1,0132	0,9981	0,9839	0,9705	0,9578	0,9458	0,9344	0,9235	0,9131	0,9031	0,8935	0,8843	0,8754	0,8669
83,1	1,1065	1,0843	1,064	1,0453	1,028	1,0118	0,9968	0,9826	0,9692	0,9565	0,9445	0,9331	0,9222	0,9118	0,9018	0,8922	0,883	0,8742	0,8656
83,2	1,1052	1,0829	1,0626	1,044	1,0266	1,0105	0,9954	0,9813	0,9679	0,9552	0,9432	0,9318	0,9209	0,9105	0,9005	0,8909	0,8817	0,8729	0,8643
83,3	1,1038	1,0816	1,0613	1,0426	1,0253	1,0092	0,9941	0,98	0,9666	0,9539	0,9419	0,9305	0,9196	0,9092	0,8992	0,8896	0,8804	0,8716	0,863
83,4	1,1025	1,0803	1,06	1,0413	1,024	1,0079	0,9928	0,9786	0,9653	0,9526	0,9406	0,9292	0,9183	0,9079	0,8979	0,8883	0,8791	0,8703	0,8617
83,5	1,1011	1,0789	1,0586	1,04	1,0227	1,0066	0,9915	0,9773	0,964	0,9513	0,9393	0,9279	0,917	0,9066	0,8966	0,887	0,8778	0,869	0,8605
83,6	1,0998	1,0776	1,0573	1,0386	1,0214	1,0052	0,9902	0,976	0,9626	0,95	0,938	0,9266	0,9157	0,9053	0,8953	0,8857	0,8765	0,8677	0,8592
83,7	1,0985	1,0763	1,056	1,0373	1,02	1,0039	0,9888	0,9747	0,9613	0,9487	0,9367	0,9253	0,9144	0,904	0,894	0,8844	0,8752	0,8664	0,8579
83,8	1,0971	1,0749	1,0546	1,036	1,0187	1,0026	0,9875	0,9734	0,96	0,9474	0,9354	0,924	0,9131	0,9027	0,8927	0,8831	0,8739	0,8651	0,8566
83,9	1,0958	1,0736	1,0533	1,0346	1,0174	1,0013	0,9862	0,972	0,9587	0,946	0,9341	0,9226	0,9118	0,9013	0,8914	0,8818	0,8726	0,8638	0,8553
84	1,0944	1,0722	1,052	1,0333	1,016	0,9999	0,9849	0,9707	0,9574	0,9447	0,9327	0,9213	0,9104	0,9	0,8901	0,8805	0,8713	0,8625	0,854
84,1	1,0931	1,0709	1,0506	1,032	1,0147	0,9986	0,9835	0,9694	0,956	0,9434	0,9314	0,92	0,9091	0,8987	0,8888	0,8792	0,87	0,8612	0,8526
84,2	1,0917	1,0695	1,0493	1,0306	1,0134	0,9973	0,9822	0,9681	0,9547	0,9421	0,9301	0,9187	0,9078	0,8974	0,8874	0,8779	0,8687	0,8599	0,8513
84,3	1,0904	1,0682	1,0479	1,0293	1,012	0,9959	0,9809	0,9667	0,9534	0,9408	0,9288	0,9174	0,9065	0,8961	0,8861	0,8766	0,8674	0,8585	0,85
84,4	1,089	1,0668	1,0466	1,0279	1,0107	0,9946	0,9795	0,9654	0,952	0,9394	0,9274	0,916	0,9052	0,8948	0,8848	0,8753	0,8661	0,8572	0,8487
84,5	1,0876	1,0655	1,0452	1,0266	1,0093	0,9932	0,9782	0,9641	0,9507	0,9381	0,9261	0,9147	0,9038	0,8934	0,8835	0,8739	0,8648	0,8559	0,8474
84,6	1,0863	1,0641	1,0439	1,0252	1,008	0,9919	0,9769	0,9627	0,9494	0,9368	0,9248	0,9134	0,9025	0,8921	0,8822	0,8726	0,8634	0,8546	0,8461
84,7	1,0849	1,0628	1,0425	1,0239	1,0066	0,9906	0,9755	0,9614	0,948	0,9354	0,9234	0,9121	0,9012	0,8908	0,8808	0,8713	0,8621	0,8533	0,8448
84,8	1,0836	1,0614	1,0412	1,0225	1,0053	0,9892	0,9742	0,96	0,9467	0,9341	0,9221	0,9107	0,8998	0,8895	0,8795	0,87	0,8608	0,852	0,8434
84,9	1,0822	1,06	1,0398	1,0212	1,0039	0,9879	0,9728	0,9587	0,9454	0,9327	0,9208	0,9094	0,8985	0,8881	0,8782	0,8686	0,8595	0,8506	0,8421

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
81,5	0,8777	0,8697	0,862	0,8545	0,8472	0,8402	0,8333	0,8267	0,8202	0,8139	0,8078	0,8018	0,796	0,7903	0,7847	0,7793	0,774	0,7688	0,7637
81,6	0,8764	0,8685	0,8607	0,8532	0,846	0,8389	0,8321	0,8255	0,819	0,8127	0,8066	0,8006	0,7947	0,789	0,7835	0,778	0,7727	0,7675	0,7624
81,7	0,8752	0,8672	0,8595	0,852	0,8447	0,8377	0,8308	0,8242	0,8177	0,8114	0,8053	0,7993	0,7935	0,7878	0,7822	0,7768	0,7715	0,7663	0,7612
81,8	0,8739	0,8659	0,8582	0,8507	0,8435	0,8364	0,8296	0,823	0,8165	0,8102	0,8041	0,7981	0,7922	0,7866	0,781	0,7756	0,7702	0,765	0,76
81,9	0,8727	0,8647	0,857	0,8495	0,8422	0,8352	0,8283	0,8217	0,8152	0,8089	0,8028	0,7968	0,791	0,7853	0,7797	0,7743	0,769	0,7638	0,7587
82	0,8714	0,8634	0,8557	0,8482	0,841	0,8339	0,8271	0,8204	0,814	0,8077	0,8016	0,7956	0,7898	0,7841	0,7785	0,7731	0,7678	0,7626	0,7575
82,1	0,8701	0,8621	0,8544	0,847	0,8397	0,8327	0,8258	0,8192	0,8127	0,8064	0,8003	0,7943	0,7885	0,7828	0,7773	0,7718	0,7665	0,7613	0,7562
82,2	0,8689	0,8609	0,8532	0,8457	0,8384	0,8314	0,8246	0,8179	0,8115	0,8052	0,7991	0,7931	0,7872	0,7816	0,776	0,7706	0,7653	0,7601	0,755
82,3	0,8676	0,8596	0,8519	0,8444	0,8372	0,8301	0,8233	0,8167	0,8102	0,8039	0,7978	0,7918	0,786	0,7803	0,7748	0,7693	0,764	0,7588	0,7537
82,4	0,8663	0,8583	0,8506	0,8432	0,8359	0,8289	0,8221	0,8154	0,809	0,8027	0,7965	0,7906	0,7847	0,7791	0,7735	0,7681	0,7628	0,7576	0,7525
82,5	0,865	0,8571	0,8494	0,8419	0,8346	0,8276	0,8208	0,8141	0,8077	0,8014	0,7953	0,7893	0,7835	0,7778	0,7722	0,7668	0,7615	0,7563	0,7512
82,6	0,8638	0,8558	0,8481	0,8406	0,8334	0,8263	0,8195	0,8129	0,8064	0,8001	0,794	0,788	0,7822	0,7765	0,771	0,7656	0,7603	0,7551	0,75
82,7	0,8625	0,8545	0,8468	0,8393	0,8321	0,8251	0,8183	0,8116	0,8052	0,7989	0,7928	0,7868	0,781	0,7753	0,7697	0,7643	0,759	0,7538	0,7487
82,8	0,8612	0,8532	0,8455	0,8381	0,8308	0,8238	0,817	0,8103	0,8039	0,7976	0,7915	0,7855	0,7797	0,774	0,7685	0,763	0,7577	0,7525	0,7475
82,9	0,8599	0,852	0,8443	0,8368	0,8296	0,8225	0,8157	0,8091	0,8026	0,7963	0,7902	0,7843	0,7784	0,7728	0,7672	0,7618	0,7565	0,7513	0,7462
83	0,8587	0,8507	0,843	0,8355	0,8283	0,8213	0,8144	0,8078	0,8014	0,7951	0,789	0,783	0,7772	0,7715	0,7659	0,7605	0,7552	0,75	0,7449
83,1	0,8574	0,8494	0,8417	0,8342	0,827	0,82	0,8132	0,8065	0,8001	0,7938	0,7877	0,7817	0,7759	0,7702	0,7647	0,7592	0,7539	0,7488	0,7437
83,2	0,8561	0,8481	0,8404	0,833	0,8257	0,8187	0,8119	0,8053	0,7988	0,7925	0,7864	0,7804	0,7746	0,7689	0,7634	0,758	0,7527	0,7475	0,7424
83,3	0,8548	0,8468	0,8391	0,8317	0,8244	0,8174	0,8106	0,804	0,7975	0,7912	0,7851	0,7792	0,7734	0,7677	0,7621	0,7567	0,7514	0,7462	0,7412
83,4	0,8535	0,8455	0,8378	0,8304	0,8232	0,8161	0,8093	0,8027	0,7962	0,79	0,7839	0,7779	0,7721	0,7664	0,7609	0,7554	0,7501	0,745	0,7399
83,5	0,8522	0,8443	0,8366	0,8291	0,8219	0,8148	0,808	0,8014	0,795	0,7887	0,7826	0,7766	0,7708	0,7651	0,7596	0,7542	0,7489	0,7437	0,7386
83,6	0,8509	0,843	0,8353	0,8278	0,8206	0,8136	0,8067	0,8001	0,7937	0,7874	0,7813	0,7753	0,7695	0,7638	0,7583	0,7529	0,7476	0,7424	0,7373
83,7	0,8496	0,8417	0,834	0,8265	0,8193	0,8123	0,8055	0,7988	0,7924	0,7861	0,78	0,7741	0,7682	0,7626	0,757	0,7516	0,7463	0,7411	0,7361
83,8	0,8483	0,8404	0,8327	0,8252	0,818	0,811	0,8042	0,7975	0,7911	0,7848	0,7787	0,7728	0,767	0,7613	0,7557	0,7503	0,745	0,7399	0,7348
83,9	0,847	0,8391	0,8314	0,8239	0,8167	0,8097	0,8029	0,7963	0,7898	0,7835	0,7774	0,7715	0,7657	0,76	0,7545	0,749	0,7437	0,7386	0,7335
84	0,8457	0,8378	0,8301	0,8226	0,8154	0,8084	0,8016	0,795	0,7885	0,7823	0,7761	0,7702	0,7644	0,7587	0,7532	0,7478	0,7425	0,7373	0,7322
84,1	0,8444	0,8365	0,8288	0,8213	0,8141	0,8071	0,8003	0,7937	0,7872	0,781	0,7749	0,7689	0,7631	0,7574	0,7519	0,7465	0,7412	0,736	0,7309
84,2	0,8431	0,8352	0,8275	0,82	0,8128	0,8058	0,799	0,7924	0,7859	0,7797	0,7736	0,7676	0,7618	0,7561	0,7506	0,7452	0,7399	0,7347	0,7297
84,3	0,8418	0,8339	0,8262	0,8187	0,8115	0,8045	0,7977	0,7911	0,7846	0,7784	0,7723	0,7663	0,7605	0,7548	0,7493	0,7439	0,7386	0,7334	0,7284
84,4	0,8405	0,8325	0,8249	0,8174	0,8102	0,8032	0,7964	0,7898	0,7833	0,7771	0,771	0,765	0,7592	0,7535	0,748	0,7426	0,7373	0,7321	0,7271
84,5	0,8392	0,8312	0,8235	0,8161	0,8089	0,8019	0,7951	0,7885	0,782	0,7758	0,7697	0,7637	0,7579	0,7522	0,7467	0,7413	0,736	0,7308	0,7258
84,6	0,8379	0,8299	0,8222	0,8148	0,8076	0,8006	0,7938	0,7872	0,7807	0,7745	0,7684	0,7624	0,7566	0,7509	0,7454	0,74	0,7347	0,7295	0,7245
84,7	0,8365	0,8286	0,8209	0,8135	0,8063	0,7993	0,7925	0,7859	0,7794	0,7732	0,7671	0,7611	0,7553	0,7496	0,7441	0,7387	0,7334	0,7282	0,7232
84,8	0,8352	0,8273	0,8196	0,8122	0,8049	0,7979	0,7911	0,7845	0,7781	0,7718	0,7657	0,7598	0,754	0,7483	0,7428	0,7374	0,7321	0,7269	0,7219
84,9	0,8339	0,826	0,8183	0,8108	0,8036	0,7966	0,7898	0,7832	0,7768	0,7705	0,7644	0,7585	0,7527	0,747	0,7415	0,7361	0,7308	0,7256	0,7206

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
81,5	0,7587	0,7538	0,749	0,7443	0,7397	0,7352	0,7308	0,7264	0,7222	0,718	0,7138	0,7098	0,7058	0,7019	0,698	0,6942	0,6905	0,6868	0,6832
81,6	0,7575	0,7526	0,7478	0,7431	0,7385	0,734	0,7296	0,7252	0,7209	0,7167	0,7126	0,7086	0,7046	0,7006	0,6968	0,693	0,6892	0,6856	0,6819
81,7	0,7562	0,7513	0,7466	0,7419	0,7373	0,7327	0,7283	0,724	0,7197	0,7155	0,7114	0,7073	0,7033	0,6994	0,6956	0,6918	0,688	0,6843	0,6807
81,8	0,755	0,7501	0,7453	0,7406	0,736	0,7315	0,7271	0,7227	0,7185	0,7143	0,7101	0,7061	0,7021	0,6982	0,6943	0,6905	0,6868	0,6831	0,6795
81,9	0,7537	0,7489	0,7441	0,7394	0,7348	0,7303	0,7259	0,7215	0,7172	0,713	0,7089	0,7049	0,7009	0,697	0,6931	0,6893	0,6856	0,6819	0,6783
82	0,7525	0,7476	0,7428	0,7381	0,7336	0,729	0,7246	0,7203	0,716	0,7118	0,7077	0,7036	0,6996	0,6957	0,6919	0,6881	0,6843	0,6807	0,677
82,1	0,7513	0,7464	0,7416	0,7369	0,7323	0,7278	0,7234	0,719	0,7148	0,7106	0,7064	0,7024	0,6984	0,6945	0,6906	0,6868	0,6831	0,6794	0,6758
82,2	0,75	0,7451	0,7404	0,7357	0,7311	0,7266	0,7221	0,7178	0,7135	0,7093	0,7052	0,7012	0,6972	0,6933	0,6894	0,6856	0,6819	0,6782	0,6746
82,3	0,7488	0,7439	0,7391	0,7344	0,7298	0,7253	0,7209	0,7166	0,7123	0,7081	0,704	0,6999	0,6959	0,692	0,6882	0,6844	0,6806	0,677	0,6733
82,4	0,7475	0,7426	0,7379	0,7332	0,7286	0,7241	0,7197	0,7153	0,711	0,7069	0,7027	0,6987	0,6947	0,6908	0,6869	0,6831	0,6794	0,6757	0,6721
82,5	0,7463	0,7414	0,7366	0,7319	0,7273	0,7228	0,7184	0,7141	0,7098	0,7056	0,7015	0,6974	0,6935	0,6895	0,6857	0,6819	0,6782	0,6745	0,6709
82,6	0,745	0,7401	0,7354	0,7307	0,7261	0,7216	0,7172	0,7128	0,7086	0,7044	0,7002	0,6962	0,6922	0,6883	0,6844	0,6807	0,6769	0,6732	0,6696
82,7	0,7438	0,7389	0,7341	0,7294	0,7248	0,7203	0,7159	0,7116	0,7073	0,7031	0,699	0,6949	0,691	0,6871	0,6832	0,6794	0,6757	0,672	0,6684
82,8	0,7425	0,7376	0,7329	0,7282	0,7236	0,7191	0,7147	0,7103	0,7061	0,7019	0,6977	0,6937	0,6897	0,6858	0,682	0,6782	0,6744	0,6708	0,6671
82,9	0,7412	0,7364	0,7316	0,7269	0,7223	0,7178	0,7134	0,7091	0,7048	0,7006	0,6965	0,6925	0,6885	0,6846	0,6807	0,6769	0,6732	0,6695	0,6659
83	0,74	0,7351	0,7303	0,7257	0,7211	0,7166	0,7121	0,7078	0,7035	0,6994	0,6952	0,6912	0,6872	0,6833	0,6795	0,6757	0,6719	0,6683	0,6646
83,1	0,7387	0,7338	0,7291	0,7244	0,7198	0,7153	0,7109	0,7066	0,7023	0,6981	0,694	0,6899	0,686	0,6821	0,6782	0,6744	0,6707	0,667	0,6634
83,2	0,7375	0,7326	0,7278	0,7231	0,7185	0,714	0,7096	0,7053	0,701	0,6968	0,6927	0,6887	0,6847	0,6808	0,677	0,6732	0,6694	0,6658	0,6621
83,3	0,7362	0,7313	0,7265	0,7219	0,7173	0,7128	0,7084	0,704	0,6998	0,6956	0,6915	0,6874	0,6835	0,6795	0,6757	0,6719	0,6682	0,6645	0,6609
83,4	0,7349	0,73	0,7253	0,7206	0,716	0,7115	0,7071	0,7028	0,6985	0,6943	0,6902	0,6862	0,6822	0,6783	0,6744	0,6707	0,6669	0,6633	0,6596
83,5	0,7336	0,7288	0,724	0,7193	0,7148	0,7103	0,7058	0,7015	0,6972	0,6931	0,689	0,6849	0,6809	0,677	0,6732	0,6694	0,6657	0,662	0,6584
83,6	0,7324	0,7275	0,7227	0,7181	0,7135	0,709	0,7046	0,7002	0,696	0,6918	0,6877	0,6836	0,6797	0,6758	0,6719	0,6681	0,6644	0,6607	0,6571
83,7	0,7311	0,7262	0,7215	0,7168	0,7122	0,7077	0,7033	0,699	0,6947	0,6905	0,6864	0,6824	0,6784	0,6745	0,6707	0,6669	0,6631	0,6595	0,6559
83,8	0,7298	0,725	0,7202	0,7155	0,7109	0,7064	0,702	0,6977	0,6934	0,6893	0,6852	0,6811	0,6771	0,6732	0,6694	0,6656	0,6619	0,6582	0,6546
83,9	0,7285	0,7237	0,7189	0,7142	0,7097	0,7052	0,7008	0,6964	0,6922	0,688	0,6839	0,6798	0,6759	0,672	0,6681	0,6643	0,6606	0,6569	0,6533
84	0,7273	0,7224	0,7176	0,713	0,7084	0,7039	0,6995	0,6952	0,6909	0,6867	0,6826	0,6786	0,6746	0,6707	0,6669	0,6631	0,6593	0,6557	0,6521
84,1	0,726	0,7211	0,7164	0,7117	0,7071	0,7026	0,6982	0,6939	0,6896	0,6854	0,6813	0,6773	0,6733	0,6694	0,6656	0,6618	0,6581	0,6544	0,6508
84,2	0,7247	0,7198	0,7151	0,7104	0,7058	0,7013	0,6969	0,6926	0,6883	0,6842	0,6801	0,676	0,6721	0,6681	0,6643	0,6605	0,6568	0,6531	0,6495
84,3	0,7234	0,7185	0,7138	0,7091	0,7045	0,7	0,6956	0,6913	0,6871	0,6829	0,6788	0,6747	0,6708	0,6669	0,663	0,6592	0,6555	0,6519	0,6482
84,4	0,7221	0,7173	0,7125	0,7078	0,7033	0,6988	0,6944	0,69	0,6858	0,6816	0,6775	0,6735	0,6695	0,6656	0,6617	0,658	0,6542	0,6506	0,647
84,5	0,7208	0,716	0,7112	0,7065	0,702	0,6975	0,6931	0,6887	0,6845	0,6803	0,6762	0,6722	0,6682	0,6643	0,6605	0,6567	0,653	0,6493	0,6457
84,6	0,7195	0,7147	0,7099	0,7053	0,7007	0,6962	0,6918	0,6875	0,6832	0,679	0,6749	0,6709	0,6669	0,663	0,6592	0,6554	0,6517	0,648	0,6444
84,7	0,7182	0,7134	0,7086	0,704	0,6994	0,6949	0,6905	0,6862	0,6819	0,6777	0,6736	0,6696	0,6656	0,6617	0,6579	0,6541	0,6504	0,6467	0,6431
84,8	0,7169	0,7121	0,7073	0,7027	0,6981	0,6936	0,6892	0,6849	0,6806	0,6764	0,6723	0,6683	0,6643	0,6604	0,6566	0,6528	0,6491	0,6455	0,6418
84,9	0,7156	0,7108	0,706	0,7014	0,6968	0,6923	0,6879	0,6836	0,6793	0,6752	0,6711	0,667	0,6631	0,6592	0,6553	0,6515	0,6478	0,6442	0,6406

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
81,5	0,6796	0,6761	0,6726	0,6692	0,6658	0,6625	0,6592	0,6559	0,6527	0,6496	0,6465	0,6434	0,6404	0,6374	0,6344	0,6315	0,6286	0,6257	0,6229
81,6	0,6784	0,6748	0,6714	0,6679	0,6646	0,6612	0,658	0,6547	0,6515	0,6484	0,6453	0,6422	0,6392	0,6362	0,6332	0,6303	0,6274	0,6245	0,6217
81,7	0,6771	0,6736	0,6701	0,6667	0,6634	0,66	0,6567	0,6535	0,6503	0,6472	0,6441	0,641	0,6379	0,635	0,632	0,6291	0,6262	0,6233	0,6205
81,8	0,6759	0,6724	0,6689	0,6655	0,6621	0,6588	0,6555	0,6523	0,6491	0,6459	0,6428	0,6398	0,6367	0,6337	0,6308	0,6279	0,625	0,6221	0,6193
81,9	0,6747	0,6712	0,6677	0,6643	0,6609	0,6576	0,6543	0,6511	0,6479	0,6447	0,6416	0,6385	0,6355	0,6325	0,6296	0,6266	0,6238	0,6209	0,6181
82	0,6735	0,6699	0,6665	0,6631	0,6597	0,6564	0,6531	0,6498	0,6467	0,6435	0,6404	0,6373	0,6343	0,6313	0,6283	0,6254	0,6225	0,6197	0,6169
82,1	0,6722	0,6687	0,6652	0,6618	0,6585	0,6551	0,6519	0,6486	0,6454	0,6423	0,6392	0,6361	0,6331	0,6301	0,6271	0,6242	0,6213	0,6185	0,6156
82,2	0,671	0,6675	0,664	0,6606	0,6572	0,6539	0,6506	0,6474	0,6442	0,6411	0,6379	0,6349	0,6318	0,6289	0,6259	0,623	0,6201	0,6172	0,6144
82,3	0,6698	0,6663	0,6628	0,6594	0,656	0,6527	0,6494	0,6462	0,643	0,6398	0,6367	0,6337	0,6306	0,6276	0,6247	0,6218	0,6189	0,616	0,6132
82,4	0,6685	0,665	0,6615	0,6581	0,6548	0,6514	0,6482	0,6449	0,6417	0,6386	0,6355	0,6324	0,6294	0,6264	0,6234	0,6205	0,6176	0,6148	0,612
82,5	0,6673	0,6638	0,6603	0,6569	0,6535	0,6502	0,6469	0,6437	0,6405	0,6374	0,6343	0,6312	0,6282	0,6252	0,6222	0,6193	0,6164	0,6136	0,6107
82,6	0,6661	0,6625	0,6591	0,6557	0,6523	0,649	0,6457	0,6425	0,6393	0,6361	0,633	0,63	0,6269	0,6239	0,621	0,6181	0,6152	0,6123	0,6095
82,7	0,6648	0,6613	0,6578	0,6544	0,6511	0,6477	0,6445	0,6412	0,638	0,6349	0,6318	0,6287	0,6257	0,6227	0,6198	0,6168	0,614	0,6111	0,6083
82,8	0,6636	0,6601	0,6566	0,6532	0,6498	0,6465	0,6432	0,64	0,6368	0,6337	0,6306	0,6275	0,6245	0,6215	0,6185	0,6156	0,6127	0,6099	0,6071
82,9	0,6623	0,6588	0,6554	0,6519	0,6486	0,6453	0,642	0,6388	0,6356	0,6324	0,6293	0,6263	0,6232	0,6202	0,6173	0,6144	0,6115	0,6086	0,6058
83	0,6611	0,6576	0,6541	0,6507	0,6473	0,644	0,6407	0,6375	0,6343	0,6312	0,6281	0,625	0,622	0,619	0,616	0,6131	0,6102	0,6074	0,6046
83,1	0,6598	0,6563	0,6529	0,6495	0,6461	0,6428	0,6395	0,6363	0,6331	0,6299	0,6268	0,6238	0,6207	0,6178	0,6148	0,6119	0,609	0,6062	0,6033
83,2	0,6586	0,6551	0,6516	0,6482	0,6448	0,6415	0,6382	0,635	0,6318	0,6287	0,6256	0,6225	0,6195	0,6165	0,6136	0,6106	0,6078	0,6049	0,6021
83,3	0,6573	0,6538	0,6504	0,647	0,6436	0,6403	0,637	0,6338	0,6306	0,6274	0,6243	0,6213	0,6183	0,6153	0,6123	0,6094	0,6065	0,6037	0,6009
83,4	0,6561	0,6526	0,6491	0,6457	0,6423	0,639	0,6357	0,6325	0,6293	0,6262	0,6231	0,62	0,617	0,614	0,6111	0,6082	0,6053	0,6024	0,5996
83,5	0,6548	0,6513	0,6479	0,6444	0,6411	0,6378	0,6345	0,6313	0,6281	0,6249	0,6218	0,6188	0,6158	0,6128	0,6098	0,6069	0,604	0,6012	0,5984
83,6	0,6536	0,6501	0,6466	0,6432	0,6398	0,6365	0,6332	0,63	0,6268	0,6237	0,6206	0,6175	0,6145	0,6115	0,6086	0,6057	0,6028	0,5999	0,5971
83,7	0,6523	0,6488	0,6453	0,6419	0,6386	0,6353	0,632	0,6288	0,6256	0,6224	0,6193	0,6163	0,6133	0,6103	0,6073	0,6044	0,6015	0,5987	0,5959
83,8	0,651	0,6475	0,6441	0,6407	0,6373	0,634	0,6307	0,6275	0,6243	0,6212	0,6181	0,615	0,612	0,609	0,6061	0,6032	0,6003	0,5974	0,5946
83,9	0,6498	0,6463	0,6428	0,6394	0,636	0,6327	0,6295	0,6262	0,6231	0,6199	0,6168	0,6138	0,6107	0,6078	0,6048	0,6019	0,599	0,5962	0,5934
84	0,6485	0,645	0,6415	0,6381	0,6348	0,6315	0,6282	0,625	0,6218	0,6187	0,6156	0,6125	0,6095	0,6065	0,6036	0,6006	0,5978	0,5949	0,5921
84,1	0,6472	0,6437	0,6403	0,6369	0,6335	0,6302	0,6269	0,6237	0,6205	0,6174	0,6143	0,6112	0,6082	0,6052	0,6023	0,5994	0,5965	0,5937	0,5909
84,2	0,646	0,6425	0,639	0,6356	0,6322	0,6289	0,6257	0,6224	0,6193	0,6161	0,613	0,61	0,607	0,604	0,601	0,5981	0,5952	0,5924	0,5896
84,3	0,6447	0,6412	0,6377	0,6343	0,631	0,6277	0,6244	0,6212	0,618	0,6149	0,6118	0,6087	0,6057	0,6027	0,5998	0,5968	0,594	0,5911	0,5883
84,4	0,6434	0,6399	0,6365	0,6331	0,6297	0,6264	0,6231	0,6199	0,6167	0,6136	0,6105	0,6074	0,6044	0,6014	0,5985	0,5956	0,5927	0,5899	0,5871
84,5	0,6421	0,6386	0,6352	0,6318	0,6284	0,6251	0,6218	0,6186	0,6155	0,6123	0,6092	0,6062	0,6031	0,6002	0,5972	0,5943	0,5914	0,5886	0,5858
84,6	0,6409	0,6374	0,6339	0,6305	0,6271	0,6238	0,6206	0,6174	0,6142	0,611	0,6079	0,6049	0,6019	0,5989	0,5959	0,593	0,5902	0,5873	0,5845
84,7	0,6396	0,6361	0,6326	0,6292	0,6259	0,6226	0,6193	0,6161	0,6129	0,6098	0,6067	0,6036	0,6006	0,5976	0,5947	0,5918	0,5889	0,5861	0,5832
84,8	0,6383	0,6348	0,6313	0,6279	0,6246	0,6213	0,618	0,6148	0,6116	0,6085	0,6054	0,6023	0,5993	0,5963	0,5934	0,5905	0,5876	0,5848	0,582
84,9	0,637	0,6335	0,6301	0,6267	0,6233	0,62	0,6167	0,6135	0,6103	0,6072	0,6041	0,6011	0,598	0,5951	0,5921	0,5892	0,5863	0,5835	0,5807

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
81,5	0,6201	0,6174	0,6147	0,612	0,6093	0,6067	0,604	0,6015	0,5989	0,5964	0,5939	0,5914	0,589	0,5865	0,5841	0,5818	0,5794	0,5771	0,5748
81,6	0,6189	0,6162	0,6134	0,6108	0,6081	0,6054	0,6028	0,6003	0,5977	0,5952	0,5927	0,5902	0,5878	0,5853	0,5829	0,5805	0,5782	0,5759	0,5736
81,7	0,6177	0,615	0,6122	0,6095	0,6069	0,6042	0,6016	0,5991	0,5965	0,594	0,5915	0,589	0,5865	0,5841	0,5817	0,5793	0,577	0,5747	0,5723
81,8	0,6165	0,6138	0,611	0,6083	0,6057	0,603	0,6004	0,5978	0,5953	0,5928	0,5903	0,5878	0,5853	0,5829	0,5805	0,5781	0,5758	0,5735	0,5711
81,9	0,6153	0,6125	0,6098	0,6071	0,6045	0,6018	0,5992	0,5966	0,5941	0,5916	0,5891	0,5866	0,5841	0,5817	0,5793	0,5769	0,5746	0,5722	0,5699
82	0,6141	0,6113	0,6086	0,6059	0,6032	0,6006	0,598	0,5954	0,5929	0,5903	0,5878	0,5854	0,5829	0,5805	0,5781	0,5757	0,5734	0,571	0,5687
82,1	0,6129	0,6101	0,6074	0,6047	0,602	0,5994	0,5968	0,5942	0,5917	0,5891	0,5866	0,5842	0,5817	0,5793	0,5769	0,5745	0,5722	0,5698	0,5675
82,2	0,6116	0,6089	0,6062	0,6035	0,6008	0,5982	0,5956	0,593	0,5904	0,5879	0,5854	0,5829	0,5805	0,5781	0,5757	0,5733	0,5709	0,5686	0,5663
82,3	0,6104	0,6077	0,6049	0,6022	0,5996	0,597	0,5943	0,5918	0,5892	0,5867	0,5842	0,5817	0,5793	0,5769	0,5745	0,5721	0,5697	0,5674	0,5651
82,4	0,6092	0,6064	0,6037	0,601	0,5984	0,5957	0,5931	0,5905	0,588	0,5855	0,583	0,5805	0,5781	0,5756	0,5732	0,5709	0,5685	0,5662	0,5639
82,5	0,608	0,6052	0,6025	0,5998	0,5971	0,5945	0,5919	0,5893	0,5868	0,5843	0,5818	0,5793	0,5768	0,5744	0,572	0,5696	0,5673	0,565	0,5627
82,6	0,6067	0,604	0,6013	0,5986	0,5959	0,5933	0,5907	0,5881	0,5856	0,583	0,5805	0,5781	0,5756	0,5732	0,5708	0,5684	0,5661	0,5637	0,5614
82,7	0,6055	0,6028	0,6	0,5973	0,5947	0,5921	0,5894	0,5869	0,5843	0,5818	0,5793	0,5768	0,5744	0,572	0,5696	0,5672	0,5649	0,5625	0,5602
82,8	0,6043	0,6015	0,5988	0,5961	0,5935	0,5908	0,5882	0,5856	0,5831	0,5806	0,5781	0,5756	0,5732	0,5707	0,5683	0,566	0,5636	0,5613	0,559
82,9	0,603	0,6003	0,5976	0,5949	0,5922	0,5896	0,587	0,5844	0,5819	0,5793	0,5769	0,5744	0,5719	0,5695	0,5671	0,5647	0,5624	0,5601	0,5578
83	0,6018	0,5991	0,5963	0,5936	0,591	0,5884	0,5858	0,5832	0,5806	0,5781	0,5756	0,5732	0,5707	0,5683	0,5659	0,5635	0,5612	0,5588	0,5565
83,1	0,6006	0,5978	0,5951	0,5924	0,5898	0,5871	0,5845	0,5819	0,5794	0,5769	0,5744	0,5719	0,5695	0,5671	0,5647	0,5623	0,5599	0,5576	0,5553
83,2	0,5993	0,5966	0,5939	0,5912	0,5885	0,5859	0,5833	0,5807	0,5782	0,5756	0,5732	0,5707	0,5682	0,5658	0,5634	0,5611	0,5587	0,5564	0,5541
83,3	0,5981	0,5953	0,5926	0,5899	0,5873	0,5846	0,582	0,5795	0,5769	0,5744	0,5719	0,5694	0,567	0,5646	0,5622	0,5598	0,5575	0,5551	0,5528
83,4	0,5968	0,5941	0,5914	0,5887	0,586	0,5834	0,5808	0,5782	0,5757	0,5732	0,5707	0,5682	0,5658	0,5633	0,561	0,5586	0,5562	0,5539	0,5516
83,5	0,5956	0,5928	0,5901	0,5874	0,5848	0,5822	0,5796	0,577	0,5744	0,5719	0,5694	0,567	0,5645	0,5621	0,5597	0,5573	0,555	0,5527	0,5504
83,6	0,5943	0,5916	0,5889	0,5862	0,5835	0,5809	0,5783	0,5757	0,5732	0,5707	0,5682	0,5657	0,5633	0,5609	0,5585	0,5561	0,5538	0,5514	0,5491
83,7	0,5931	0,5904	0,5876	0,5849	0,5823	0,5797	0,5771	0,5745	0,572	0,5694	0,5669	0,5645	0,562	0,5596	0,5572	0,5549	0,5525	0,5502	0,5479
83,8	0,5918	0,5891	0,5864	0,5837	0,581	0,5784	0,5758	0,5732	0,5707	0,5682	0,5657	0,5632	0,5608	0,5584	0,556	0,5536	0,5513	0,5489	0,5466
83,9	0,5906	0,5878	0,5851	0,5824	0,5798	0,5772	0,5746	0,572	0,5695	0,5669	0,5644	0,562	0,5595	0,5571	0,5547	0,5524	0,55	0,5477	0,5454
84	0,5893	0,5866	0,5839	0,5812	0,5785	0,5759	0,5733	0,5707	0,5682	0,5657	0,5632	0,5607	0,5583	0,5559	0,5535	0,5511	0,5488	0,5464	0,5441
84,1	0,5881	0,5853	0,5826	0,5799	0,5773	0,5747	0,5721	0,5695	0,5669	0,5644	0,5619	0,5595	0,557	0,5546	0,5522	0,5499	0,5475	0,5452	0,5429
84,2	0,5868	0,5841	0,5814	0,5787	0,576	0,5734	0,5708	0,5682	0,5657	0,5632	0,5607	0,5582	0,5558	0,5534	0,551	0,5486	0,5463	0,5439	0,5416
84,3	0,5855	0,5828	0,5801	0,5774	0,5748	0,5721	0,5695	0,567	0,5644	0,5619	0,5594	0,557	0,5545	0,5521	0,5497	0,5473	0,545	0,5427	0,5404
84,4	0,5843	0,5815	0,5788	0,5761	0,5735	0,5709	0,5683	0,5657	0,5632	0,5606	0,5582	0,5557	0,5533	0,5508	0,5485	0,5461	0,5437	0,5414	0,5391
84,5	0,583	0,5803	0,5776	0,5749	0,5722	0,5696	0,567	0,5644	0,5619	0,5594	0,5569	0,5544	0,552	0,5496	0,5472	0,5448	0,5425	0,5402	0,5379
84,6	0,5817	0,579	0,5763	0,5736	0,571	0,5683	0,5657	0,5632	0,5606	0,5581	0,5556	0,5532	0,5507	0,5483	0,5459	0,5436	0,5412	0,5389	0,5366
84,7	0,5805	0,5777	0,575	0,5723	0,5697	0,5671	0,5645	0,5619	0,5594	0,5569	0,5544	0,5519	0,5495	0,5471	0,5447	0,5423	0,54	0,5376	0,5353
84,8	0,5792	0,5765	0,5737	0,5711	0,5684	0,5658	0,5632	0,5606	0,5581	0,5556	0,5531	0,5506	0,5482	0,5458	0,5434	0,541	0,5387	0,5364	0,5341
84,9	0,5779	0,5752	0,5725	0,5698	0,5671	0,5645	0,5619	0,5594	0,5568	0,5543	0,5518	0,5494	0,5469	0,5445	0,5421	0,5398	0,5374	0,5351	0,5328

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
81,5	0,5725	0,5702	0,5679	0,5657	0,5635	0,5613	0,5592	0,557	0,5549	0,5528	0,5507	0,5486	0,5466	0,5445	0,5425	0,5405	0,5385	0,5365	0,5346
81,6	0,5713	0,569	0,5668	0,5645	0,5623	0,5601	0,558	0,5558	0,5537	0,5516	0,5495	0,5474	0,5454	0,5433	0,5413	0,5393	0,5373	0,5353	0,5334
81,7	0,5701	0,5678	0,5655	0,5633	0,5611	0,5589	0,5568	0,5546	0,5525	0,5504	0,5483	0,5462	0,5442	0,5421	0,5401	0,5381	0,5361	0,5341	0,5322
81,8	0,5689	0,5666	0,5643	0,5621	0,5599	0,5577	0,5556	0,5534	0,5513	0,5492	0,5471	0,545	0,543	0,5409	0,5389	0,5369	0,5349	0,5329	0,531
81,9	0,5676	0,5654	0,5631	0,5609	0,5587	0,5565	0,5544	0,5522	0,5501	0,548	0,5459	0,5438	0,5418	0,5397	0,5377	0,5357	0,5337	0,5317	0,5298
82	0,5664	0,5642	0,5619	0,5597	0,5575	0,5553	0,5532	0,551	0,5489	0,5468	0,5447	0,5426	0,5406	0,5385	0,5365	0,5345	0,5325	0,5305	0,5286
82,1	0,5652	0,563	0,5607	0,5585	0,5563	0,5541	0,5519	0,5498	0,5477	0,5456	0,5435	0,5414	0,5394	0,5373	0,5353	0,5333	0,5313	0,5293	0,5274
82,2	0,564	0,5618	0,5595	0,5573	0,5551	0,5529	0,5507	0,5486	0,5465	0,5444	0,5423	0,5402	0,5381	0,5361	0,5341	0,5321	0,5301	0,5281	0,5262
82,3	0,5628	0,5605	0,5583	0,5561	0,5539	0,5517	0,5495	0,5474	0,5453	0,5431	0,5411	0,539	0,5369	0,5349	0,5329	0,5309	0,5289	0,5269	0,525
82,4	0,5616	0,5593	0,5571	0,5549	0,5527	0,5505	0,5483	0,5462	0,544	0,5419	0,5398	0,5378	0,5357	0,5337	0,5317	0,5297	0,5277	0,5257	0,5238
82,5	0,5604	0,5581	0,5559	0,5536	0,5514	0,5493	0,5471	0,545	0,5428	0,5407	0,5386	0,5366	0,5345	0,5325	0,5305	0,5285	0,5265	0,5245	0,5225
82,6	0,5592	0,5569	0,5546	0,5524	0,5502	0,548	0,5459	0,5437	0,5416	0,5395	0,5374	0,5353	0,5333	0,5313	0,5292	0,5272	0,5253	0,5233	0,5213
82,7	0,5579	0,5557	0,5534	0,5512	0,549	0,5468	0,5447	0,5425	0,5404	0,5383	0,5362	0,5341	0,5321	0,53	0,528	0,526	0,524	0,5221	0,5201
82,8	0,5567	0,5544	0,5522	0,55	0,5478	0,5456	0,5434	0,5413	0,5392	0,5371	0,535	0,5329	0,5309	0,5288	0,5268	0,5248	0,5228	0,5208	0,5189
82,9	0,5555	0,5532	0,551	0,5488	0,5466	0,5444	0,5422	0,5401	0,538	0,5358	0,5338	0,5317	0,5296	0,5276	0,5256	0,5236	0,5216	0,5196	0,5177
83	0,5543	0,552	0,5498	0,5475	0,5453	0,5432	0,541	0,5389	0,5367	0,5346	0,5325	0,5305	0,5284	0,5264	0,5244	0,5224	0,5204	0,5184	0,5165
83,1	0,553	0,5508	0,5485	0,5463	0,5441	0,5419	0,5398	0,5376	0,5355	0,5334	0,5313	0,5292	0,5272	0,5252	0,5231	0,5211	0,5192	0,5172	0,5152
83,2	0,5518	0,5495	0,5473	0,5451	0,5429	0,5407	0,5385	0,5364	0,5343	0,5322	0,5301	0,528	0,526	0,5239	0,5219	0,5199	0,5179	0,516	0,514
83,3	0,5506	0,5483	0,5461	0,5438	0,5416	0,5395	0,5373	0,5352	0,533	0,5309	0,5289	0,5268	0,5247	0,5227	0,5207	0,5187	0,5167	0,5147	0,5128
83,4	0,5493	0,5471	0,5448	0,5426	0,5404	0,5382	0,5361	0,5339	0,5318	0,5297	0,5276	0,5256	0,5235	0,5215	0,5195	0,5175	0,5155	0,5135	0,5116
83,5	0,5481	0,5458	0,5436	0,5414	0,5392	0,537	0,5348	0,5327	0,5306	0,5285	0,5264	0,5243	0,5223	0,5202	0,5182	0,5162	0,5142	0,5123	0,5103
83,6	0,5468	0,5446	0,5424	0,5401	0,5379	0,5358	0,5336	0,5315	0,5293	0,5272	0,5251	0,5231	0,521	0,519	0,517	0,515	0,513	0,511	0,5091
83,7	0,5456	0,5433	0,5411	0,5389	0,5367	0,5345	0,5324	0,5302	0,5281	0,526	0,5239	0,5218	0,5198	0,5178	0,5157	0,5137	0,5118	0,5098	0,5078
83,8	0,5444	0,5421	0,5399	0,5376	0,5355	0,5333	0,5311	0,529	0,5269	0,5248	0,5227	0,5206	0,5186	0,5165	0,5145	0,5125	0,5105	0,5086	0,5066
83,9	0,5431	0,5409	0,5386	0,5364	0,5342	0,532	0,5299	0,5277	0,5256	0,5235	0,5214	0,5194	0,5173	0,5153	0,5133	0,5113	0,5093	0,5073	0,5054
84	0,5419	0,5396	0,5374	0,5352	0,533	0,5308	0,5286	0,5265	0,5244	0,5223	0,5202	0,5181	0,5161	0,514	0,512	0,51	0,508	0,5061	0,5041
84,1	0,5406	0,5384	0,5361	0,5339	0,5317	0,5295	0,5274	0,5252	0,5231	0,521	0,5189	0,5169	0,5148	0,5128	0,5108	0,5088	0,5068	0,5048	0,5029
84,2	0,5394	0,5371	0,5349	0,5327	0,5305	0,5283	0,5261	0,524	0,5219	0,5198	0,5177	0,5156	0,5136	0,5115	0,5095	0,5075	0,5056	0,5036	0,5016
84,3	0,5381	0,5358	0,5336	0,5314	0,5292	0,527	0,5249	0,5227	0,5206	0,5185	0,5164	0,5144	0,5123	0,5103	0,5083	0,5063	0,5043	0,5023	0,5004
84,4	0,5368	0,5346	0,5324	0,5301	0,5279	0,5258	0,5236	0,5215	0,5194	0,5173	0,5152	0,5131	0,5111	0,509	0,507	0,505	0,5031	0,5011	0,4991
84,5	0,5356	0,5333	0,5311	0,5289	0,5267	0,5245	0,5224	0,5202	0,5181	0,516	0,5139	0,5119	0,5098	0,5078	0,5058	0,5038	0,5018	0,4998	0,4979
84,6	0,5343	0,5321	0,5298	0,5276	0,5254	0,5233	0,5211	0,519	0,5168	0,5147	0,5127	0,5106	0,5086	0,5065	0,5045	0,5025	0,5005	0,4986	0,4966
84,7	0,5331	0,5308	0,5286	0,5264	0,5242	0,522	0,5198	0,5177	0,5156	0,5135	0,5114	0,5093	0,5073	0,5053	0,5033	0,5013	0,4993	0,4973	0,4954
84,8	0,5318	0,5295	0,5273	0,5251	0,5229	0,5207	0,5186	0,5164	0,5143	0,5122	0,5101	0,5081	0,506	0,504	0,502	0,5	0,498	0,4961	0,4941
84,9	0,5305	0,5283	0,526	0,5238	0,5216	0,5195	0,5173	0,5152	0,5131	0,511	0,5089	0,5068	0,5048	0,5027	0,5007	0,4987	0,4968	0,4948	0,4928

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
81,5	0,5326	0,5307	0,5288	0,5269	0,525	0,5231	0,5213	0,5194	0,5176	0,5158	0,514	0,5122	0,5104	0,5087	0,5069	0,5052	0,5035	0,5018	0,5001
81,6	0,5314	0,5295	0,5276	0,5257	0,5238	0,5219	0,5201	0,5183	0,5164	0,5146	0,5128	0,511	0,5093	0,5075	0,5057	0,504	0,5023	0,5006	0,4989
81,7	0,5302	0,5283	0,5264	0,5245	0,5226	0,5208	0,5189	0,5171	0,5152	0,5134	0,5116	0,5098	0,5081	0,5063	0,5046	0,5028	0,5011	0,4994	0,4977
81,8	0,529	0,5271	0,5252	0,5233	0,5214	0,5196	0,5177	0,5159	0,514	0,5122	0,5104	0,5086	0,5069	0,5051	0,5034	0,5016	0,4999	0,4982	0,4965
81,9	0,5278	0,5259	0,524	0,5221	0,5202	0,5184	0,5165	0,5147	0,5128	0,511	0,5092	0,5074	0,5057	0,5039	0,5022	0,5004	0,4987	0,497	0,4953
82	0,5266	0,5247	0,5228	0,5209	0,519	0,5172	0,5153	0,5135	0,5116	0,5098	0,508	0,5063	0,5045	0,5027	0,501	0,4992	0,4975	0,4958	0,4941
82,1	0,5254	0,5235	0,5216	0,5197	0,5178	0,516	0,5141	0,5123	0,5104	0,5086	0,5068	0,5051	0,5033	0,5015	0,4998	0,498	0,4963	0,4946	0,4929
82,2	0,5242	0,5223	0,5204	0,5185	0,5166	0,5148	0,5129	0,5111	0,5092	0,5074	0,5056	0,5038	0,5021	0,5003	0,4986	0,4968	0,4951	0,4934	0,4917
82,3	0,523	0,5211	0,5192	0,5173	0,5154	0,5135	0,5117	0,5099	0,508	0,5062	0,5044	0,5026	0,5009	0,4991	0,4974	0,4956	0,4939	0,4922	0,4905
82,4	0,5218	0,5199	0,518	0,5161	0,5142	0,5123	0,5105	0,5087	0,5068	0,505	0,5032	0,5014	0,4997	0,4979	0,4962	0,4944	0,4927	0,491	0,4893
82,5	0,5206	0,5187	0,5168	0,5149	0,513	0,5111	0,5093	0,5074	0,5056	0,5038	0,502	0,5002	0,4985	0,4967	0,495	0,4932	0,4915	0,4898	0,4881
82,6	0,5194	0,5175	0,5156	0,5137	0,5118	0,5099	0,5081	0,5062	0,5044	0,5026	0,5008	0,499	0,4973	0,4955	0,4938	0,492	0,4903	0,4886	0,4869
82,7	0,5182	0,5163	0,5143	0,5125	0,5106	0,5087	0,5069	0,505	0,5032	0,5014	0,4996	0,4978	0,496	0,4943	0,4925	0,4908	0,4891	0,4874	0,4857
82,8	0,517	0,515	0,5131	0,5112	0,5094	0,5075	0,5056	0,5038	0,502	0,5002	0,4984	0,4966	0,4948	0,4931	0,4913	0,4896	0,4879	0,4862	0,4845
82,9	0,5157	0,5138	0,5119	0,51	0,5081	0,5063	0,5044	0,5026	0,5008	0,499	0,4972	0,4954	0,4936	0,4919	0,4901	0,4884	0,4867	0,485	0,4833
83	0,5145	0,5126	0,5107	0,5088	0,5069	0,5051	0,5032	0,5014	0,4996	0,4977	0,4959	0,4942	0,4924	0,4906	0,4889	0,4872	0,4854	0,4837	0,482
83,1	0,5133	0,5114	0,5095	0,5076	0,5057	0,5038	0,502	0,5002	0,4983	0,4965	0,4947	0,4929	0,4912	0,4894	0,4877	0,4859	0,4842	0,4825	0,4808
83,2	0,5121	0,5102	0,5082	0,5064	0,5045	0,5026	0,5008	0,4989	0,4971	0,4953	0,4935	0,4917	0,49	0,4882	0,4865	0,4847	0,483	0,4813	0,4796
83,3	0,5108	0,5089	0,507	0,5051	0,5032	0,5014	0,4995	0,4977	0,4959	0,4941	0,4923	0,4905	0,4887	0,487	0,4852	0,4835	0,4818	0,4801	0,4784
83,4	0,5096	0,5077	0,5058	0,5039	0,502	0,5002	0,4983	0,4965	0,4947	0,4929	0,4911	0,4893	0,4875	0,4858	0,484	0,4823	0,4806	0,4789	0,4772
83,5	0,5084	0,5065	0,5046	0,5027	0,5008	0,4989	0,4971	0,4952	0,4934	0,4916	0,4898	0,488	0,4863	0,4845	0,4828	0,4811	0,4793	0,4776	0,4759
83,6	0,5072	0,5052	0,5033	0,5014	0,4996	0,4977	0,4959	0,494	0,4922	0,4904	0,4886	0,4868	0,4851	0,4833	0,4816	0,4798	0,4781	0,4764	0,4747
83,7	0,5059	0,504	0,5021	0,5002	0,4983	0,4965	0,4946	0,4928	0,491	0,4892	0,4874	0,4856	0,4838	0,4821	0,4803	0,4786	0,4769	0,4752	0,4735
83,8	0,5047	0,5028	0,5009	0,499	0,4971	0,4952	0,4934	0,4915	0,4897	0,4879	0,4861	0,4844	0,4826	0,4808	0,4791	0,4774	0,4756	0,4739	0,4723
83,9	0,5034	0,5015	0,4996	0,4977	0,4959	0,494	0,4921	0,4903	0,4885	0,4867	0,4849	0,4831	0,4814	0,4796	0,4779	0,4761	0,4744	0,4727	0,471
84	0,5022	0,5003	0,4984	0,4965	0,4946	0,4928	0,4909	0,4891	0,4873	0,4854	0,4837	0,4819	0,4801	0,4784	0,4766	0,4749	0,4732	0,4715	0,4698
84,1	0,501	0,499	0,4971	0,4952	0,4934	0,4915	0,4897	0,4878	0,486	0,4842	0,4824	0,4806	0,4789	0,4771	0,4754	0,4737	0,4719	0,4702	0,4685
84,2	0,4997	0,4978	0,4959	0,494	0,4921	0,4903	0,4884	0,4866	0,4848	0,483	0,4812	0,4794	0,4776	0,4759	0,4741	0,4724	0,4707	0,469	0,4673
84,3	0,4985	0,4965	0,4946	0,4927	0,4909	0,489	0,4872	0,4853	0,4835	0,4817	0,4799	0,4782	0,4764	0,4746	0,4729	0,4712	0,4695	0,4677	0,4661
84,4	0,4972	0,4953	0,4934	0,4915	0,4896	0,4878	0,4859	0,4841	0,4823	0,4805	0,4787	0,4769	0,4751	0,4734	0,4716	0,4699	0,4682	0,4665	0,4648
84,5	0,496	0,494	0,4921	0,4902	0,4884	0,4865	0,4847	0,4828	0,481	0,4792	0,4774	0,4757	0,4739	0,4721	0,4704	0,4687	0,467	0,4653	0,4636
84,6	0,4947	0,4928	0,4909	0,489	0,4871	0,4853	0,4834	0,4816	0,4798	0,478	0,4762	0,4744	0,4726	0,4709	0,4691	0,4674	0,4657	0,464	0,4623
84,7	0,4934	0,4915	0,4896	0,4877	0,4859	0,484	0,4822	0,4803	0,4785	0,4767	0,4749	0,4731	0,4714	0,4696	0,4679	0,4662	0,4645	0,4628	0,4611
84,8	0,4922	0,4903	0,4884	0,4865	0,4846	0,4827	0,4809	0,4791	0,4773	0,4755	0,4737	0,4719	0,4701	0,4684	0,4666	0,4649	0,4632	0,4615	0,4598
84,9	0,4909	0,489	0,4871	0,4852	0,4833	0,4815	0,4796	0,4778	0,476	0,4742	0,4724	0,4706	0,4689	0,4671	0,4654	0,4637	0,4619	0,4602	0,4585

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15	15,1
81,5	0,4984	0,4967	0,495	0,4934	0,4917	0,4901	0,4885	0,4869	0,4853
81,6	0,4972	0,4955	0,4939	0,4922	0,4906	0,4889	0,4873	0,4857	0,4841
81,7	0,496	0,4943	0,4927	0,491	0,4894	0,4877	0,4861	0,4845	0,4829
81,8	0,4948	0,4931	0,4915	0,4898	0,4882	0,4865	0,4849	0,4833	0,4817
81,9	0,4936	0,4919	0,4903	0,4886	0,487	0,4854	0,4837	0,4821	0,4805
82	0,4924	0,4907	0,4891	0,4874	0,4858	0,4842	0,4825	0,4809	0,4793
82,1	0,4912	0,4896	0,4879	0,4862	0,4846	0,483	0,4813	0,4797	0,4781
82,2	0,49	0,4884	0,4867	0,485	0,4834	0,4818	0,4802	0,4785	0,4769
82,3	0,4888	0,4872	0,4855	0,4838	0,4822	0,4806	0,479	0,4773	0,4757
82,4	0,4876	0,4859	0,4843	0,4826	0,481	0,4794	0,4778	0,4761	0,4745
82,5	0,4864	0,4847	0,4831	0,4814	0,4798	0,4782	0,4765	0,4749	0,4733
82,6	0,4852	0,4835	0,4819	0,4802	0,4786	0,477	0,4753	0,4737	0,4721
82,7	0,484	0,4823	0,4807	0,479	0,4774	0,4758	0,4741	0,4725	0,4709
82,8	0,4828	0,4811	0,4795	0,4778	0,4762	0,4745	0,4729	0,4713	0,4697
82,9	0,4816	0,4799	0,4782	0,4766	0,475	0,4733	0,4717	0,4701	0,4685
83	0,4804	0,4787	0,477	0,4754	0,4737	0,4721	0,4705	0,4689	0,4673
83,1	0,4791	0,4775	0,4758	0,4742	0,4725	0,4709	0,4693	0,4677	0,4661
83,2	0,4779	0,4763	0,4746	0,4729	0,4713	0,4697	0,4681	0,4665	0,4649
83,3	0,4767	0,475	0,4734	0,4717	0,4701	0,4685	0,4668	0,4652	0,4636
83,4	0,4755	0,4738	0,4722	0,4705	0,4689	0,4672	0,4656	0,464	0,4624
83,5	0,4743	0,4726	0,4709	0,4693	0,4676	0,466	0,4644	0,4628	0,4612
83,6	0,473	0,4714	0,4697	0,4681	0,4664	0,4648	0,4632	0,4616	0,46
83,7	0,4718	0,4701	0,4685	0,4668	0,4652	0,4636	0,4619	0,4603	0,4588
83,8	0,4706	0,4689	0,4672	0,4656	0,464	0,4623	0,4607	0,4591	0,4575
83,9	0,4693	0,4677	0,466	0,4644	0,4627	0,4611	0,4595	0,4579	0,4563
84	0,4681	0,4664	0,4648	0,4631	0,4615	0,4599	0,4583	0,4566	0,4551
84,1	0,4669	0,4652	0,4635	0,4619	0,4603	0,4586	0,457	0,4554	0,4538
84,2	0,4656	0,464	0,4623	0,4606	0,459	0,4574	0,4558	0,4542	0,4526
84,3	0,4644	0,4627	0,4611	0,4594	0,4578	0,4561	0,4545	0,4529	0,4513
84,4	0,4631	0,4615	0,4598	0,4582	0,4565	0,4549	0,4533	0,4517	0,4501
84,5	0,4619	0,4602	0,4586	0,4569	0,4553	0,4537	0,452	0,4504	0,4489
84,6	0,4606	0,459	0,4573	0,4557	0,454	0,4524	0,4508	0,4492	0,4476
84,7	0,4594	0,4577	0,4561	0,4544	0,4528	0,4512	0,4495	0,4479	0,4464
84,8	0,4581	0,4565	0,4548	0,4532	0,4515	0,4499	0,4483	0,4467	0,4451
84,9	0,4569	0,4552	0,4535	0,4519	0,4503	0,4486	0,447	0,4454	0,4438

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
85	1,0808	1,0587	1,0384	1,0198	1,0026	0,9865	0,9715	0,9573	0,944	0,9314	0,9194	0,908	0,8972	0,8868	0,8768	0,8673	0,8581	0,8493	0,8408

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
85	0,8326	0,8246	0,817	0,8095	0,8023	0,7953	0,7885	0,7819	0,7755	0,7692	0,7631	0,7572	0,7514	0,7457	0,7402	0,7348	0,7295	0,7243	0,7193

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
85	0,7143	0,7095	0,7047	0,7001	0,6955	0,691	0,6866	0,6823	0,678	0,6739	0,6698	0,6657	0,6618	0,6579	0,654	0,6502	0,6465	0,6429	0,6393

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
85	0,6357	0,6322	0,6288	0,6254	0,622	0,6187	0,6154	0,6122	0,6091	0,6059	0,6028	0,5998	0,5968	0,5938	0,5908	0,5879	0,5851	0,5822	0,5794

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
85	0,5766	0,5739	0,5712	0,5685	0,5659	0,5632	0,5606	0,5581	0,5555	0,553	0,5505	0,5481	0,5456	0,5432	0,5409	0,5385	0,5361	0,5338	0,5315

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
85	0,5293	0,527	0,5248	0,5226	0,5204	0,5182	0,516	0,5139	0,5118	0,5097	0,5076	0,5055	0,5035	0,5015	0,4995	0,4975	0,4955	0,4935	0,4916

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
85	0,4897	0,4877	0,4858	0,4839	0,4821	0,4802	0,4784	0,4765	0,4747	0,4729	0,4711	0,4694	0,4676	0,4659	0,4641	0,4624	0,4607	0,459	0,4573

Table of internal index of viability and disease resistance of population - α_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
85	0,4556	0,4539	0,4523	0,4506	0,449	0,4474	0,4458	0,4442

ADDENDUM

B_2

Parameters of external viability and disease resistance of population

(γ_h)

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
50	0,7438	0,7591	0,7733	0,7867	0,7992	0,8111	0,8225	0,8332	0,8435	0,8534	0,8629	0,872	0,8808	0,8892	0,8974	0,9054	0,9131	0,9206	0,9279
50,1	0,7485	0,7639	0,7782	0,7916	0,8042	0,8162	0,8275	0,8383	0,8487	0,8586	0,8681	0,8772	0,886	0,8946	0,9028	0,9108	0,9185	0,926	0,9333
50,2	0,7533	0,7687	0,7831	0,7965	0,8092	0,8212	0,8326	0,8434	0,8538	0,8638	0,8733	0,8825	0,8913	0,8999	0,9081	0,9161	0,9239	0,9315	0,9388
50,3	0,7581	0,7735	0,788	0,8015	0,8142	0,8262	0,8377	0,8486	0,859	0,869	0,8786	0,8878	0,8967	0,9052	0,9135	0,9216	0,9294	0,9369	0,9443
50,4	0,7629	0,7784	0,7929	0,8065	0,8192	0,8313	0,8428	0,8538	0,8642	0,8742	0,8838	0,8931	0,902	0,9106	0,9189	0,927	0,9348	0,9424	0,9498
50,5	0,7677	0,7833	0,7978	0,8115	0,8243	0,8364	0,848	0,8589	0,8694	0,8795	0,8891	0,8984	0,9074	0,916	0,9244	0,9325	0,9403	0,948	0,9554
50,6	0,7726	0,7882	0,8028	0,8165	0,8294	0,8416	0,8531	0,8642	0,8747	0,8848	0,8945	0,9038	0,9128	0,9215	0,9298	0,938	0,9459	0,9535	0,9609
50,7	0,7775	0,7932	0,8078	0,8216	0,8345	0,8467	0,8583	0,8694	0,88	0,8901	0,8998	0,9092	0,9182	0,9269	0,9353	0,9435	0,9514	0,9591	0,9665
50,8	0,7824	0,7982	0,8129	0,8266	0,8396	0,8519	0,8636	0,8747	0,8853	0,8955	0,9052	0,9146	0,9237	0,9324	0,9409	0,949	0,957	0,9647	0,9722
50,9	0,7873	0,8031	0,8179	0,8317	0,8448	0,8571	0,8688	0,88	0,8906	0,9008	0,9106	0,9201	0,9291	0,9379	0,9464	0,9546	0,9626	0,9703	0,9778
51	0,7923	0,8082	0,823	0,8369	0,85	0,8623	0,8741	0,8853	0,896	0,9062	0,9161	0,9255	0,9346	0,9434	0,952	0,9602	0,9682	0,976	0,9835
51,1	0,7972	0,8132	0,8281	0,842	0,8552	0,8676	0,8794	0,8906	0,9014	0,9116	0,9215	0,931	0,9402	0,949	0,9576	0,9658	0,9739	0,9817	0,9892
51,2	0,8023	0,8183	0,8332	0,8472	0,8604	0,8729	0,8847	0,896	0,9068	0,9171	0,927	0,9365	0,9457	0,9546	0,9632	0,9715	0,9795	0,9874	0,995
51,3	0,8073	0,8234	0,8384	0,8524	0,8657	0,8782	0,8901	0,9014	0,9122	0,9226	0,9325	0,9421	0,9513	0,9602	0,9688	0,9772	0,9852	0,9931	1,0007
51,4	0,8124	0,8285	0,8436	0,8577	0,871	0,8835	0,8955	0,9068	0,9177	0,9281	0,9381	0,9477	0,9569	0,9659	0,9745	0,9829	0,991	0,9989	1,0065
51,5	0,8174	0,8337	0,8488	0,8629	0,8763	0,8889	0,9009	0,9123	0,9232	0,9336	0,9436	0,9533	0,9626	0,9715	0,9802	0,9886	0,9968	1,0046	1,0123
51,6	0,8225	0,8388	0,854	0,8682	0,8816	0,8943	0,9063	0,9177	0,9287	0,9392	0,9492	0,9589	0,9682	0,9772	0,9859	0,9944	1,0025	1,0105	1,0182
51,7	0,8277	0,844	0,8593	0,8735	0,887	0,8997	0,9118	0,9232	0,9342	0,9447	0,9548	0,9646	0,9739	0,983	0,9917	1,0002	1,0084	1,0163	1,0241
51,8	0,8328	0,8493	0,8645	0,8789	0,8924	0,9051	0,9172	0,9288	0,9398	0,9504	0,9605	0,9702	0,9796	0,9887	0,9975	1,006	1,0142	1,0222	1,03
51,9	0,838	0,8545	0,8699	0,8842	0,8978	0,9106	0,9228	0,9343	0,9454	0,956	0,9662	0,976	0,9854	0,9945	1,0033	1,0118	1,0201	1,0281	1,0359
52	0,8432	0,8598	0,8752	0,8896	0,9032	0,9161	0,9283	0,9399	0,951	0,9617	0,9719	0,9817	0,9912	1,0003	1,0091	1,0177	1,026	1,034	1,0418
52,1	0,8485	0,8651	0,8806	0,895	0,9087	0,9216	0,9339	0,9455	0,9567	0,9674	0,9776	0,9875	0,997	1,0061	1,015	1,0236	1,0319	1,04	1,0478
52,2	0,8537	0,8704	0,886	0,9005	0,9142	0,9272	0,9395	0,9512	0,9624	0,9731	0,9834	0,9933	1,0028	1,012	1,0209	1,0295	1,0379	1,046	1,0539
52,3	0,859	0,8758	0,8914	0,906	0,9197	0,9327	0,9451	0,9568	0,9681	0,9788	0,9891	0,9991	1,0086	1,0179	1,0268	1,0355	1,0438	1,052	1,0599
52,4	0,8643	0,8812	0,8968	0,9115	0,9253	0,9383	0,9507	0,9625	0,9738	0,9846	0,995	1,0049	1,0145	1,0238	1,0328	1,0414	1,0499	1,058	1,066
52,5	0,8697	0,8866	0,9023	0,917	0,9309	0,944	0,9564	0,9682	0,9796	0,9904	1,0008	1,0108	1,0204	1,0297	1,0387	1,0475	1,0559	1,0641	1,0721
52,6	0,8751	0,892	0,9078	0,9226	0,9365	0,9496	0,9621	0,974	0,9853	0,9962	1,0067	1,0167	1,0264	1,0357	1,0448	1,0535	1,062	1,0702	1,0782
52,7	0,8805	0,8975	0,9133	0,9281	0,9421	0,9553	0,9678	0,9798	0,9912	1,0021	1,0126	1,0226	1,0324	1,0417	1,0508	1,0596	1,0681	1,0763	1,0844
52,8	0,8859	0,903	0,9189	0,9337	0,9478	0,961	0,9736	0,9856	0,997	1,008	1,0185	1,0286	1,0384	1,0478	1,0569	1,0657	1,0742	1,0825	1,0905
52,9	0,8914	0,9085	0,9244	0,9394	0,9535	0,9668	0,9794	0,9914	1,0029	1,0139	1,0245	1,0346	1,0444	1,0538	1,063	1,0718	1,0804	1,0887	1,0968
53	0,8968	0,914	0,9301	0,9451	0,9592	0,9725	0,9852	0,9973	1,0088	1,0198	1,0304	1,0406	1,0504	1,0599	1,0691	1,0779	1,0865	1,0949	1,103
53,1	0,9023	0,9196	0,9357	0,9507	0,9649	0,9783	0,9911	1,0032	1,0147	1,0258	1,0364	1,0467	1,0565	1,066	1,0752	1,0841	1,0928	1,1011	1,1093
53,2	0,9079	0,9252	0,9414	0,9565	0,9707	0,9842	0,9969	1,0091	1,0207	1,0318	1,0425	1,0528	1,0626	1,0722	1,0814	1,0903	1,099	1,1074	1,1156
53,3	0,9134	0,9308	0,947	0,9622	0,9765	0,99	1,0028	1,015	1,0267	1,0378	1,0486	1,0589	1,0688	1,0784	1,0876	1,0966	1,1053	1,1137	1,1219
53,4	0,919	0,9365	0,9528	0,968	0,9823	0,9959	1,0088	1,021	1,0327	1,0439	1,0547	1,065	1,075	1,0846	1,0939	1,1029	1,1116	1,1201	1,1283

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
50	0,9349	0,9418	0,9485	0,9551	0,9615	0,9678	0,9739	0,9799	0,9857	0,9915	0,9971	1,0026	1,008	1,0133	1,0185	1,0237	1,0287	1,0337	1,0385
50,1	0,9404	0,9473	0,9541	0,9607	0,9671	0,9734	0,9795	0,9855	0,9914	0,9971	1,0028	1,0083	1,0137	1,0191	1,0243	1,0295	1,0345	1,0395	1,0444
50,2	0,9459	0,9529	0,9596	0,9662	0,9727	0,979	0,9851	0,9912	0,9971	1,0028	1,0085	1,0141	1,0195	1,0249	1,0301	1,0353	1,0404	1,0454	1,0503
50,3	0,9514	0,9584	0,9652	0,9718	0,9783	0,9846	0,9908	0,9969	1,0028	1,0086	1,0143	1,0198	1,0253	1,0307	1,036	1,0411	1,0462	1,0512	1,0562
50,4	0,957	0,964	0,9708	0,9775	0,9839	0,9903	0,9965	1,0026	1,0085	1,0143	1,02	1,0256	1,0311	1,0365	1,0418	1,047	1,0521	1,0571	1,0621
50,5	0,9626	0,9696	0,9764	0,9831	0,9896	0,996	1,0022	1,0083	1,0143	1,0201	1,0258	1,0315	1,037	1,0424	1,0477	1,0529	1,058	1,0631	1,068
50,6	0,9682	0,9752	0,9821	0,9888	0,9953	1,0017	1,008	1,0141	1,0201	1,0259	1,0317	1,0373	1,0428	1,0483	1,0536	1,0588	1,064	1,069	1,074
50,7	0,9738	0,9809	0,9878	0,9945	1,0011	1,0075	1,0137	1,0199	1,0259	1,0318	1,0375	1,0432	1,0487	1,0542	1,0595	1,0648	1,07	1,075	1,08
50,8	0,9795	0,9866	0,9935	1,0002	1,0068	1,0132	1,0195	1,0257	1,0317	1,0376	1,0434	1,0491	1,0547	1,0601	1,0655	1,0708	1,076	1,081	1,0861
50,9	0,9851	0,9923	0,9992	1,006	1,0126	1,0191	1,0254	1,0315	1,0376	1,0435	1,0493	1,055	1,0606	1,0661	1,0715	1,0768	1,082	1,0871	1,0921
51	0,9909	0,998	1,005	1,0118	1,0184	1,0249	1,0312	1,0374	1,0435	1,0494	1,0553	1,061	1,0666	1,0721	1,0775	1,0828	1,088	1,0932	1,0982
51,1	0,9966	1,0038	1,0108	1,0176	1,0242	1,0307	1,0371	1,0433	1,0494	1,0554	1,0612	1,067	1,0726	1,0781	1,0836	1,0889	1,0941	1,0993	1,1043
51,2	1,0024	1,0096	1,0166	1,0234	1,0301	1,0366	1,043	1,0493	1,0554	1,0614	1,0672	1,073	1,0786	1,0842	1,0896	1,095	1,1002	1,1054	1,1105
51,3	1,0081	1,0154	1,0224	1,0293	1,036	1,0425	1,049	1,0552	1,0614	1,0674	1,0733	1,079	1,0847	1,0903	1,0957	1,1011	1,1064	1,1116	1,1167
51,4	1,014	1,0212	1,0283	1,0352	1,0419	1,0485	1,0549	1,0612	1,0674	1,0734	1,0793	1,0851	1,0908	1,0964	1,1019	1,1073	1,1125	1,1178	1,1229
51,5	1,0198	1,0271	1,0342	1,0411	1,0479	1,0545	1,0609	1,0672	1,0734	1,0795	1,0854	1,0912	1,0969	1,1025	1,108	1,1134	1,1187	1,124	1,1291
51,6	1,0257	1,033	1,0401	1,0471	1,0538	1,0605	1,0669	1,0733	1,0795	1,0855	1,0915	1,0973	1,1031	1,1087	1,1142	1,1196	1,125	1,1302	1,1354
51,7	1,0316	1,0389	1,0461	1,053	1,0598	1,0665	1,073	1,0793	1,0856	1,0917	1,0976	1,1035	1,1093	1,1149	1,1204	1,1259	1,1312	1,1365	1,1417
51,8	1,0375	1,0449	1,052	1,059	1,0659	1,0725	1,0791	1,0854	1,0917	1,0978	1,1038	1,1097	1,1155	1,1211	1,1267	1,1321	1,1375	1,1428	1,148
51,9	1,0435	1,0509	1,0581	1,0651	1,0719	1,0786	1,0852	1,0916	1,0978	1,104	1,11	1,1159	1,1217	1,1274	1,1329	1,1384	1,1438	1,1491	1,1543
52	1,0495	1,0569	1,0641	1,0711	1,078	1,0847	1,0913	1,0977	1,104	1,1102	1,1162	1,1221	1,128	1,1337	1,1393	1,1448	1,1501	1,1555	1,1607
52,1	1,0555	1,0629	1,0702	1,0772	1,0841	1,0909	1,0975	1,1039	1,1102	1,1164	1,1225	1,1284	1,1342	1,14	1,1456	1,1511	1,1565	1,1619	1,1671
52,2	1,0615	1,069	1,0763	1,0834	1,0903	1,097	1,1037	1,1101	1,1165	1,1227	1,1287	1,1347	1,1406	1,1463	1,1519	1,1575	1,1629	1,1683	1,1735
52,3	1,0676	1,0751	1,0824	1,0895	1,0964	1,1032	1,1099	1,1164	1,1227	1,129	1,1351	1,141	1,1469	1,1527	1,1583	1,1639	1,1694	1,1747	1,18
52,4	1,0737	1,0812	1,0885	1,0957	1,1027	1,1095	1,1161	1,1227	1,129	1,1353	1,1414	1,1474	1,1533	1,1591	1,1648	1,1703	1,1758	1,1812	1,1865
52,5	1,0798	1,0874	1,0947	1,1019	1,1089	1,1157	1,1224	1,129	1,1353	1,1416	1,1478	1,1538	1,1597	1,1655	1,1712	1,1768	1,1823	1,1877	1,193
52,6	1,086	1,0935	1,1009	1,1081	1,1151	1,122	1,1287	1,1353	1,1417	1,148	1,1542	1,1602	1,1661	1,172	1,1777	1,1833	1,1888	1,1942	1,1996
52,7	1,0922	1,0998	1,1072	1,1144	1,1214	1,1283	1,1351	1,1416	1,1481	1,1544	1,1606	1,1667	1,1726	1,1785	1,1842	1,1898	1,1954	1,2008	1,2062
52,8	1,0984	1,106	1,1134	1,1207	1,1278	1,1347	1,1414	1,148	1,1545	1,1608	1,1671	1,1731	1,1791	1,185	1,1907	1,1964	1,2019	1,2074	1,2128
52,9	1,1046	1,1123	1,1197	1,127	1,1341	1,141	1,1478	1,1545	1,161	1,1673	1,1735	1,1796	1,1856	1,1915	1,1973	1,203	1,2086	1,214	1,2194
53	1,1109	1,1186	1,1261	1,1334	1,1405	1,1475	1,1542	1,1609	1,1674	1,1738	1,1801	1,1862	1,1922	1,1981	1,2039	1,2096	1,2152	1,2207	1,2261
53,1	1,1172	1,1249	1,1324	1,1397	1,1469	1,1539	1,1607	1,1674	1,1739	1,1803	1,1866	1,1928	1,1988	1,2047	1,2105	1,2162	1,2219	1,2274	1,2328
53,2	1,1235	1,1313	1,1388	1,1462	1,1533	1,1603	1,1672	1,1739	1,1805	1,1869	1,1932	1,1994	1,2054	1,2114	1,2172	1,2229	1,2286	1,2341	1,2395
53,3	1,1299	1,1377	1,1452	1,1526	1,1598	1,1668	1,1737	1,1804	1,187	1,1935	1,1998	1,206	1,2121	1,218	1,2239	1,2296	1,2353	1,2409	1,2463
53,4	1,1363	1,1441	1,1517	1,1591	1,1663	1,1734	1,1803	1,187	1,1936	1,2001	1,2064	1,2127	1,2188	1,2247	1,2306	1,2364	1,2421	1,2476	1,2531

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
50	1,0433	1,0481	1,0527	1,0573	1,0618	1,0662	1,0706	1,0749	1,0792	1,0834	1,0876	1,0917	1,0957	1,0997	1,1036	1,1075	1,1114	1,1152	1,119
50,1	1,0492	1,0539	1,0586	1,0632	1,0677	1,0722	1,0766	1,0809	1,0852	1,0894	1,0936	1,0977	1,1017	1,1058	1,1097	1,1136	1,1175	1,1213	1,1251
50,2	1,0551	1,0598	1,0645	1,0691	1,0737	1,0781	1,0826	1,0869	1,0912	1,0954	1,0996	1,1037	1,1078	1,1118	1,1158	1,1197	1,1236	1,1274	1,1312
50,3	1,061	1,0658	1,0705	1,0751	1,0797	1,0841	1,0886	1,0929	1,0972	1,1015	1,1057	1,1098	1,1139	1,118	1,1219	1,1259	1,1298	1,1336	1,1374
50,4	1,067	1,0717	1,0764	1,0811	1,0857	1,0902	1,0946	1,099	1,1033	1,1076	1,1118	1,116	1,1201	1,1241	1,1281	1,1321	1,136	1,1398	1,1436
50,5	1,0729	1,0777	1,0825	1,0871	1,0917	1,0962	1,1007	1,1051	1,1094	1,1137	1,1179	1,1221	1,1262	1,1303	1,1343	1,1382	1,1422	1,146	1,1499
50,6	1,0789	1,0837	1,0885	1,0932	1,0978	1,1023	1,1068	1,1112	1,1155	1,1198	1,1241	1,1283	1,1324	1,1365	1,1405	1,1445	1,1484	1,1523	1,1561
50,7	1,0849	1,0898	1,0945	1,0992	1,1039	1,1084	1,1129	1,1173	1,1217	1,126	1,1303	1,1345	1,1386	1,1427	1,1467	1,1507	1,1547	1,1586	1,1624
50,8	1,091	1,0958	1,1006	1,1053	1,11	1,1146	1,1191	1,1235	1,1279	1,1322	1,1365	1,1407	1,1448	1,1489	1,153	1,157	1,161	1,1649	1,1687
50,9	1,0971	1,1019	1,1067	1,1115	1,1161	1,1207	1,1252	1,1297	1,1341	1,1384	1,1427	1,1469	1,1511	1,1552	1,1593	1,1633	1,1673	1,1712	1,1751
51	1,1032	1,1081	1,1129	1,1176	1,1223	1,1269	1,1314	1,1359	1,1403	1,1447	1,149	1,1532	1,1574	1,1615	1,1656	1,1697	1,1736	1,1776	1,1815
51,1	1,1093	1,1142	1,1191	1,1238	1,1285	1,1331	1,1377	1,1422	1,1466	1,151	1,1553	1,1595	1,1637	1,1679	1,172	1,176	1,18	1,184	1,1879
51,2	1,1155	1,1204	1,1253	1,13	1,1347	1,1394	1,1439	1,1484	1,1529	1,1573	1,1616	1,1659	1,1701	1,1742	1,1784	1,1824	1,1864	1,1904	1,1943
51,3	1,1217	1,1266	1,1315	1,1363	1,141	1,1456	1,1502	1,1547	1,1592	1,1636	1,1679	1,1722	1,1765	1,1806	1,1848	1,1888	1,1929	1,1968	1,2008
51,4	1,1279	1,1329	1,1377	1,1425	1,1473	1,1519	1,1566	1,1611	1,1656	1,17	1,1743	1,1786	1,1829	1,1871	1,1912	1,1953	1,1993	1,2033	1,2073
51,5	1,1341	1,1391	1,144	1,1488	1,1536	1,1583	1,1629	1,1674	1,1719	1,1764	1,1807	1,185	1,1893	1,1935	1,1977	1,2018	1,2058	1,2098	1,2138
51,6	1,1404	1,1454	1,1503	1,1552	1,1599	1,1646	1,1693	1,1738	1,1783	1,1828	1,1872	1,1915	1,1958	1,2	1,2042	1,2083	1,2123	1,2164	1,2203
51,7	1,1467	1,1517	1,1567	1,1615	1,1663	1,171	1,1757	1,1803	1,1848	1,1892	1,1936	1,198	1,2023	1,2065	1,2107	1,2148	1,2189	1,2229	1,2269
51,8	1,1531	1,1581	1,163	1,1679	1,1727	1,1775	1,1821	1,1867	1,1913	1,1957	1,2001	1,2045	1,2088	1,213	1,2172	1,2214	1,2255	1,2295	1,2335
51,9	1,1594	1,1645	1,1694	1,1743	1,1792	1,1839	1,1886	1,1932	1,1978	1,2022	1,2067	1,211	1,2153	1,2196	1,2238	1,228	1,2321	1,2361	1,2402
52	1,1658	1,1709	1,1759	1,1808	1,1856	1,1904	1,1951	1,1997	1,2043	1,2088	1,2132	1,2176	1,2219	1,2262	1,2304	1,2346	1,2387	1,2428	1,2468
52,1	1,1723	1,1773	1,1823	1,1873	1,1921	1,1969	1,2016	1,2062	1,2108	1,2153	1,2198	1,2242	1,2286	1,2328	1,2371	1,2413	1,2454	1,2495	1,2535
52,2	1,1787	1,1838	1,1888	1,1938	1,1986	1,2034	1,2082	1,2128	1,2174	1,222	1,2264	1,2308	1,2352	1,2395	1,2438	1,248	1,2521	1,2562	1,2603
52,3	1,1852	1,1903	1,1953	1,2003	1,2052	1,21	1,2147	1,2194	1,224	1,2286	1,2331	1,2375	1,2419	1,2462	1,2505	1,2547	1,2588	1,263	1,267
52,4	1,1917	1,1968	1,2019	1,2069	1,2118	1,2166	1,2214	1,226	1,2307	1,2352	1,2397	1,2442	1,2486	1,2529	1,2572	1,2614	1,2656	1,2697	1,2738
52,5	1,1982	1,2034	1,2085	1,2135	1,2184	1,2232	1,228	1,2327	1,2374	1,2419	1,2465	1,2509	1,2553	1,2597	1,264	1,2682	1,2724	1,2766	1,2806
52,6	1,2048	1,21	1,2151	1,2201	1,225	1,2299	1,2347	1,2394	1,2441	1,2487	1,2532	1,2577	1,2621	1,2665	1,2708	1,275	1,2792	1,2834	1,2875
52,7	1,2114	1,2166	1,2217	1,2267	1,2317	1,2366	1,2414	1,2461	1,2508	1,2554	1,26	1,2645	1,2689	1,2733	1,2776	1,2819	1,2861	1,2903	1,2944
52,8	1,2181	1,2233	1,2284	1,2334	1,2384	1,2433	1,2481	1,2529	1,2576	1,2622	1,2668	1,2713	1,2757	1,2801	1,2845	1,2887	1,293	1,2972	1,3013
52,9	1,2247	1,2299	1,2351	1,2401	1,2451	1,25	1,2549	1,2597	1,2644	1,269	1,2736	1,2781	1,2826	1,287	1,2913	1,2957	1,2999	1,3041	1,3082
53	1,2314	1,2367	1,2418	1,2469	1,2519	1,2568	1,2617	1,2665	1,2712	1,2759	1,2805	1,285	1,2895	1,2939	1,2983	1,3026	1,3068	1,3111	1,3152
53,1	1,2381	1,2434	1,2486	1,2537	1,2587	1,2636	1,2685	1,2733	1,2781	1,2827	1,2874	1,2919	1,2964	1,3008	1,3052	1,3096	1,3138	1,3181	1,3222
53,2	1,2449	1,2502	1,2554	1,2605	1,2655	1,2705	1,2754	1,2802	1,285	1,2897	1,2943	1,2989	1,3034	1,3078	1,3122	1,3166	1,3209	1,3251	1,3293
53,3	1,2517	1,257	1,2622	1,2673	1,2724	1,2774	1,2823	1,2871	1,2919	1,2966	1,3012	1,3058	1,3103	1,3148	1,3192	1,3236	1,3279	1,3321	1,3364
53,4	1,2585	1,2638	1,2691	1,2742	1,2793	1,2843	1,2892	1,2941	1,2988	1,3036	1,3082	1,3128	1,3174	1,3219	1,3263	1,3307	1,335	1,3392	1,3435

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
50	1,1227	1,1264	1,13	1,1336	1,1371	1,1407	1,1442	1,1476	1,151	1,1544	1,1578	1,1611	1,1644	1,1676	1,1708	1,174	1,1772	1,1803	1,1834
50,1	1,1288	1,1325	1,1362	1,1398	1,1433	1,1469	1,1504	1,1538	1,1573	1,1607	1,164	1,1673	1,1706	1,1739	1,1771	1,1803	1,1835	1,1867	1,1898
50,2	1,135	1,1387	1,1423	1,146	1,1496	1,1531	1,1566	1,1601	1,1635	1,1669	1,1703	1,1736	1,1769	1,1802	1,1835	1,1867	1,1899	1,193	1,1962
50,3	1,1412	1,1449	1,1486	1,1522	1,1558	1,1594	1,1629	1,1664	1,1698	1,1732	1,1766	1,18	1,1833	1,1866	1,1898	1,193	1,1962	1,1994	1,2026
50,4	1,1474	1,1511	1,1548	1,1585	1,1621	1,1656	1,1692	1,1727	1,1761	1,1796	1,183	1,1863	1,1896	1,1929	1,1962	1,1995	1,2027	1,2058	1,209
50,5	1,1536	1,1574	1,1611	1,1647	1,1684	1,172	1,1755	1,179	1,1825	1,1859	1,1893	1,1927	1,196	1,1994	1,2026	1,2059	1,2091	1,2123	1,2154
50,6	1,1599	1,1637	1,1674	1,1711	1,1747	1,1783	1,1818	1,1854	1,1889	1,1923	1,1957	1,1991	1,2025	1,2058	1,2091	1,2123	1,2155	1,2188	1,2219
50,7	1,1662	1,17	1,1737	1,1774	1,1811	1,1847	1,1882	1,1918	1,1953	1,1987	1,2021	1,2055	1,2089	1,2122	1,2155	1,2188	1,222	1,2253	1,2284
50,8	1,1726	1,1763	1,1801	1,1838	1,1874	1,1911	1,1946	1,1982	1,2017	1,2052	1,2086	1,212	1,2154	1,2187	1,222	1,2253	1,2286	1,2318	1,235
50,9	1,1789	1,1827	1,1865	1,1902	1,1939	1,1975	1,2011	1,2046	1,2082	1,2116	1,2151	1,2185	1,2219	1,2252	1,2286	1,2319	1,2351	1,2383	1,2416
51	1,1853	1,1891	1,1929	1,1966	1,2003	1,2039	1,2075	1,2111	1,2146	1,2181	1,2216	1,225	1,2284	1,2318	1,2351	1,2384	1,2417	1,2449	1,2482
51,1	1,1917	1,1956	1,1993	1,2031	1,2068	1,2104	1,214	1,2176	1,2212	1,2247	1,2281	1,2316	1,235	1,2384	1,2417	1,245	1,2483	1,2516	1,2548
51,2	1,1982	1,202	1,2058	1,2095	1,2133	1,2169	1,2206	1,2241	1,2277	1,2312	1,2347	1,2382	1,2416	1,245	1,2483	1,2516	1,2549	1,2582	1,2614
51,3	1,2047	1,2085	1,2123	1,2161	1,2198	1,2235	1,2271	1,2307	1,2343	1,2378	1,2413	1,2448	1,2482	1,2516	1,255	1,2583	1,2616	1,2649	1,2681
51,4	1,2112	1,215	1,2188	1,2226	1,2263	1,23	1,2337	1,2373	1,2409	1,2444	1,2479	1,2514	1,2549	1,2583	1,2616	1,265	1,2683	1,2716	1,2749
51,5	1,2177	1,2216	1,2254	1,2292	1,2329	1,2366	1,2403	1,2439	1,2475	1,2511	1,2546	1,2581	1,2615	1,265	1,2683	1,2717	1,275	1,2783	1,2816
51,6	1,2243	1,2281	1,232	1,2358	1,2395	1,2433	1,2469	1,2506	1,2542	1,2578	1,2613	1,2648	1,2682	1,2717	1,2751	1,2785	1,2818	1,2851	1,2884
51,7	1,2309	1,2347	1,2386	1,2424	1,2462	1,2499	1,2536	1,2573	1,2609	1,2645	1,268	1,2715	1,275	1,2784	1,2819	1,2852	1,2886	1,2919	1,2952
51,8	1,2375	1,2414	1,2453	1,2491	1,2529	1,2566	1,2603	1,264	1,2676	1,2712	1,2748	1,2783	1,2818	1,2852	1,2887	1,292	1,2954	1,2987	1,302
51,9	1,2441	1,2481	1,2519	1,2558	1,2596	1,2633	1,267	1,2707	1,2744	1,278	1,2815	1,2851	1,2886	1,292	1,2955	1,2989	1,3022	1,3056	1,3089
52	1,2508	1,2548	1,2586	1,2625	1,2663	1,2701	1,2738	1,2775	1,2812	1,2848	1,2883	1,2919	1,2954	1,2989	1,3023	1,3057	1,3091	1,3125	1,3158
52,1	1,2575	1,2615	1,2654	1,2692	1,2731	1,2768	1,2806	1,2843	1,288	1,2916	1,2952	1,2987	1,3023	1,3058	1,3092	1,3126	1,316	1,3194	1,3227
52,2	1,2643	1,2682	1,2722	1,276	1,2799	1,2837	1,2874	1,2911	1,2948	1,2985	1,3021	1,3056	1,3092	1,3127	1,3161	1,3196	1,323	1,3263	1,3297
52,3	1,2711	1,275	1,279	1,2829	1,2867	1,2905	1,2943	1,298	1,3017	1,3053	1,309	1,3125	1,3161	1,3196	1,3231	1,3265	1,3299	1,3333	1,3367
52,4	1,2779	1,2818	1,2858	1,2897	1,2936	1,2974	1,3011	1,3049	1,3086	1,3123	1,3159	1,3195	1,323	1,3266	1,3301	1,3335	1,337	1,3403	1,3437
52,5	1,2847	1,2887	1,2926	1,2966	1,3004	1,3043	1,3081	1,3118	1,3155	1,3192	1,3229	1,3265	1,33	1,3336	1,3371	1,3405	1,344	1,3474	1,3508
52,6	1,2916	1,2956	1,2995	1,3035	1,3074	1,3112	1,315	1,3188	1,3225	1,3262	1,3298	1,3335	1,337	1,3406	1,3441	1,3476	1,351	1,3545	1,3579
52,7	1,2985	1,3025	1,3065	1,3104	1,3143	1,3182	1,322	1,3258	1,3295	1,3332	1,3369	1,3405	1,3441	1,3477	1,3512	1,3547	1,3581	1,3616	1,365
52,8	1,3054	1,3094	1,3134	1,3174	1,3213	1,3252	1,329	1,3328	1,3365	1,3403	1,3439	1,3476	1,3512	1,3548	1,3583	1,3618	1,3653	1,3687	1,3721
52,9	1,3124	1,3164	1,3204	1,3244	1,3283	1,3322	1,336	1,3398	1,3436	1,3473	1,351	1,3547	1,3583	1,3619	1,3654	1,369	1,3724	1,3759	1,3793
53	1,3193	1,3234	1,3274	1,3314	1,3354	1,3393	1,3431	1,3469	1,3507	1,3544	1,3581	1,3618	1,3654	1,369	1,3726	1,3761	1,3796	1,3831	1,3865
53,1	1,3264	1,3304	1,3345	1,3385	1,3424	1,3463	1,3502	1,354	1,3578	1,3616	1,3653	1,369	1,3726	1,3762	1,3798	1,3833	1,3868	1,3903	1,3938
53,2	1,3334	1,3375	1,3416	1,3456	1,3495	1,3535	1,3574	1,3612	1,365	1,3688	1,3725	1,3762	1,3798	1,3834	1,387	1,3906	1,3941	1,3976	1,4011
53,3	1,3405	1,3446	1,3487	1,3527	1,3567	1,3606	1,3645	1,3684	1,3722	1,376	1,3797	1,3834	1,3871	1,3907	1,3943	1,3979	1,4014	1,4049	1,4084
53,4	1,3476	1,3518	1,3558	1,3599	1,3639	1,3678	1,3717	1,3756	1,3794	1,3832	1,387	1,3907	1,3944	1,398	1,4016	1,4052	1,4087	1,4122	1,4157

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
50	1,1865	1,1896	1,1926	1,1956	1,1986	1,2015	1,2045	1,2074	1,2103	1,2131	1,216	1,2188	1,2216	1,2243	1,2271	1,2298	1,2325	1,2352	1,2379
50,1	1,1929	1,1959	1,199	1,202	1,205	1,2079	1,2109	1,2138	1,2167	1,2196	1,2224	1,2252	1,228	1,2308	1,2336	1,2363	1,239	1,2417	1,2444
50,2	1,1993	1,2023	1,2054	1,2084	1,2114	1,2144	1,2173	1,2202	1,2231	1,226	1,2289	1,2317	1,2345	1,2373	1,2401	1,2428	1,2456	1,2483	1,251
50,3	1,2057	1,2088	1,2118	1,2148	1,2178	1,2208	1,2238	1,2267	1,2296	1,2325	1,2354	1,2382	1,2411	1,2439	1,2466	1,2494	1,2521	1,2549	1,2576
50,4	1,2121	1,2152	1,2183	1,2213	1,2243	1,2273	1,2303	1,2332	1,2362	1,2391	1,2419	1,2448	1,2476	1,2504	1,2532	1,256	1,2587	1,2615	1,2642
50,5	1,2186	1,2217	1,2248	1,2278	1,2308	1,2338	1,2368	1,2398	1,2427	1,2456	1,2485	1,2514	1,2542	1,257	1,2598	1,2626	1,2654	1,2681	1,2708
50,6	1,2251	1,2282	1,2313	1,2343	1,2374	1,2404	1,2434	1,2463	1,2493	1,2522	1,2551	1,258	1,2608	1,2636	1,2665	1,2692	1,272	1,2748	1,2775
50,7	1,2316	1,2347	1,2378	1,2409	1,2439	1,247	1,25	1,2529	1,2559	1,2588	1,2617	1,2646	1,2675	1,2703	1,2731	1,2759	1,2787	1,2814	1,2842
50,8	1,2381	1,2413	1,2444	1,2475	1,2505	1,2536	1,2566	1,2596	1,2625	1,2655	1,2684	1,2713	1,2741	1,277	1,2798	1,2826	1,2854	1,2882	1,2909
50,9	1,2447	1,2479	1,251	1,2541	1,2572	1,2602	1,2632	1,2662	1,2692	1,2721	1,2751	1,278	1,2808	1,2837	1,2865	1,2893	1,2921	1,2949	1,2977
51	1,2513	1,2545	1,2576	1,2607	1,2638	1,2669	1,2699	1,2729	1,2759	1,2788	1,2818	1,2847	1,2876	1,2904	1,2933	1,2961	1,2989	1,3017	1,3045
51,1	1,258	1,2612	1,2643	1,2674	1,2705	1,2736	1,2766	1,2796	1,2826	1,2856	1,2885	1,2914	1,2943	1,2972	1,3001	1,3029	1,3057	1,3085	1,3113
51,2	1,2647	1,2678	1,271	1,2741	1,2772	1,2803	1,2833	1,2864	1,2893	1,2923	1,2953	1,2982	1,3011	1,304	1,3069	1,3097	1,3125	1,3153	1,3181
51,3	1,2714	1,2745	1,2777	1,2808	1,284	1,287	1,2901	1,2931	1,2961	1,2991	1,3021	1,305	1,3079	1,3108	1,3137	1,3166	1,3194	1,3222	1,325
51,4	1,2781	1,2813	1,2845	1,2876	1,2907	1,2938	1,2969	1,2999	1,303	1,3059	1,3089	1,3119	1,3148	1,3177	1,3206	1,3234	1,3263	1,3291	1,3319
51,5	1,2848	1,2881	1,2912	1,2944	1,2975	1,3006	1,3037	1,3068	1,3098	1,3128	1,3158	1,3187	1,3217	1,3246	1,3275	1,3303	1,3332	1,336	1,3388
51,6	1,2916	1,2948	1,2981	1,3012	1,3043	1,3075	1,3106	1,3136	1,3167	1,3197	1,3227	1,3256	1,3286	1,3315	1,3344	1,3373	1,3401	1,343	1,3458
51,7	1,2985	1,3017	1,3049	1,3081	1,3112	1,3143	1,3174	1,3205	1,3236	1,3266	1,3296	1,3326	1,3355	1,3385	1,3414	1,3443	1,3471	1,35	1,3528
51,8	1,3053	1,3085	1,3118	1,3149	1,3181	1,3212	1,3243	1,3274	1,3305	1,3335	1,3365	1,3395	1,3425	1,3454	1,3484	1,3513	1,3541	1,357	1,3598
51,9	1,3122	1,3154	1,3187	1,3219	1,325	1,3282	1,3313	1,3344	1,3375	1,3405	1,3435	1,3465	1,3495	1,3525	1,3554	1,3583	1,3612	1,364	1,3669
52	1,3191	1,3224	1,3256	1,3288	1,332	1,3351	1,3383	1,3414	1,3445	1,3475	1,3505	1,3535	1,3565	1,3595	1,3624	1,3653	1,3683	1,3711	1,374
52,1	1,326	1,3293	1,3326	1,3358	1,339	1,3421	1,3453	1,3484	1,3515	1,3546	1,3576	1,3606	1,3636	1,3666	1,3695	1,3724	1,3754	1,3782	1,3811
52,2	1,333	1,3363	1,3395	1,3428	1,346	1,3492	1,3523	1,3554	1,3585	1,3616	1,3647	1,3677	1,3707	1,3737	1,3766	1,3796	1,3825	1,3854	1,3883
52,3	1,34	1,3433	1,3466	1,3498	1,353	1,3562	1,3594	1,3625	1,3656	1,3687	1,3718	1,3748	1,3778	1,3808	1,3838	1,3867	1,3896	1,3926	1,3954
52,4	1,347	1,3504	1,3536	1,3569	1,3601	1,3633	1,3665	1,3696	1,3727	1,3758	1,3789	1,382	1,385	1,388	1,391	1,3939	1,3969	1,3998	1,4027
52,5	1,3541	1,3574	1,3607	1,364	1,3672	1,3704	1,3736	1,3768	1,3799	1,383	1,3861	1,3891	1,3922	1,3952	1,3982	1,4011	1,4041	1,407	1,4099
52,6	1,3612	1,3645	1,3678	1,3711	1,3744	1,3776	1,3808	1,3839	1,3871	1,3902	1,3933	1,3964	1,3994	1,4024	1,4054	1,4084	1,4113	1,4143	1,4172
52,7	1,3683	1,3717	1,375	1,3783	1,3815	1,3848	1,388	1,3911	1,3943	1,3974	1,4005	1,4036	1,4067	1,4097	1,4127	1,4157	1,4186	1,4216	1,4245
52,8	1,3755	1,3789	1,3822	1,3855	1,3887	1,392	1,3952	1,3984	1,4015	1,4047	1,4078	1,4109	1,414	1,417	1,42	1,423	1,426	1,4289	1,4319
52,9	1,3827	1,3861	1,3894	1,3927	1,396	1,3992	1,4025	1,4056	1,4088	1,412	1,4151	1,4182	1,4213	1,4243	1,4273	1,4303	1,4333	1,4363	1,4392
53	1,3899	1,3933	1,3966	1,4	1,4033	1,4065	1,4097	1,413	1,4161	1,4193	1,4224	1,4255	1,4286	1,4317	1,4347	1,4377	1,4407	1,4437	1,4466
53,1	1,3972	1,4006	1,4039	1,4073	1,4106	1,4138	1,4171	1,4203	1,4235	1,4266	1,4298	1,4329	1,436	1,4391	1,4421	1,4451	1,4482	1,4511	1,4541
53,2	1,4045	1,4079	1,4113	1,4146	1,4179	1,4212	1,4244	1,4277	1,4309	1,434	1,4372	1,4403	1,4434	1,4465	1,4496	1,4526	1,4556	1,4586	1,4616
53,3	1,4118	1,4152	1,4186	1,4219	1,4253	1,4286	1,4318	1,4351	1,4383	1,4415	1,4446	1,4478	1,4509	1,454	1,457	1,4601	1,4631	1,4661	1,4691
53,4	1,4192	1,4226	1,426	1,4293	1,4327	1,436	1,4392	1,4425	1,4457	1,4489	1,4521	1,4552	1,4584	1,4615	1,4645	1,4676	1,4706	1,4736	1,4766

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
50	1,2406	1,2432	1,2458	1,2484	1,251	1,2535	1,2561	1,2586	1,2611	1,2636	1,2661	1,2686	1,271	1,2735	1,2759	1,2783	1,2807	1,283	1,2854
50,1	1,2471	1,2497	1,2523	1,255	1,2576	1,2601	1,2627	1,2652	1,2677	1,2702	1,2727	1,2752	1,2777	1,2801	1,2825	1,2849	1,2873	1,2897	1,2921
50,2	1,2536	1,2563	1,2589	1,2615	1,2641	1,2667	1,2693	1,2718	1,2744	1,2769	1,2794	1,2819	1,2843	1,2868	1,2892	1,2916	1,294	1,2964	1,2988
50,3	1,2602	1,2629	1,2655	1,2682	1,2708	1,2734	1,2759	1,2785	1,281	1,2835	1,286	1,2885	1,291	1,2935	1,2959	1,2983	1,3008	1,3031	1,3055
50,4	1,2669	1,2695	1,2722	1,2748	1,2774	1,28	1,2826	1,2852	1,2877	1,2902	1,2928	1,2952	1,2977	1,3002	1,3026	1,3051	1,3075	1,3099	1,3123
50,5	1,2735	1,2762	1,2788	1,2815	1,2841	1,2867	1,2893	1,2919	1,2944	1,297	1,2995	1,302	1,3045	1,307	1,3094	1,3119	1,3143	1,3167	1,3191
50,6	1,2802	1,2829	1,2855	1,2882	1,2908	1,2934	1,296	1,2986	1,3012	1,3037	1,3063	1,3088	1,3113	1,3137	1,3162	1,3187	1,3211	1,3235	1,3259
50,7	1,2869	1,2896	1,2923	1,2949	1,2976	1,3002	1,3028	1,3054	1,308	1,3105	1,3131	1,3156	1,3181	1,3206	1,323	1,3255	1,3279	1,3304	1,3328
50,8	1,2936	1,2963	1,299	1,3017	1,3043	1,307	1,3096	1,3122	1,3148	1,3173	1,3199	1,3224	1,3249	1,3274	1,3299	1,3324	1,3348	1,3372	1,3397
50,9	1,3004	1,3031	1,3058	1,3085	1,3111	1,3138	1,3164	1,319	1,3216	1,3242	1,3267	1,3293	1,3318	1,3343	1,3368	1,3392	1,3417	1,3442	1,3466
51	1,3072	1,3099	1,3126	1,3153	1,318	1,3206	1,3233	1,3259	1,3285	1,331	1,3336	1,3361	1,3387	1,3412	1,3437	1,3462	1,3486	1,3511	1,3535
51,1	1,314	1,3167	1,3195	1,3222	1,3248	1,3275	1,3301	1,3327	1,3354	1,3379	1,3405	1,3431	1,3456	1,3481	1,3506	1,3531	1,3556	1,3581	1,3605
51,2	1,3209	1,3236	1,3263	1,329	1,3317	1,3344	1,337	1,3397	1,3423	1,3449	1,3475	1,35	1,3526	1,3551	1,3576	1,3601	1,3626	1,3651	1,3675
51,3	1,3278	1,3305	1,3332	1,3359	1,3386	1,3413	1,344	1,3466	1,3492	1,3518	1,3544	1,357	1,3596	1,3621	1,3646	1,3671	1,3696	1,3721	1,3746
51,4	1,3347	1,3374	1,3402	1,3429	1,3456	1,3483	1,3509	1,3536	1,3562	1,3588	1,3614	1,364	1,3666	1,3691	1,3717	1,3742	1,3767	1,3792	1,3816
51,5	1,3416	1,3444	1,3471	1,3499	1,3526	1,3553	1,3579	1,3606	1,3632	1,3659	1,3685	1,3711	1,3736	1,3762	1,3787	1,3812	1,3837	1,3862	1,3887
51,6	1,3486	1,3514	1,3541	1,3569	1,3596	1,3623	1,365	1,3676	1,3703	1,3729	1,3755	1,3781	1,3807	1,3833	1,3858	1,3883	1,3909	1,3934	1,3959
51,7	1,3556	1,3584	1,3612	1,3639	1,3666	1,3693	1,372	1,3747	1,3774	1,38	1,3826	1,3852	1,3878	1,3904	1,3929	1,3955	1,398	1,4005	1,403
51,8	1,3626	1,3654	1,3682	1,371	1,3737	1,3764	1,3791	1,3818	1,3845	1,3871	1,3897	1,3924	1,395	1,3975	1,4001	1,4027	1,4052	1,4077	1,4102
51,9	1,3697	1,3725	1,3753	1,3781	1,3808	1,3835	1,3862	1,3889	1,3916	1,3943	1,3969	1,3995	1,4021	1,4047	1,4073	1,4099	1,4124	1,4149	1,4174
52	1,3768	1,3796	1,3824	1,3852	1,388	1,3907	1,3934	1,3961	1,3988	1,4014	1,4041	1,4067	1,4093	1,4119	1,4145	1,4171	1,4196	1,4222	1,4247
52,1	1,3839	1,3868	1,3896	1,3923	1,3951	1,3979	1,4006	1,4033	1,406	1,4087	1,4113	1,414	1,4166	1,4192	1,4218	1,4244	1,4269	1,4294	1,432
52,2	1,3911	1,3939	1,3967	1,3995	1,4023	1,4051	1,4078	1,4105	1,4132	1,4159	1,4186	1,4212	1,4238	1,4265	1,4291	1,4316	1,4342	1,4368	1,4393
52,3	1,3983	1,4011	1,404	1,4068	1,4095	1,4123	1,4151	1,4178	1,4205	1,4232	1,4258	1,4285	1,4312	1,4338	1,4364	1,439	1,4415	1,4441	1,4466
52,4	1,4055	1,4084	1,4112	1,414	1,4168	1,4196	1,4223	1,4251	1,4278	1,4305	1,4332	1,4358	1,4385	1,4411	1,4437	1,4463	1,4489	1,4515	1,454
52,5	1,4128	1,4156	1,4185	1,4213	1,4241	1,4269	1,4296	1,4324	1,4351	1,4378	1,4405	1,4432	1,4459	1,4485	1,4511	1,4537	1,4563	1,4589	1,4614
52,6	1,4201	1,423	1,4258	1,4286	1,4314	1,4342	1,437	1,4397	1,4425	1,4452	1,4479	1,4506	1,4532	1,4559	1,4585	1,4611	1,4637	1,4663	1,4689
52,7	1,4274	1,4303	1,4331	1,436	1,4388	1,4416	1,4444	1,4471	1,4499	1,4526	1,4553	1,458	1,4607	1,4633	1,466	1,4686	1,4712	1,4738	1,4764
52,8	1,4348	1,4376	1,4405	1,4434	1,4462	1,449	1,4518	1,4546	1,4573	1,46	1,4628	1,4655	1,4681	1,4708	1,4735	1,4761	1,4787	1,4813	1,4839
52,9	1,4421	1,445	1,4479	1,4508	1,4536	1,4564	1,4592	1,462	1,4648	1,4675	1,4703	1,4729	1,4756	1,4783	1,481	1,4836	1,4862	1,4888	1,4914
53	1,4496	1,4525	1,4554	1,4582	1,4611	1,4639	1,4667	1,4695	1,4723	1,475	1,4778	1,4805	1,4832	1,4859	1,4885	1,4912	1,4938	1,4964	1,499
53,1	1,457	1,4599	1,4628	1,4657	1,4686	1,4714	1,4742	1,477	1,4798	1,4826	1,4853	1,488	1,4907	1,4934	1,4961	1,4988	1,5014	1,504	1,5066
53,2	1,4645	1,4674	1,4704	1,4732	1,4761	1,4789	1,4818	1,4846	1,4874	1,4901	1,4929	1,4956	1,4983	1,501	1,5037	1,5064	1,509	1,5117	1,5143
53,3	1,472	1,475	1,4779	1,4808	1,4836	1,4865	1,4893	1,4922	1,495	1,4977	1,5005	1,5032	1,506	1,5087	1,5114	1,514	1,5167	1,5193	1,522
53,4	1,4796	1,4825	1,4855	1,4884	1,4912	1,4941	1,497	1,4998	1,5026	1,5054	1,5081	1,5109	1,5136	1,5164	1,519	1,5217	1,5244	1,5271	1,5297

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
50	1,2877	1,2901	1,2924	1,2947	1,297	1,2993	1,3015	1,3038	1,306	1,3083	1,3105	1,3127	1,3149	1,317	1,3192	1,3214	1,3235	1,3256	1,3278
50,1	1,2944	1,2968	1,2991	1,3014	1,3037	1,306	1,3083	1,3105	1,3128	1,315	1,3172	1,3194	1,3216	1,3238	1,326	1,3282	1,3303	1,3324	1,3346
50,2	1,3011	1,3035	1,3058	1,3081	1,3105	1,3127	1,315	1,3173	1,3196	1,3218	1,324	1,3262	1,3284	1,3306	1,3328	1,335	1,3372	1,3393	1,3414
50,3	1,3079	1,3103	1,3126	1,3149	1,3172	1,3195	1,3218	1,3241	1,3264	1,3286	1,3308	1,3331	1,3353	1,3375	1,3397	1,3419	1,344	1,3462	1,3483
50,4	1,3147	1,317	1,3194	1,3217	1,324	1,3263	1,3286	1,3309	1,3332	1,3354	1,3377	1,3399	1,3421	1,3444	1,3465	1,3487	1,3509	1,3531	1,3552
50,5	1,3215	1,3238	1,3262	1,3285	1,3309	1,3332	1,3355	1,3378	1,3401	1,3423	1,3446	1,3468	1,349	1,3513	1,3535	1,3556	1,3578	1,36	1,3622
50,6	1,3283	1,3307	1,3331	1,3354	1,3377	1,3401	1,3424	1,3447	1,347	1,3492	1,3515	1,3537	1,356	1,3582	1,3604	1,3626	1,3648	1,367	1,3691
50,7	1,3352	1,3376	1,3399	1,3423	1,3446	1,347	1,3493	1,3516	1,3539	1,3562	1,3584	1,3607	1,3629	1,3652	1,3674	1,3696	1,3718	1,3739	1,3761
50,8	1,3421	1,3445	1,3469	1,3492	1,3516	1,3539	1,3562	1,3585	1,3608	1,3631	1,3654	1,3677	1,3699	1,3721	1,3744	1,3766	1,3788	1,381	1,3831
50,9	1,349	1,3514	1,3538	1,3562	1,3585	1,3609	1,3632	1,3655	1,3678	1,3701	1,3724	1,3747	1,3769	1,3792	1,3814	1,3836	1,3858	1,388	1,3902
51	1,356	1,3584	1,3608	1,3631	1,3655	1,3678	1,3702	1,3725	1,3748	1,3771	1,3794	1,3817	1,384	1,3862	1,3885	1,3907	1,3929	1,3951	1,3973
51,1	1,3629	1,3653	1,3678	1,3701	1,3725	1,3749	1,3772	1,3796	1,3819	1,3842	1,3865	1,3888	1,391	1,3933	1,3955	1,3978	1,4	1,4022	1,4044
51,2	1,3699	1,3724	1,3748	1,3772	1,3796	1,3819	1,3843	1,3866	1,389	1,3913	1,3936	1,3959	1,3981	1,4004	1,4027	1,4049	1,4071	1,4093	1,4115
51,3	1,377	1,3794	1,3818	1,3842	1,3866	1,389	1,3914	1,3937	1,3961	1,3984	1,4007	1,403	1,4053	1,4076	1,4098	1,412	1,4143	1,4165	1,4187
51,4	1,3841	1,3865	1,3889	1,3914	1,3937	1,3961	1,3985	1,4009	1,4032	1,4055	1,4079	1,4102	1,4124	1,4147	1,417	1,4192	1,4215	1,4237	1,4259
51,5	1,3912	1,3936	1,3961	1,3985	1,4009	1,4033	1,4056	1,408	1,4104	1,4127	1,415	1,4173	1,4196	1,4219	1,4242	1,4265	1,4287	1,431	1,4332
51,6	1,3983	1,4008	1,4032	1,4056	1,4081	1,4105	1,4128	1,4152	1,4176	1,4199	1,4223	1,4246	1,4269	1,4292	1,4314	1,4337	1,436	1,4382	1,4404
51,7	1,4055	1,4079	1,4104	1,4128	1,4153	1,4177	1,4201	1,4224	1,4248	1,4272	1,4295	1,4318	1,4341	1,4364	1,4387	1,441	1,4433	1,4455	1,4478
51,8	1,4127	1,4152	1,4176	1,4201	1,4225	1,4249	1,4273	1,4297	1,4321	1,4344	1,4368	1,4391	1,4414	1,4437	1,446	1,4483	1,4506	1,4528	1,4551
51,9	1,4199	1,4224	1,4249	1,4273	1,4298	1,4322	1,4346	1,437	1,4393	1,4417	1,4441	1,4464	1,4487	1,4511	1,4534	1,4557	1,4579	1,4602	1,4625
52	1,4272	1,4297	1,4321	1,4346	1,437	1,4395	1,4419	1,4443	1,4467	1,4491	1,4514	1,4538	1,4561	1,4584	1,4607	1,463	1,4653	1,4676	1,4699
52,1	1,4345	1,437	1,4395	1,4419	1,4444	1,4468	1,4492	1,4517	1,454	1,4564	1,4588	1,4612	1,4635	1,4658	1,4681	1,4705	1,4727	1,475	1,4773
52,2	1,4418	1,4443	1,4468	1,4493	1,4517	1,4542	1,4566	1,459	1,4614	1,4638	1,4662	1,4686	1,4709	1,4732	1,4756	1,4779	1,4802	1,4825	1,4848
52,3	1,4492	1,4517	1,4542	1,4567	1,4591	1,4616	1,464	1,4664	1,4689	1,4713	1,4736	1,476	1,4784	1,4807	1,483	1,4854	1,4877	1,49	1,4923
52,4	1,4566	1,4591	1,4616	1,4641	1,4666	1,469	1,4715	1,4739	1,4763	1,4787	1,4811	1,4835	1,4859	1,4882	1,4906	1,4929	1,4952	1,4975	1,4998
52,5	1,464	1,4665	1,469	1,4715	1,474	1,4765	1,4789	1,4814	1,4838	1,4862	1,4886	1,491	1,4934	1,4957	1,4981	1,5004	1,5027	1,5051	1,5074
52,6	1,4714	1,474	1,4765	1,479	1,4815	1,484	1,4864	1,4889	1,4913	1,4937	1,4962	1,4985	1,5009	1,5033	1,5056	1,508	1,5103	1,5126	1,5149
52,7	1,4789	1,4815	1,484	1,4865	1,489	1,4915	1,494	1,4964	1,4989	1,5013	1,5037	1,5061	1,5085	1,5109	1,5133	1,5156	1,5179	1,5203	1,5226
52,8	1,4865	1,489	1,4915	1,4941	1,4966	1,4991	1,5015	1,504	1,5065	1,5089	1,5113	1,5137	1,5161	1,5185	1,5209	1,5232	1,5256	1,5279	1,5302
52,9	1,494	1,4966	1,4991	1,5016	1,5042	1,5067	1,5092	1,5116	1,5141	1,5165	1,519	1,5214	1,5238	1,5262	1,5285	1,5309	1,5333	1,5356	1,538
53	1,5016	1,5042	1,5067	1,5093	1,5118	1,5143	1,5168	1,5193	1,5217	1,5242	1,5266	1,529	1,5315	1,5339	1,5363	1,5386	1,541	1,5433	1,5457
53,1	1,5092	1,5118	1,5144	1,5169	1,5194	1,522	1,5245	1,5269	1,5294	1,5319	1,5343	1,5368	1,5392	1,5416	1,544	1,5464	1,5487	1,5511	1,5534
53,2	1,5169	1,5195	1,522	1,5246	1,5271	1,5297	1,5322	1,5347	1,5372	1,5396	1,5421	1,5445	1,547	1,5494	1,5518	1,5541	1,5565	1,5589	1,5612
53,3	1,5246	1,5272	1,5297	1,5323	1,5349	1,5374	1,5399	1,5424	1,5449	1,5474	1,5498	1,5523	1,5547	1,5572	1,5596	1,562	1,5643	1,5667	1,5691
53,4	1,5323	1,5349	1,5375	1,5401	1,5426	1,5452	1,5477	1,5502	1,5527	1,5552	1,5577	1,5601	1,5626	1,565	1,5674	1,5698	1,5722	1,5746	1,5769

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
50	1,3299	1,332	1,3341	1,3361	1,3382	1,3403	1,3423	1,3444
50,1	1,3367	1,3388	1,3409	1,343	1,3451	1,3471	1,3492	1,3512
50,2	1,3436	1,3457	1,3478	1,3499	1,352	1,354	1,3561	1,3581
50,3	1,3504	1,3526	1,3547	1,3568	1,3589	1,3609	1,363	1,3651
50,4	1,3574	1,3595	1,3616	1,3637	1,3658	1,3679	1,37	1,372
50,5	1,3643	1,3664	1,3685	1,3707	1,3728	1,3749	1,3769	1,379
50,6	1,3713	1,3734	1,3755	1,3777	1,3798	1,3819	1,384	1,386
50,7	1,3783	1,3804	1,3826	1,3847	1,3868	1,3889	1,391	1,3931
50,8	1,3853	1,3875	1,3896	1,3917	1,3939	1,396	1,3981	1,4002
50,9	1,3924	1,3945	1,3967	1,3988	1,4009	1,4031	1,4052	1,4073
51	1,3995	1,4016	1,4038	1,4059	1,4081	1,4102	1,4123	1,4144
51,1	1,4066	1,4088	1,4109	1,4131	1,4152	1,4174	1,4195	1,4216
51,2	1,4137	1,4159	1,4181	1,4203	1,4224	1,4245	1,4267	1,4288
51,3	1,4209	1,4231	1,4253	1,4275	1,4296	1,4318	1,4339	1,436
51,4	1,4281	1,4303	1,4325	1,4347	1,4369	1,439	1,4412	1,4433
51,5	1,4354	1,4376	1,4398	1,442	1,4441	1,4463	1,4484	1,4506
51,6	1,4427	1,4449	1,4471	1,4493	1,4515	1,4536	1,4558	1,4579
51,7	1,45	1,4522	1,4544	1,4566	1,4588	1,461	1,4631	1,4653
51,8	1,4573	1,4596	1,4618	1,464	1,4662	1,4684	1,4705	1,4727
51,9	1,4647	1,4669	1,4692	1,4714	1,4736	1,4758	1,4779	1,4801
52	1,4721	1,4744	1,4766	1,4788	1,481	1,4832	1,4854	1,4876
52,1	1,4796	1,4818	1,484	1,4863	1,4885	1,4907	1,4929	1,4951
52,2	1,487	1,4893	1,4915	1,4938	1,496	1,4982	1,5004	1,5026
52,3	1,4945	1,4968	1,499	1,5013	1,5035	1,5057	1,5079	1,5101
52,4	1,5021	1,5043	1,5066	1,5088	1,5111	1,5133	1,5155	1,5177
52,5	1,5096	1,5119	1,5142	1,5164	1,5187	1,5209	1,5231	1,5253
52,6	1,5172	1,5195	1,5218	1,5241	1,5263	1,5285	1,5308	1,533
52,7	1,5249	1,5272	1,5294	1,5317	1,534	1,5362	1,5385	1,5407
52,8	1,5326	1,5349	1,5371	1,5394	1,5417	1,5439	1,5462	1,5484
52,9	1,5403	1,5426	1,5448	1,5471	1,5494	1,5517	1,5539	1,5561
53	1,548	1,5503	1,5526	1,5549	1,5572	1,5594	1,5617	1,5639
53,1	1,5558	1,5581	1,5604	1,5627	1,565	1,5673	1,5695	1,5718
53,2	1,5636	1,5659	1,5682	1,5705	1,5728	1,5751	1,5774	1,5796
53,3	1,5714	1,5737	1,5761	1,5784	1,5807	1,583	1,5853	1,5875
53,4	1,5793	1,5816	1,584	1,5863	1,5886	1,5909	1,5932	1,5954

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
53,5	0,9247	0,9422	0,9585	0,9738	0,9882	1,0018	1,0147	1,027	1,0388	1,05	1,0608	1,0712	1,0812	1,0908	1,1002	1,1092	1,1179	1,1264	1,1347
53,6	0,9303	0,9479	0,9643	0,9797	0,9941	1,0078	1,0207	1,0331	1,0448	1,0561	1,067	1,0774	1,0874	1,0971	1,1065	1,1155	1,1243	1,1328	1,1411
53,7	0,936	0,9537	0,9701	0,9855	1	1,0137	1,0267	1,0391	1,0509	1,0623	1,0731	1,0836	1,0937	1,1034	1,1128	1,1219	1,1307	1,1393	1,1476
53,8	0,9417	0,9594	0,976	0,9914	1,006	1,0197	1,0328	1,0452	1,0571	1,0685	1,0794	1,0899	1,1	1,1097	1,1192	1,1283	1,1371	1,1457	1,1541
53,9	0,9474	0,9652	0,9818	0,9973	1,0119	1,0258	1,0389	1,0513	1,0633	1,0747	1,0856	1,0962	1,1063	1,1161	1,1256	1,1347	1,1436	1,1522	1,1606
54	0,9532	0,9711	0,9877	1,0033	1,018	1,0318	1,045	1,0575	1,0695	1,0809	1,0919	1,1025	1,1127	1,1225	1,132	1,1412	1,1501	1,1587	1,1671
54,1	0,959	0,9769	0,9936	1,0093	1,024	1,0379	1,0511	1,0637	1,0757	1,0872	1,0982	1,1088	1,119	1,1289	1,1384	1,1477	1,1566	1,1653	1,1737
54,2	0,9648	0,9828	0,9996	1,0153	1,0301	1,044	1,0573	1,0699	1,082	1,0935	1,1046	1,1152	1,1255	1,1354	1,1449	1,1542	1,1632	1,1719	1,1803
54,3	0,9707	0,9887	1,0056	1,0213	1,0362	1,0502	1,0635	1,0762	1,0882	1,0998	1,1109	1,1216	1,1319	1,1418	1,1514	1,1607	1,1698	1,1785	1,187
54,4	0,9765	0,9947	1,0116	1,0274	1,0423	1,0564	1,0697	1,0824	1,0946	1,1062	1,1173	1,1281	1,1384	1,1484	1,158	1,1673	1,1764	1,1851	1,1937
54,5	0,9824	1,0007	1,0176	1,0335	1,0485	1,0626	1,076	1,0887	1,1009	1,1126	1,1238	1,1345	1,1449	1,1549	1,1646	1,1739	1,183	1,1918	1,2004
54,6	0,9884	1,0067	1,0237	1,0397	1,0546	1,0688	1,0823	1,0951	1,1073	1,119	1,1303	1,141	1,1514	1,1615	1,1712	1,1806	1,1897	1,1985	1,2071
54,7	0,9944	1,0127	1,0298	1,0458	1,0609	1,0751	1,0886	1,1015	1,1137	1,1255	1,1367	1,1476	1,158	1,1681	1,1778	1,1873	1,1964	1,2053	1,2139
54,8	1,0004	1,0188	1,036	1,052	1,0671	1,0814	1,095	1,1079	1,1202	1,132	1,1433	1,1542	1,1646	1,1748	1,1845	1,194	1,2032	1,2121	1,2207
54,9	1,0064	1,0249	1,0421	1,0582	1,0734	1,0878	1,1014	1,1143	1,1267	1,1385	1,1498	1,1608	1,1713	1,1814	1,1912	1,2007	1,2099	1,2189	1,2275
55	1,0125	1,031	1,0483	1,0645	1,0797	1,0941	1,1078	1,1208	1,1332	1,145	1,1564	1,1674	1,178	1,1881	1,198	1,2075	1,2167	1,2257	1,2344
55,1	1,0186	1,0372	1,0546	1,0708	1,0861	1,1005	1,1142	1,1273	1,1397	1,1516	1,1631	1,1741	1,1847	1,1949	1,2048	1,2143	1,2236	1,2326	1,2413
55,2	1,0247	1,0434	1,0608	1,0771	1,0925	1,1069	1,1207	1,1338	1,1463	1,1583	1,1697	1,1808	1,1914	1,2017	1,2116	1,2212	1,2305	1,2395	1,2483
55,3	1,0309	1,0496	1,0671	1,0835	1,0989	1,1134	1,1272	1,1404	1,1529	1,1649	1,1764	1,1875	1,1982	1,2085	1,2184	1,2281	1,2374	1,2464	1,2552
55,4	1,037	1,0559	1,0734	1,0899	1,1053	1,1199	1,1338	1,147	1,1595	1,1716	1,1832	1,1943	1,205	1,2153	1,2253	1,235	1,2443	1,2534	1,2622
55,5	1,0433	1,0622	1,0798	1,0963	1,1118	1,1264	1,1404	1,1536	1,1662	1,1783	1,1899	1,2011	1,2118	1,2222	1,2322	1,2419	1,2513	1,2604	1,2693
55,6	1,0495	1,0685	1,0862	1,1027	1,1183	1,133	1,147	1,1602	1,1729	1,1851	1,1967	1,2079	1,2187	1,2291	1,2392	1,2489	1,2583	1,2675	1,2764
55,7	1,0558	1,0749	1,0926	1,1092	1,1248	1,1396	1,1536	1,1669	1,1797	1,1918	1,2035	1,2148	1,2256	1,236	1,2461	1,2559	1,2654	1,2746	1,2835
55,8	1,0621	1,0812	1,0991	1,1157	1,1314	1,1462	1,1603	1,1737	1,1864	1,1987	1,2104	1,2217	1,2325	1,243	1,2532	1,263	1,2725	1,2817	1,2906
55,9	1,0685	1,0877	1,1055	1,1223	1,138	1,1529	1,167	1,1804	1,1932	1,2055	1,2173	1,2286	1,2395	1,25	1,2602	1,27	1,2796	1,2888	1,2978
56	1,0748	1,0941	1,1121	1,1289	1,1447	1,1596	1,1737	1,1872	1,2001	1,2124	1,2242	1,2356	1,2465	1,2571	1,2673	1,2772	1,2867	1,296	1,305
56,1	1,0812	1,1006	1,1186	1,1355	1,1513	1,1663	1,1805	1,1941	1,207	1,2193	1,2312	1,2426	1,2536	1,2642	1,2744	1,2843	1,2939	1,3032	1,3123
56,2	1,0877	1,1071	1,1252	1,1421	1,158	1,1731	1,1873	1,2009	1,2139	1,2263	1,2382	1,2496	1,2606	1,2713	1,2815	1,2915	1,3011	1,3105	1,3196
56,3	1,0942	1,1137	1,1318	1,1488	1,1648	1,1799	1,1942	1,2078	1,2208	1,2333	1,2452	1,2567	1,2678	1,2784	1,2887	1,2987	1,3084	1,3178	1,3269
56,4	1,1007	1,1203	1,1385	1,1555	1,1716	1,1867	1,2011	1,2148	1,2278	1,2403	1,2523	1,2638	1,2749	1,2856	1,296	1,306	1,3157	1,3251	1,3342
56,5	1,1072	1,1269	1,1452	1,1623	1,1784	1,1936	1,208	1,2217	1,2348	1,2474	1,2594	1,271	1,2821	1,2928	1,3032	1,3133	1,323	1,3325	1,3416
56,6	1,1138	1,1335	1,1519	1,1691	1,1852	1,2005	1,2149	1,2287	1,2419	1,2545	1,2665	1,2781	1,2893	1,3001	1,3105	1,3206	1,3304	1,3399	1,3491
56,7	1,1204	1,1402	1,1586	1,1759	1,1921	1,2074	1,2219	1,2358	1,249	1,2616	1,2737	1,2854	1,2966	1,3074	1,3178	1,328	1,3378	1,3473	1,3565
56,8	1,1271	1,1469	1,1654	1,1827	1,199	1,2144	1,229	1,2428	1,2561	1,2688	1,2809	1,2926	1,3039	1,3147	1,3252	1,3354	1,3452	1,3548	1,364
56,9	1,1338	1,1537	1,1723	1,1896	1,2059	1,2214	1,236	1,2499	1,2632	1,276	1,2882	1,2999	1,3112	1,3221	1,3326	1,3428	1,3527	1,3623	1,3716

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
53,5	1,1427	1,1505	1,1582	1,1656	1,1728	1,1799	1,1869	1,1936	1,2003	1,2068	1,2131	1,2194	1,2255	1,2315	1,2374	1,2432	1,2489	1,2544	1,26
53,6	1,1492	1,157	1,1647	1,1721	1,1794	1,1865	1,1935	1,2003	1,2069	1,2134	1,2198	1,2261	1,2322	1,2382	1,2442	1,25	1,2557	1,2613	1,2668
53,7	1,1557	1,1635	1,1712	1,1787	1,186	1,1931	1,2001	1,2069	1,2136	1,2201	1,2266	1,2328	1,239	1,245	1,251	1,2568	1,2625	1,2682	1,2737
53,8	1,1622	1,1701	1,1778	1,1853	1,1926	1,1998	1,2068	1,2136	1,2203	1,2269	1,2333	1,2396	1,2458	1,2519	1,2578	1,2637	1,2694	1,2751	1,2806
53,9	1,1687	1,1767	1,1844	1,1919	1,1993	1,2065	1,2135	1,2204	1,2271	1,2337	1,2401	1,2464	1,2527	1,2587	1,2647	1,2706	1,2764	1,282	1,2876
54	1,1753	1,1833	1,191	1,1986	1,206	1,2132	1,2202	1,2271	1,2339	1,2405	1,247	1,2533	1,2595	1,2656	1,2716	1,2775	1,2833	1,289	1,2946
54,1	1,1819	1,1899	1,1977	1,2053	1,2127	1,2199	1,227	1,2339	1,2407	1,2473	1,2538	1,2602	1,2664	1,2726	1,2786	1,2845	1,2903	1,296	1,3016
54,2	1,1886	1,1966	1,2044	1,212	1,2194	1,2267	1,2338	1,2407	1,2475	1,2542	1,2607	1,2671	1,2734	1,2795	1,2856	1,2915	1,2973	1,3031	1,3087
54,3	1,1952	1,2033	1,2111	1,2188	1,2262	1,2335	1,2406	1,2476	1,2544	1,2611	1,2676	1,2741	1,2803	1,2865	1,2926	1,2985	1,3044	1,3101	1,3158
54,4	1,202	1,21	1,2179	1,2256	1,233	1,2404	1,2475	1,2545	1,2613	1,268	1,2746	1,281	1,2873	1,2936	1,2996	1,3056	1,3115	1,3172	1,3229
54,5	1,2087	1,2168	1,2247	1,2324	1,2399	1,2472	1,2544	1,2614	1,2683	1,275	1,2816	1,2881	1,2944	1,3006	1,3067	1,3127	1,3186	1,3244	1,3301
54,6	1,2155	1,2236	1,2315	1,2392	1,2468	1,2541	1,2613	1,2684	1,2753	1,282	1,2886	1,2951	1,3015	1,3077	1,3138	1,3198	1,3258	1,3316	1,3373
54,7	1,2223	1,2304	1,2384	1,2461	1,2537	1,2611	1,2683	1,2754	1,2823	1,289	1,2957	1,3022	1,3086	1,3148	1,321	1,327	1,3329	1,3388	1,3445
54,8	1,2291	1,2373	1,2453	1,253	1,2606	1,2681	1,2753	1,2824	1,2893	1,2961	1,3028	1,3093	1,3157	1,322	1,3282	1,3342	1,3402	1,346	1,3518
54,9	1,236	1,2442	1,2522	1,26	1,2676	1,2751	1,2823	1,2895	1,2964	1,3032	1,3099	1,3165	1,3229	1,3292	1,3354	1,3414	1,3474	1,3533	1,3591
55	1,2429	1,2511	1,2592	1,267	1,2746	1,2821	1,2894	1,2965	1,3035	1,3104	1,3171	1,3236	1,3301	1,3364	1,3426	1,3487	1,3547	1,3606	1,3664
55,1	1,2498	1,2581	1,2662	1,274	1,2817	1,2892	1,2965	1,3037	1,3107	1,3175	1,3243	1,3309	1,3373	1,3437	1,3499	1,356	1,362	1,3679	1,3738
55,2	1,2568	1,2651	1,2732	1,2811	1,2888	1,2963	1,3036	1,3108	1,3179	1,3248	1,3315	1,3381	1,3446	1,351	1,3572	1,3634	1,3694	1,3753	1,3812
55,3	1,2638	1,2721	1,2803	1,2882	1,2959	1,3034	1,3108	1,318	1,3251	1,332	1,3388	1,3454	1,3519	1,3583	1,3646	1,3707	1,3768	1,3827	1,3886
55,4	1,2708	1,2792	1,2873	1,2953	1,303	1,3106	1,318	1,3253	1,3323	1,3393	1,3461	1,3527	1,3593	1,3657	1,372	1,3781	1,3842	1,3902	1,3961
55,5	1,2779	1,2863	1,2945	1,3024	1,3102	1,3178	1,3253	1,3325	1,3396	1,3466	1,3534	1,3601	1,3666	1,3731	1,3794	1,3856	1,3917	1,3977	1,4036
55,6	1,285	1,2934	1,3016	1,3096	1,3174	1,3251	1,3325	1,3398	1,3469	1,3539	1,3608	1,3675	1,3741	1,3805	1,3868	1,3931	1,3992	1,4052	1,4111
55,7	1,2922	1,3006	1,3088	1,3169	1,3247	1,3324	1,3398	1,3471	1,3543	1,3613	1,3682	1,3749	1,3815	1,388	1,3943	1,4006	1,4067	1,4128	1,4187
55,8	1,2993	1,3078	1,3161	1,3241	1,332	1,3397	1,3472	1,3545	1,3617	1,3687	1,3756	1,3824	1,389	1,3955	1,4019	1,4081	1,4143	1,4203	1,4263
55,9	1,3066	1,3151	1,3234	1,3314	1,3393	1,347	1,3546	1,3619	1,3691	1,3762	1,3831	1,3899	1,3965	1,403	1,4094	1,4157	1,4219	1,428	1,434
56	1,3138	1,3223	1,3306	1,3388	1,3467	1,3544	1,362	1,3694	1,3766	1,3837	1,3906	1,3974	1,4041	1,4106	1,417	1,4234	1,4296	1,4356	1,4416
56,1	1,3211	1,3296	1,338	1,3461	1,3541	1,3618	1,3694	1,3768	1,3841	1,3912	1,3981	1,405	1,4117	1,4182	1,4247	1,431	1,4372	1,4433	1,4494
56,2	1,3284	1,337	1,3454	1,3535	1,3615	1,3693	1,3769	1,3843	1,3916	1,3987	1,4057	1,4126	1,4193	1,4259	1,4324	1,4387	1,445	1,4511	1,4571
56,3	1,3358	1,3444	1,3528	1,361	1,369	1,3768	1,3844	1,3919	1,3992	1,4063	1,4134	1,4202	1,427	1,4336	1,4401	1,4464	1,4527	1,4589	1,4649
56,4	1,3431	1,3518	1,3602	1,3684	1,3765	1,3843	1,392	1,3995	1,4068	1,414	1,421	1,4279	1,4347	1,4413	1,4478	1,4542	1,4605	1,4667	1,4728
56,5	1,3506	1,3593	1,3677	1,376	1,384	1,3919	1,3996	1,4071	1,4145	1,4217	1,4287	1,4356	1,4424	1,4491	1,4556	1,462	1,4683	1,4745	1,4806
56,6	1,358	1,3667	1,3752	1,3835	1,3916	1,3995	1,4072	1,4147	1,4221	1,4294	1,4364	1,4434	1,4502	1,4569	1,4634	1,4699	1,4762	1,4824	1,4885
56,7	1,3655	1,3743	1,3828	1,3911	1,3992	1,4071	1,4149	1,4224	1,4299	1,4371	1,4442	1,4512	1,458	1,4647	1,4713	1,4778	1,4841	1,4903	1,4965
56,8	1,3731	1,3818	1,3904	1,3987	1,4069	1,4148	1,4226	1,4302	1,4376	1,4449	1,452	1,459	1,4659	1,4726	1,4792	1,4857	1,492	1,4983	1,5045
56,9	1,3806	1,3894	1,398	1,4064	1,4145	1,4225	1,4303	1,4379	1,4454	1,4527	1,4599	1,4669	1,4737	1,4805	1,4871	1,4936	1,5	1,5063	1,5125

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
53,5	1,2654	1,2707	1,2759	1,2811	1,2862	1,2912	1,2961	1,301	1,3058	1,3106	1,3152	1,3199	1,3244	1,3289	1,3334	1,3378	1,3421	1,3464	1,3506
53,6	1,2723	1,2776	1,2829	1,2881	1,2932	1,2982	1,3031	1,308	1,3128	1,3176	1,3223	1,3269	1,3315	1,336	1,3405	1,3449	1,3492	1,3535	1,3578
53,7	1,2792	1,2845	1,2898	1,295	1,3001	1,3052	1,3102	1,3151	1,3199	1,3247	1,3294	1,334	1,3386	1,3431	1,3476	1,352	1,3564	1,3607	1,365
53,8	1,2861	1,2915	1,2968	1,302	1,3072	1,3122	1,3172	1,3221	1,327	1,3318	1,3365	1,3412	1,3458	1,3503	1,3548	1,3592	1,3636	1,368	1,3722
53,9	1,2931	1,2985	1,3038	1,3091	1,3142	1,3193	1,3243	1,3293	1,3341	1,3389	1,3437	1,3483	1,353	1,3575	1,362	1,3665	1,3709	1,3752	1,3795
54	1,3001	1,3055	1,3109	1,3161	1,3213	1,3264	1,3314	1,3364	1,3413	1,3461	1,3508	1,3555	1,3602	1,3648	1,3693	1,3737	1,3781	1,3825	1,3868
54,1	1,3072	1,3126	1,318	1,3232	1,3284	1,3335	1,3386	1,3436	1,3485	1,3533	1,3581	1,3628	1,3674	1,372	1,3765	1,381	1,3855	1,3898	1,3941
54,2	1,3142	1,3197	1,3251	1,3304	1,3356	1,3407	1,3458	1,3508	1,3557	1,3605	1,3653	1,3701	1,3747	1,3793	1,3839	1,3884	1,3928	1,3972	1,4015
54,3	1,3214	1,3268	1,3322	1,3375	1,3428	1,3479	1,353	1,358	1,3629	1,3678	1,3726	1,3773	1,382	1,3867	1,3912	1,3957	1,4002	1,4046	1,4089
54,4	1,3285	1,334	1,3394	1,3447	1,35	1,3551	1,3602	1,3653	1,3702	1,3751	1,3799	1,3847	1,3894	1,394	1,3986	1,4031	1,4076	1,412	1,4164
54,5	1,3357	1,3412	1,3466	1,352	1,3572	1,3624	1,3675	1,3726	1,3775	1,3824	1,3873	1,392	1,3968	1,4014	1,406	1,4105	1,415	1,4195	1,4239
54,6	1,3429	1,3484	1,3539	1,3592	1,3645	1,3697	1,3748	1,3799	1,3849	1,3898	1,3947	1,3995	1,4042	1,4089	1,4135	1,418	1,4225	1,427	1,4314
54,7	1,3501	1,3557	1,3612	1,3665	1,3718	1,3771	1,3822	1,3873	1,3923	1,3972	1,4021	1,4069	1,4116	1,4163	1,4209	1,4255	1,43	1,4345	1,4389
54,8	1,3574	1,363	1,3685	1,3739	1,3792	1,3844	1,3896	1,3947	1,3997	1,4047	1,4095	1,4144	1,4191	1,4238	1,4285	1,4331	1,4376	1,4421	1,4465
54,9	1,3647	1,3703	1,3758	1,3812	1,3866	1,3918	1,397	1,4021	1,4072	1,4121	1,417	1,4219	1,4267	1,4314	1,436	1,4406	1,4452	1,4497	1,4541
55	1,3721	1,3777	1,3832	1,3887	1,394	1,3993	1,4045	1,4096	1,4147	1,4197	1,4246	1,4294	1,4342	1,4389	1,4436	1,4482	1,4528	1,4573	1,4617
55,1	1,3795	1,3851	1,3906	1,3961	1,4015	1,4068	1,412	1,4171	1,4222	1,4272	1,4321	1,437	1,4418	1,4466	1,4513	1,4559	1,4604	1,465	1,4694
55,2	1,3869	1,3925	1,3981	1,4036	1,409	1,4143	1,4195	1,4247	1,4298	1,4348	1,4397	1,4446	1,4494	1,4542	1,4589	1,4636	1,4681	1,4727	1,4772
55,3	1,3943	1,4	1,4056	1,4111	1,4165	1,4218	1,4271	1,4322	1,4374	1,4424	1,4474	1,4523	1,4571	1,4619	1,4666	1,4713	1,4759	1,4804	1,4849
55,4	1,4018	1,4075	1,4131	1,4186	1,4241	1,4294	1,4347	1,4399	1,445	1,45	1,455	1,4599	1,4648	1,4696	1,4743	1,479	1,4836	1,4882	1,4927
55,5	1,4094	1,4151	1,4207	1,4262	1,4316	1,437	1,4423	1,4475	1,4527	1,4577	1,4627	1,4677	1,4725	1,4774	1,4821	1,4868	1,4914	1,496	1,5005
55,6	1,4169	1,4226	1,4283	1,4338	1,4393	1,4447	1,45	1,4552	1,4604	1,4655	1,4705	1,4754	1,4803	1,4851	1,4899	1,4946	1,4993	1,5039	1,5084
55,7	1,4245	1,4303	1,4359	1,4415	1,447	1,4524	1,4577	1,4629	1,4681	1,4732	1,4782	1,4832	1,4881	1,493	1,4978	1,5025	1,5071	1,5118	1,5163
55,8	1,4322	1,4379	1,4436	1,4492	1,4547	1,4601	1,4654	1,4707	1,4759	1,481	1,4861	1,4911	1,496	1,5008	1,5056	1,5104	1,515	1,5197	1,5243
55,9	1,4398	1,4456	1,4513	1,4569	1,4624	1,4679	1,4732	1,4785	1,4837	1,4889	1,4939	1,4989	1,5039	1,5087	1,5135	1,5183	1,523	1,5276	1,5322
56	1,4475	1,4533	1,459	1,4647	1,4702	1,4757	1,481	1,4863	1,4916	1,4967	1,5018	1,5068	1,5118	1,5167	1,5215	1,5263	1,531	1,5356	1,5403
56,1	1,4553	1,4611	1,4668	1,4725	1,478	1,4835	1,4889	1,4942	1,4995	1,5046	1,5097	1,5148	1,5197	1,5247	1,5295	1,5343	1,539	1,5437	1,5483
56,2	1,4631	1,4689	1,4746	1,4803	1,4859	1,4914	1,4968	1,5021	1,5074	1,5126	1,5177	1,5228	1,5277	1,5327	1,5375	1,5423	1,5471	1,5518	1,5564
56,3	1,4709	1,4767	1,4825	1,4882	1,4938	1,4993	1,5047	1,5101	1,5153	1,5206	1,5257	1,5308	1,5358	1,5407	1,5456	1,5504	1,5552	1,5599	1,5645
56,4	1,4787	1,4846	1,4904	1,4961	1,5017	1,5072	1,5127	1,5181	1,5233	1,5286	1,5337	1,5388	1,5438	1,5488	1,5537	1,5585	1,5633	1,568	1,5727
56,5	1,4866	1,4925	1,4983	1,504	1,5097	1,5152	1,5207	1,5261	1,5314	1,5366	1,5418	1,5469	1,552	1,5569	1,5618	1,5667	1,5715	1,5762	1,5809
56,6	1,4945	1,5005	1,5063	1,512	1,5177	1,5232	1,5287	1,5341	1,5395	1,5447	1,5499	1,5551	1,5601	1,5651	1,57	1,5749	1,5797	1,5844	1,5892
56,7	1,5025	1,5084	1,5143	1,5201	1,5257	1,5313	1,5368	1,5422	1,5476	1,5529	1,5581	1,5632	1,5683	1,5733	1,5782	1,5831	1,5879	1,5927	1,5974
56,8	1,5105	1,5165	1,5223	1,5281	1,5338	1,5394	1,5449	1,5504	1,5557	1,561	1,5663	1,5714	1,5765	1,5815	1,5865	1,5914	1,5962	1,601	1,6058
56,9	1,5185	1,5245	1,5304	1,5362	1,5419	1,5476	1,5531	1,5586	1,5639	1,5693	1,5745	1,5797	1,5848	1,5898	1,5948	1,5997	1,6046	1,6094	1,6141

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
53,5	1,3548	1,3589	1,363	1,3671	1,3711	1,375	1,379	1,3828	1,3867	1,3905	1,3942	1,398	1,4017	1,4053	1,4089	1,4125	1,4161	1,4196	1,4231
53,6	1,362	1,3661	1,3702	1,3743	1,3783	1,3823	1,3862	1,3901	1,394	1,3978	1,4016	1,4053	1,409	1,4127	1,4163	1,4199	1,4235	1,427	1,4305
53,7	1,3692	1,3734	1,3775	1,3816	1,3856	1,3896	1,3935	1,3974	1,4013	1,4051	1,4089	1,4127	1,4164	1,4201	1,4237	1,4273	1,4309	1,4344	1,438
53,8	1,3764	1,3806	1,3848	1,3889	1,3929	1,3969	1,4009	1,4048	1,4087	1,4125	1,4163	1,4201	1,4238	1,4275	1,4311	1,4348	1,4384	1,4419	1,4454
53,9	1,3837	1,3879	1,3921	1,3962	1,4002	1,4043	1,4082	1,4122	1,4161	1,4199	1,4237	1,4275	1,4312	1,4349	1,4386	1,4423	1,4458	1,4494	1,453
54	1,3911	1,3953	1,3994	1,4036	1,4076	1,4116	1,4156	1,4196	1,4235	1,4273	1,4312	1,435	1,4387	1,4424	1,4461	1,4498	1,4534	1,457	1,4605
54,1	1,3984	1,4026	1,4068	1,4109	1,415	1,4191	1,4231	1,427	1,4309	1,4348	1,4387	1,4425	1,4462	1,45	1,4537	1,4573	1,4609	1,4645	1,4681
54,2	1,4058	1,41	1,4142	1,4184	1,4225	1,4265	1,4305	1,4345	1,4384	1,4423	1,4462	1,45	1,4538	1,4575	1,4612	1,4649	1,4685	1,4721	1,4757
54,3	1,4132	1,4175	1,4217	1,4258	1,4299	1,434	1,438	1,442	1,446	1,4499	1,4537	1,4576	1,4614	1,4651	1,4688	1,4725	1,4762	1,4798	1,4834
54,4	1,4207	1,4249	1,4292	1,4333	1,4375	1,4415	1,4456	1,4496	1,4535	1,4575	1,4613	1,4652	1,469	1,4727	1,4765	1,4802	1,4838	1,4874	1,4911
54,5	1,4282	1,4324	1,4367	1,4409	1,445	1,4491	1,4532	1,4572	1,4611	1,4651	1,469	1,4728	1,4766	1,4804	1,4841	1,4879	1,4915	1,4952	1,4988
54,6	1,4357	1,44	1,4442	1,4484	1,4526	1,4567	1,4608	1,4648	1,4688	1,4727	1,4766	1,4805	1,4843	1,4881	1,4919	1,4956	1,4993	1,5029	1,5065
54,7	1,4433	1,4476	1,4518	1,456	1,4602	1,4643	1,4684	1,4724	1,4764	1,4804	1,4843	1,4882	1,492	1,4958	1,4996	1,5033	1,507	1,5107	1,5143
54,8	1,4509	1,4552	1,4594	1,4637	1,4679	1,472	1,4761	1,4801	1,4841	1,4881	1,492	1,4959	1,4998	1,5036	1,5074	1,5111	1,5148	1,5185	1,5222
54,9	1,4585	1,4628	1,4671	1,4713	1,4755	1,4797	1,4838	1,4879	1,4919	1,4959	1,4998	1,5037	1,5076	1,5114	1,5152	1,519	1,5227	1,5264	1,53
55	1,4661	1,4705	1,4748	1,4791	1,4833	1,4874	1,4916	1,4956	1,4997	1,5037	1,5076	1,5115	1,5154	1,5193	1,5231	1,5268	1,5306	1,5343	1,5379
55,1	1,4739	1,4782	1,4825	1,4868	1,491	1,4952	1,4993	1,5034	1,5075	1,5115	1,5154	1,5194	1,5233	1,5271	1,5309	1,5347	1,5385	1,5422	1,5459
55,2	1,4816	1,486	1,4903	1,4946	1,4988	1,503	1,5072	1,5113	1,5153	1,5193	1,5233	1,5273	1,5312	1,535	1,5389	1,5427	1,5464	1,5501	1,5538
55,3	1,4894	1,4938	1,4981	1,5024	1,5067	1,5108	1,515	1,5191	1,5232	1,5272	1,5312	1,5352	1,5391	1,543	1,5468	1,5506	1,5544	1,5582	1,5619
55,4	1,4972	1,5016	1,5059	1,5103	1,5145	1,5187	1,5229	1,527	1,5311	1,5352	1,5392	1,5432	1,5471	1,551	1,5548	1,5586	1,5624	1,5662	1,5699
55,5	1,505	1,5094	1,5138	1,5181	1,5224	1,5267	1,5308	1,535	1,5391	1,5432	1,5472	1,5512	1,5551	1,559	1,5629	1,5667	1,5705	1,5743	1,578
55,6	1,5129	1,5173	1,5217	1,5261	1,5304	1,5346	1,5388	1,543	1,5471	1,5512	1,5552	1,5592	1,5631	1,5671	1,5709	1,5748	1,5786	1,5824	1,5861
55,7	1,5208	1,5253	1,5297	1,534	1,5383	1,5426	1,5468	1,551	1,5551	1,5592	1,5633	1,5673	1,5712	1,5752	1,5791	1,5829	1,5867	1,5905	1,5943
55,8	1,5288	1,5332	1,5377	1,542	1,5463	1,5506	1,5548	1,559	1,5632	1,5673	1,5714	1,5754	1,5794	1,5833	1,5872	1,5911	1,5949	1,5987	1,6025
55,9	1,5368	1,5412	1,5457	1,5501	1,5544	1,5587	1,5629	1,5671	1,5713	1,5754	1,5795	1,5835	1,5875	1,5915	1,5954	1,5993	1,6031	1,6069	1,6107
56	1,5448	1,5493	1,5537	1,5581	1,5625	1,5668	1,5711	1,5753	1,5794	1,5836	1,5877	1,5917	1,5957	1,5997	1,6036	1,6075	1,6114	1,6152	1,619
56,1	1,5529	1,5574	1,5618	1,5663	1,5706	1,5749	1,5792	1,5834	1,5876	1,5918	1,5959	1,5999	1,6039	1,6079	1,6119	1,6158	1,6197	1,6235	1,6273
56,2	1,561	1,5655	1,57	1,5744	1,5788	1,5831	1,5874	1,5917	1,5958	1,6	1,6041	1,6082	1,6122	1,6162	1,6202	1,6241	1,628	1,6318	1,6356
56,3	1,5691	1,5737	1,5782	1,5826	1,587	1,5913	1,5956	1,5999	1,6041	1,6083	1,6124	1,6165	1,6205	1,6245	1,6285	1,6324	1,6363	1,6402	1,644
56,4	1,5773	1,5819	1,5864	1,5908	1,5952	1,5996	1,6039	1,6082	1,6124	1,6166	1,6207	1,6248	1,6289	1,6329	1,6369	1,6408	1,6447	1,6486	1,6525
56,5	1,5855	1,5901	1,5946	1,5991	1,6035	1,6079	1,6122	1,6165	1,6207	1,6249	1,6291	1,6332	1,6373	1,6413	1,6453	1,6493	1,6532	1,6571	1,6609
56,6	1,5938	1,5984	1,6029	1,6074	1,6118	1,6162	1,6206	1,6249	1,6291	1,6333	1,6375	1,6416	1,6457	1,6498	1,6538	1,6578	1,6617	1,6656	1,6695
56,7	1,6021	1,6067	1,6112	1,6157	1,6202	1,6246	1,629	1,6333	1,6375	1,6418	1,6459	1,6501	1,6542	1,6583	1,6623	1,6663	1,6702	1,6741	1,678
56,8	1,6104	1,615	1,6196	1,6241	1,6286	1,633	1,6374	1,6417	1,646	1,6502	1,6544	1,6586	1,6627	1,6668	1,6708	1,6748	1,6788	1,6827	1,6866
56,9	1,6188	1,6234	1,628	1,6326	1,637	1,6415	1,6458	1,6502	1,6545	1,6587	1,663	1,6671	1,6713	1,6753	1,6794	1,6834	1,6874	1,6913	1,6952

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
53,5	1,4266	1,43	1,4334	1,4368	1,4401	1,4434	1,4467	1,45	1,4532	1,4564	1,4596	1,4628	1,4659	1,469	1,4721	1,4751	1,4782	1,4812	1,4842
53,6	1,434	1,4374	1,4408	1,4442	1,4476	1,4509	1,4542	1,4575	1,4607	1,4639	1,4671	1,4703	1,4734	1,4766	1,4797	1,4827	1,4858	1,4888	1,4918
53,7	1,4414	1,4449	1,4483	1,4517	1,4551	1,4584	1,4617	1,465	1,4683	1,4715	1,4747	1,4779	1,481	1,4842	1,4873	1,4904	1,4934	1,4965	1,4995
53,8	1,4489	1,4524	1,4558	1,4592	1,4626	1,466	1,4693	1,4726	1,4758	1,4791	1,4823	1,4855	1,4886	1,4918	1,4949	1,498	1,5011	1,5041	1,5072
53,9	1,4565	1,4599	1,4634	1,4668	1,4702	1,4735	1,4769	1,4802	1,4835	1,4867	1,4899	1,4931	1,4963	1,4995	1,5026	1,5057	1,5088	1,5118	1,5149
54	1,464	1,4675	1,471	1,4744	1,4778	1,4812	1,4845	1,4878	1,4911	1,4944	1,4976	1,5008	1,504	1,5072	1,5103	1,5134	1,5165	1,5196	1,5226
54,1	1,4716	1,4751	1,4786	1,482	1,4854	1,4888	1,4922	1,4955	1,4988	1,5021	1,5053	1,5085	1,5117	1,5149	1,5181	1,5212	1,5243	1,5274	1,5304
54,2	1,4793	1,4828	1,4862	1,4897	1,4931	1,4965	1,4999	1,5032	1,5065	1,5098	1,5131	1,5163	1,5195	1,5227	1,5258	1,529	1,5321	1,5352	1,5382
54,3	1,4869	1,4904	1,4939	1,4974	1,5008	1,5042	1,5076	1,5109	1,5143	1,5176	1,5208	1,5241	1,5273	1,5305	1,5336	1,5368	1,5399	1,543	1,5461
54,4	1,4946	1,4981	1,5016	1,5051	1,5086	1,512	1,5154	1,5187	1,5221	1,5254	1,5286	1,5319	1,5351	1,5383	1,5415	1,5447	1,5478	1,5509	1,554
54,5	1,5023	1,5059	1,5094	1,5129	1,5163	1,5198	1,5232	1,5265	1,5299	1,5332	1,5365	1,5398	1,543	1,5462	1,5494	1,5526	1,5557	1,5588	1,5619
54,6	1,5101	1,5137	1,5172	1,5207	1,5242	1,5276	1,531	1,5344	1,5377	1,5411	1,5444	1,5476	1,5509	1,5541	1,5573	1,5605	1,5636	1,5668	1,5699
54,7	1,5179	1,5215	1,525	1,5285	1,532	1,5355	1,5389	1,5423	1,5456	1,549	1,5523	1,5556	1,5588	1,5621	1,5653	1,5685	1,5716	1,5748	1,5779
54,8	1,5258	1,5293	1,5329	1,5364	1,5399	1,5434	1,5468	1,5502	1,5536	1,5569	1,5602	1,5635	1,5668	1,5701	1,5733	1,5765	1,5796	1,5828	1,5859
54,9	1,5336	1,5372	1,5408	1,5443	1,5478	1,5513	1,5547	1,5582	1,5615	1,5649	1,5682	1,5715	1,5748	1,5781	1,5813	1,5845	1,5877	1,5908	1,594
55	1,5416	1,5452	1,5487	1,5523	1,5558	1,5593	1,5627	1,5662	1,5695	1,5729	1,5763	1,5796	1,5829	1,5861	1,5894	1,5926	1,5958	1,599	1,6021
55,1	1,5495	1,5531	1,5567	1,5603	1,5638	1,5673	1,5708	1,5742	1,5776	1,581	1,5843	1,5876	1,591	1,5942	1,5975	1,6007	1,6039	1,6071	1,6102
55,2	1,5575	1,5611	1,5647	1,5683	1,5718	1,5753	1,5788	1,5822	1,5857	1,5891	1,5924	1,5958	1,5991	1,6024	1,6056	1,6089	1,6121	1,6153	1,6184
55,3	1,5655	1,5692	1,5728	1,5764	1,5799	1,5834	1,5869	1,5903	1,5938	1,5972	1,6006	1,6039	1,6072	1,6105	1,6138	1,6171	1,6203	1,6235	1,6267
55,4	1,5736	1,5772	1,5809	1,5844	1,588	1,5915	1,595	1,5985	1,6019	1,6053	1,6087	1,6121	1,6154	1,6187	1,622	1,6253	1,6285	1,6317	1,6349
55,5	1,5817	1,5853	1,589	1,5926	1,5961	1,5997	1,6032	1,6067	1,6101	1,6135	1,617	1,6203	1,6237	1,627	1,6303	1,6335	1,6368	1,64	1,6432
55,6	1,5898	1,5935	1,5971	1,6008	1,6043	1,6079	1,6114	1,6149	1,6183	1,6218	1,6252	1,6286	1,6319	1,6353	1,6386	1,6419	1,6451	1,6483	1,6515
55,7	1,598	1,6017	1,6053	1,609	1,6125	1,6161	1,6196	1,6231	1,6266	1,6301	1,6335	1,6369	1,6403	1,6436	1,6469	1,6502	1,6535	1,6567	1,6599
55,8	1,6062	1,6099	1,6136	1,6172	1,6208	1,6244	1,6279	1,6314	1,6349	1,6384	1,6418	1,6452	1,6486	1,6519	1,6553	1,6586	1,6619	1,6651	1,6683
55,9	1,6144	1,6182	1,6218	1,6255	1,6291	1,6327	1,6362	1,6398	1,6433	1,6467	1,6502	1,6536	1,657	1,6604	1,6637	1,667	1,6703	1,6735	1,6768
56	1,6227	1,6265	1,6302	1,6338	1,6374	1,641	1,6446	1,6481	1,6516	1,6551	1,6586	1,662	1,6654	1,6688	1,6721	1,6755	1,6788	1,682	1,6853
56,1	1,6311	1,6348	1,6385	1,6422	1,6458	1,6494	1,653	1,6565	1,6601	1,6636	1,667	1,6705	1,6739	1,6773	1,6806	1,684	1,6873	1,6905	1,6938
56,2	1,6394	1,6432	1,6469	1,6506	1,6542	1,6578	1,6614	1,665	1,6685	1,672	1,6755	1,679	1,6824	1,6858	1,6891	1,6925	1,6958	1,6991	1,7024
56,3	1,6478	1,6516	1,6553	1,659	1,6627	1,6663	1,6699	1,6735	1,677	1,6805	1,684	1,6875	1,6909	1,6943	1,6977	1,7011	1,7044	1,7077	1,711
56,4	1,6563	1,66	1,6638	1,6675	1,6712	1,6748	1,6784	1,682	1,6856	1,6891	1,6926	1,6961	1,6995	1,7029	1,7063	1,7097	1,713	1,7163	1,7196
56,5	1,6648	1,6685	1,6723	1,676	1,6797	1,6834	1,687	1,6906	1,6941	1,6977	1,7012	1,7047	1,7081	1,7116	1,715	1,7183	1,7217	1,725	1,7283
56,6	1,6733	1,6771	1,6808	1,6846	1,6883	1,6919	1,6956	1,6992	1,7028	1,7063	1,7098	1,7133	1,7168	1,7202	1,7237	1,727	1,7304	1,7337	1,7371
56,7	1,6818	1,6856	1,6894	1,6932	1,6969	1,7005	1,7042	1,7078	1,7114	1,715	1,7185	1,722	1,7255	1,729	1,7324	1,7358	1,7391	1,7425	1,7458
56,8	1,6904	1,6943	1,6981	1,7018	1,7055	1,7092	1,7129	1,7165	1,7201	1,7237	1,7272	1,7307	1,7342	1,7377	1,7411	1,7445	1,7479	1,7513	1,7546
56,9	1,6991	1,7029	1,7067	1,7105	1,7142	1,7179	1,7216	1,7252	1,7288	1,7324	1,736	1,7395	1,743	1,7465	1,7499	1,7534	1,7568	1,7601	1,7635

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
53,5	1,4872	1,4901	1,4931	1,496	1,4989	1,5018	1,5046	1,5074	1,5102	1,5131	1,5158	1,5186	1,5213	1,5241	1,5268	1,5295	1,5321	1,5348	1,5374
53,6	1,4948	1,4978	1,5007	1,5036	1,5065	1,5094	1,5123	1,5151	1,518	1,5208	1,5235	1,5263	1,5291	1,5318	1,5345	1,5372	1,5399	1,5426	1,5452
53,7	1,5025	1,5054	1,5084	1,5113	1,5142	1,5171	1,52	1,5228	1,5257	1,5285	1,5313	1,5341	1,5368	1,5396	1,5423	1,545	1,5477	1,5504	1,553
53,8	1,5102	1,5131	1,5161	1,519	1,522	1,5249	1,5277	1,5306	1,5335	1,5363	1,5391	1,5419	1,5446	1,5474	1,5501	1,5529	1,5556	1,5582	1,5609
53,9	1,5179	1,5209	1,5239	1,5268	1,5297	1,5326	1,5355	1,5384	1,5413	1,5441	1,5469	1,5497	1,5525	1,5552	1,558	1,5607	1,5634	1,5661	1,5688
54	1,5256	1,5287	1,5316	1,5346	1,5375	1,5405	1,5433	1,5462	1,5491	1,5519	1,5548	1,5576	1,5604	1,5631	1,5659	1,5686	1,5713	1,574	1,5767
54,1	1,5334	1,5364	1,5395	1,5424	1,5454	1,5483	1,5512	1,5541	1,557	1,5598	1,5627	1,5655	1,5683	1,571	1,5738	1,5765	1,5793	1,582	1,5847
54,2	1,5413	1,5443	1,5473	1,5503	1,5532	1,5562	1,5591	1,562	1,5649	1,5677	1,5706	1,5734	1,5762	1,579	1,5818	1,5845	1,5873	1,59	1,5927
54,3	1,5491	1,5522	1,5552	1,5582	1,5611	1,5641	1,567	1,5699	1,5728	1,5757	1,5785	1,5814	1,5842	1,587	1,5898	1,5925	1,5953	1,598	1,6007
54,4	1,557	1,5601	1,5631	1,5661	1,5691	1,572	1,575	1,5779	1,5808	1,5837	1,5865	1,5894	1,5922	1,595	1,5978	1,6006	1,6033	1,6061	1,6088
54,5	1,565	1,568	1,5711	1,5741	1,5771	1,58	1,583	1,5859	1,5888	1,5917	1,5946	1,5974	1,6003	1,6031	1,6059	1,6086	1,6114	1,6141	1,6169
54,6	1,573	1,576	1,5791	1,5821	1,5851	1,5881	1,591	1,594	1,5969	1,5998	1,6026	1,6055	1,6083	1,6112	1,614	1,6168	1,6195	1,6223	1,625
54,7	1,581	1,584	1,5871	1,5901	1,5931	1,5961	1,5991	1,602	1,605	1,6079	1,6107	1,6136	1,6165	1,6193	1,6221	1,6249	1,6277	1,6305	1,6332
54,8	1,589	1,5921	1,5952	1,5982	1,6012	1,6042	1,6072	1,6101	1,6131	1,616	1,6189	1,6218	1,6246	1,6275	1,6303	1,6331	1,6359	1,6387	1,6414
54,9	1,5971	1,6002	1,6033	1,6063	1,6093	1,6123	1,6153	1,6183	1,6212	1,6242	1,6271	1,63	1,6328	1,6357	1,6385	1,6413	1,6441	1,6469	1,6497
55	1,6052	1,6083	1,6114	1,6145	1,6175	1,6205	1,6235	1,6265	1,6294	1,6324	1,6353	1,6382	1,6411	1,6439	1,6468	1,6496	1,6524	1,6552	1,658
55,1	1,6134	1,6165	1,6196	1,6227	1,6257	1,6287	1,6317	1,6347	1,6377	1,6406	1,6435	1,6464	1,6493	1,6522	1,6551	1,6579	1,6607	1,6635	1,6663
55,2	1,6216	1,6247	1,6278	1,6309	1,6339	1,637	1,64	1,643	1,646	1,6489	1,6518	1,6548	1,6577	1,6605	1,6634	1,6662	1,6691	1,6719	1,6747
55,3	1,6298	1,6329	1,636	1,6391	1,6422	1,6452	1,6483	1,6513	1,6543	1,6572	1,6602	1,6631	1,666	1,6689	1,6718	1,6746	1,6775	1,6803	1,6831
55,4	1,6381	1,6412	1,6443	1,6474	1,6505	1,6536	1,6566	1,6596	1,6626	1,6656	1,6685	1,6715	1,6744	1,6773	1,6802	1,683	1,6859	1,6887	1,6915
55,5	1,6464	1,6495	1,6527	1,6558	1,6589	1,6619	1,665	1,668	1,671	1,674	1,6769	1,6799	1,6828	1,6857	1,6886	1,6915	1,6943	1,6972	1,7
55,6	1,6547	1,6579	1,661	1,6642	1,6673	1,6703	1,6734	1,6764	1,6794	1,6824	1,6854	1,6883	1,6913	1,6942	1,6971	1,7	1,7028	1,7057	1,7085
55,7	1,6631	1,6663	1,6694	1,6726	1,6757	1,6788	1,6818	1,6849	1,6879	1,6909	1,6939	1,6968	1,6998	1,7027	1,7056	1,7085	1,7114	1,7142	1,7171
55,8	1,6715	1,6747	1,6779	1,681	1,6841	1,6872	1,6903	1,6934	1,6964	1,6994	1,7024	1,7054	1,7083	1,7113	1,7142	1,7171	1,72	1,7228	1,7257
55,9	1,68	1,6832	1,6864	1,6895	1,6926	1,6957	1,6988	1,7019	1,7049	1,708	1,711	1,7139	1,7169	1,7198	1,7228	1,7257	1,7286	1,7314	1,7343
56	1,6885	1,6917	1,6949	1,698	1,7012	1,7043	1,7074	1,7105	1,7135	1,7165	1,7196	1,7225	1,7255	1,7285	1,7314	1,7343	1,7372	1,7401	1,743
56,1	1,697	1,7003	1,7034	1,7066	1,7098	1,7129	1,716	1,7191	1,7221	1,7252	1,7282	1,7312	1,7342	1,7371	1,7401	1,743	1,7459	1,7488	1,7517
56,2	1,7056	1,7088	1,712	1,7152	1,7184	1,7215	1,7246	1,7277	1,7308	1,7339	1,7369	1,7399	1,7429	1,7458	1,7488	1,7517	1,7547	1,7576	1,7604
56,3	1,7142	1,7175	1,7207	1,7239	1,727	1,7302	1,7333	1,7364	1,7395	1,7426	1,7456	1,7486	1,7516	1,7546	1,7576	1,7605	1,7634	1,7664	1,7692
56,4	1,7229	1,7262	1,7294	1,7326	1,7357	1,7389	1,742	1,7451	1,7482	1,7513	1,7544	1,7574	1,7604	1,7634	1,7664	1,7693	1,7723	1,7752	1,7781
56,5	1,7316	1,7349	1,7381	1,7413	1,7445	1,7477	1,7508	1,7539	1,757	1,7601	1,7632	1,7662	1,7692	1,7722	1,7752	1,7782	1,7811	1,784	1,7869
56,6	1,7403	1,7436	1,7468	1,7501	1,7533	1,7564	1,7596	1,7627	1,7658	1,7689	1,772	1,775	1,7781	1,7811	1,7841	1,7871	1,79	1,793	1,7959
56,7	1,7491	1,7524	1,7556	1,7589	1,7621	1,7653	1,7684	1,7716	1,7747	1,7778	1,7809	1,7839	1,787	1,79	1,793	1,796	1,799	1,8019	1,8048
56,8	1,7579	1,7612	1,7645	1,7677	1,7709	1,7741	1,7773	1,7805	1,7836	1,7867	1,7898	1,7929	1,7959	1,799	1,802	1,805	1,8079	1,8109	1,8138
56,9	1,7668	1,7701	1,7734	1,7766	1,7799	1,7831	1,7863	1,7894	1,7926	1,7957	1,7988	1,8018	1,8049	1,8079	1,811	1,814	1,8169	1,8199	1,8229

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
53,5	1,5401	1,5427	1,5453	1,5479	1,5504	1,553	1,5555	1,558	1,5605	1,563	1,5655	1,568	1,5704	1,5728	1,5753	1,5777	1,5801	1,5825	1,5848
53,6	1,5479	1,5505	1,5531	1,5557	1,5582	1,5608	1,5633	1,5659	1,5684	1,5709	1,5734	1,5758	1,5783	1,5807	1,5832	1,5856	1,588	1,5904	1,5928
53,7	1,5557	1,5583	1,5609	1,5635	1,5661	1,5687	1,5712	1,5738	1,5763	1,5788	1,5813	1,5838	1,5862	1,5887	1,5911	1,5935	1,596	1,5984	1,6008
53,8	1,5636	1,5662	1,5688	1,5714	1,574	1,5766	1,5791	1,5817	1,5842	1,5867	1,5892	1,5917	1,5942	1,5967	1,5991	1,6015	1,604	1,6064	1,6088
53,9	1,5714	1,5741	1,5767	1,5793	1,5819	1,5845	1,5871	1,5896	1,5922	1,5947	1,5972	1,5997	1,6022	1,6047	1,6071	1,6096	1,612	1,6144	1,6168
54	1,5794	1,582	1,5847	1,5873	1,5899	1,5925	1,5951	1,5976	1,6002	1,6027	1,6052	1,6077	1,6102	1,6127	1,6152	1,6176	1,62	1,6225	1,6249
54,1	1,5874	1,59	1,5927	1,5953	1,5979	1,6005	1,6031	1,6057	1,6082	1,6108	1,6133	1,6158	1,6183	1,6208	1,6232	1,6257	1,6281	1,6306	1,633
54,2	1,5954	1,598	1,6007	1,6033	1,6059	1,6085	1,6111	1,6137	1,6163	1,6188	1,6214	1,6239	1,6264	1,6289	1,6314	1,6338	1,6363	1,6387	1,6412
54,3	1,6034	1,6061	1,6087	1,6114	1,614	1,6166	1,6192	1,6218	1,6244	1,627	1,6295	1,632	1,6345	1,637	1,6395	1,642	1,6445	1,6469	1,6493
54,4	1,6115	1,6142	1,6168	1,6195	1,6221	1,6248	1,6274	1,63	1,6325	1,6351	1,6377	1,6402	1,6427	1,6452	1,6477	1,6502	1,6527	1,6551	1,6576
54,5	1,6196	1,6223	1,625	1,6276	1,6303	1,6329	1,6355	1,6381	1,6407	1,6433	1,6459	1,6484	1,6509	1,6535	1,656	1,6584	1,6609	1,6634	1,6658
54,6	1,6277	1,6305	1,6331	1,6358	1,6385	1,6411	1,6437	1,6464	1,6489	1,6515	1,6541	1,6566	1,6592	1,6617	1,6642	1,6667	1,6692	1,6717	1,6741
54,7	1,6359	1,6386	1,6413	1,644	1,6467	1,6493	1,652	1,6546	1,6572	1,6598	1,6624	1,6649	1,6675	1,67	1,6725	1,675	1,6775	1,68	1,6825
54,8	1,6442	1,6469	1,6496	1,6523	1,6549	1,6576	1,6602	1,6629	1,6655	1,6681	1,6707	1,6732	1,6758	1,6783	1,6809	1,6834	1,6859	1,6884	1,6908
54,9	1,6524	1,6551	1,6579	1,6606	1,6633	1,6659	1,6686	1,6712	1,6738	1,6764	1,679	1,6816	1,6842	1,6867	1,6892	1,6918	1,6943	1,6968	1,6993
55	1,6607	1,6635	1,6662	1,6689	1,6716	1,6743	1,6769	1,6796	1,6822	1,6848	1,6874	1,69	1,6926	1,6951	1,6977	1,7002	1,7027	1,7052	1,7077
55,1	1,6691	1,6718	1,6745	1,6773	1,6799	1,6826	1,6853	1,688	1,6906	1,6932	1,6958	1,6984	1,701	1,7036	1,7061	1,7087	1,7112	1,7137	1,7162
55,2	1,6774	1,6802	1,6829	1,6857	1,6884	1,6911	1,6937	1,6964	1,699	1,7017	1,7043	1,7069	1,7095	1,712	1,7146	1,7172	1,7197	1,7222	1,7247
55,3	1,6858	1,6886	1,6914	1,6941	1,6968	1,6995	1,7022	1,7049	1,7075	1,7102	1,7128	1,7154	1,718	1,7206	1,7231	1,7257	1,7282	1,7308	1,7333
55,4	1,6943	1,6971	1,6998	1,7026	1,7053	1,708	1,7107	1,7134	1,716	1,7187	1,7213	1,7239	1,7265	1,7291	1,7317	1,7343	1,7368	1,7394	1,7419
55,5	1,7028	1,7056	1,7083	1,7111	1,7138	1,7165	1,7192	1,7219	1,7246	1,7273	1,7299	1,7325	1,7351	1,7377	1,7403	1,7429	1,7455	1,748	1,7505
55,6	1,7113	1,7141	1,7169	1,7196	1,7224	1,7251	1,7278	1,7305	1,7332	1,7359	1,7385	1,7412	1,7438	1,7464	1,749	1,7516	1,7541	1,7567	1,7592
55,7	1,7199	1,7227	1,7255	1,7282	1,731	1,7337	1,7364	1,7392	1,7418	1,7445	1,7472	1,7498	1,7524	1,7551	1,7577	1,7602	1,7628	1,7654	1,7679
55,8	1,7285	1,7313	1,7341	1,7369	1,7396	1,7424	1,7451	1,7478	1,7505	1,7532	1,7559	1,7585	1,7612	1,7638	1,7664	1,769	1,7716	1,7741	1,7767
55,9	1,7371	1,74	1,7428	1,7455	1,7483	1,7511	1,7538	1,7565	1,7592	1,7619	1,7646	1,7673	1,7699	1,7725	1,7752	1,7778	1,7803	1,7829	1,7855
56	1,7458	1,7487	1,7515	1,7542	1,757	1,7598	1,7625	1,7653	1,768	1,7707	1,7734	1,776	1,7787	1,7813	1,784	1,7866	1,7892	1,7918	1,7943
56,1	1,7545	1,7574	1,7602	1,763	1,7658	1,7686	1,7713	1,7741	1,7768	1,7795	1,7822	1,7849	1,7875	1,7902	1,7928	1,7954	1,798	1,8006	1,8032
56,2	1,7633	1,7662	1,769	1,7718	1,7746	1,7774	1,7801	1,7829	1,7856	1,7883	1,791	1,7937	1,7964	1,799	1,8017	1,8043	1,8069	1,8095	1,8121
56,3	1,7721	1,775	1,7778	1,7806	1,7834	1,7862	1,789	1,7918	1,7945	1,7972	1,7999	1,8026	1,8053	1,808	1,8106	1,8133	1,8159	1,8185	1,8211
56,4	1,7809	1,7838	1,7867	1,7895	1,7923	1,7951	1,7979	1,8007	1,8034	1,8061	1,8089	1,8116	1,8143	1,8169	1,8196	1,8222	1,8249	1,8275	1,8301
56,5	1,7898	1,7927	1,7956	1,7984	1,8012	1,804	1,8068	1,8096	1,8124	1,8151	1,8178	1,8206	1,8233	1,8259	1,8286	1,8312	1,8339	1,8365	1,8391
56,6	1,7988	1,8016	1,8045	1,8074	1,8102	1,813	1,8158	1,8186	1,8214	1,8241	1,8269	1,8296	1,8323	1,835	1,8377	1,8403	1,843	1,8456	1,8482
56,7	1,8077	1,8106	1,8135	1,8164	1,8192	1,822	1,8248	1,8276	1,8304	1,8332	1,8359	1,8386	1,8414	1,8441	1,8467	1,8494	1,8521	1,8547	1,8573
56,8	1,8168	1,8196	1,8225	1,8254	1,8283	1,8311	1,8339	1,8367	1,8395	1,8423	1,845	1,8478	1,8505	1,8532	1,8559	1,8586	1,8612	1,8639	1,8665
56,9	1,8258	1,8287	1,8316	1,8345	1,8373	1,8402	1,843	1,8458	1,8486	1,8514	1,8541	1,8569	1,8596	1,8624	1,8651	1,8677	1,8704	1,8731	1,8757

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
53,5	1,5872	1,5896	1,5919	1,5942	1,5965	1,5988	1,6011	1,6034
53,6	1,5951	1,5975	1,5999	1,6022	1,6045	1,6068	1,6091	1,6114
53,7	1,6031	1,6055	1,6079	1,6102	1,6125	1,6148	1,6171	1,6194
53,8	1,6112	1,6135	1,6159	1,6182	1,6206	1,6229	1,6252	1,6275
53,9	1,6192	1,6216	1,624	1,6263	1,6286	1,631	1,6333	1,6356
54	1,6273	1,6297	1,6321	1,6344	1,6368	1,6391	1,6414	1,6437
54,1	1,6354	1,6378	1,6402	1,6426	1,6449	1,6473	1,6496	1,6519
54,2	1,6436	1,646	1,6484	1,6508	1,6531	1,6555	1,6578	1,6601
54,3	1,6518	1,6542	1,6566	1,659	1,6613	1,6637	1,666	1,6684
54,4	1,66	1,6624	1,6648	1,6672	1,6696	1,672	1,6743	1,6767
54,5	1,6683	1,6707	1,6731	1,6755	1,6779	1,6803	1,6826	1,685
54,6	1,6766	1,679	1,6814	1,6838	1,6862	1,6886	1,691	1,6934
54,7	1,6849	1,6874	1,6898	1,6922	1,6946	1,697	1,6994	1,7017
54,8	1,6933	1,6958	1,6982	1,7006	1,703	1,7054	1,7078	1,7102
54,9	1,7017	1,7042	1,7066	1,7091	1,7115	1,7139	1,7163	1,7187
55	1,7102	1,7126	1,7151	1,7175	1,72	1,7224	1,7248	1,7272
55,1	1,7187	1,7211	1,7236	1,726	1,7285	1,7309	1,7333	1,7357
55,2	1,7272	1,7297	1,7322	1,7346	1,737	1,7395	1,7419	1,7443
55,3	1,7358	1,7383	1,7407	1,7432	1,7457	1,7481	1,7505	1,7529
55,4	1,7444	1,7469	1,7494	1,7519	1,7543	1,7567	1,7592	1,7616
55,5	1,753	1,7556	1,758	1,7605	1,763	1,7654	1,7679	1,7703
55,6	1,7617	1,7643	1,7667	1,7692	1,7717	1,7742	1,7766	1,7791
55,7	1,7705	1,773	1,7755	1,778	1,7805	1,7829	1,7854	1,7878
55,8	1,7792	1,7818	1,7843	1,7868	1,7893	1,7917	1,7942	1,7966
55,9	1,788	1,7906	1,7931	1,7956	1,7981	1,8006	1,8031	1,8055
56	1,7969	1,7994	1,802	1,8045	1,807	1,8095	1,812	1,8144
56,1	1,8058	1,8083	1,8109	1,8134	1,8159	1,8184	1,8209	1,8234
56,2	1,8147	1,8173	1,8198	1,8223	1,8249	1,8274	1,8299	1,8324
56,3	1,8237	1,8262	1,8288	1,8313	1,8339	1,8364	1,8389	1,8414
56,4	1,8327	1,8353	1,8378	1,8404	1,8429	1,8454	1,8479	1,8504
56,5	1,8417	1,8443	1,8469	1,8494	1,852	1,8545	1,857	1,8595
56,6	1,8508	1,8534	1,856	1,8586	1,8611	1,8636	1,8662	1,8687
56,7	1,86	1,8626	1,8652	1,8677	1,8703	1,8728	1,8754	1,8779
56,8	1,8691	1,8717	1,8743	1,8769	1,8795	1,882	1,8846	1,8871
56,9	1,8783	1,881	1,8836	1,8862	1,8887	1,8913	1,8939	1,8964

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
57	1,1405	1,1605	1,1791	1,1966	1,2129	1,2284	1,2431	1,2571	1,2704	1,2832	1,2954	1,3072	1,3186	1,3295	1,3401	1,3503	1,3602	1,3698	1,3792
57,1	1,1472	1,1673	1,186	1,2035	1,22	1,2355	1,2502	1,2643	1,2777	1,2905	1,3028	1,3146	1,326	1,3369	1,3475	1,3578	1,3677	1,3774	1,3868
57,2	1,154	1,1742	1,1929	1,2105	1,227	1,2426	1,2574	1,2715	1,2849	1,2978	1,3101	1,322	1,3334	1,3444	1,355	1,3653	1,3753	1,385	1,3944
57,3	1,1608	1,1811	1,1999	1,2175	1,2341	1,2498	1,2646	1,2787	1,2922	1,3051	1,3175	1,3294	1,3409	1,3519	1,3626	1,3729	1,3829	1,3927	1,4021
57,4	1,1677	1,188	1,2069	1,2246	1,2412	1,2569	1,2718	1,286	1,2996	1,3125	1,3249	1,3369	1,3484	1,3595	1,3702	1,3806	1,3906	1,4004	1,4098
57,5	1,1746	1,195	1,2139	1,2317	1,2484	1,2642	1,2791	1,2933	1,3069	1,3199	1,3324	1,3444	1,3559	1,3671	1,3778	1,3882	1,3983	1,4081	1,4176
57,6	1,1815	1,202	1,221	1,2388	1,2556	1,2714	1,2864	1,3007	1,3143	1,3274	1,3399	1,3519	1,3635	1,3747	1,3855	1,3959	1,406	1,4159	1,4254
57,7	1,1885	1,209	1,2281	1,246	1,2628	1,2787	1,2938	1,3081	1,3218	1,3349	1,3474	1,3595	1,3711	1,3824	1,3932	1,4037	1,4138	1,4237	1,4332
57,8	1,1955	1,2161	1,2353	1,2532	1,2701	1,286	1,3012	1,3156	1,3293	1,3424	1,355	1,3671	1,3788	1,39	1,4009	1,4114	1,4216	1,4315	1,4411
57,9	1,2025	1,2232	1,2425	1,2605	1,2774	1,2934	1,3086	1,323	1,3368	1,35	1,3626	1,3748	1,3865	1,3978	1,4087	1,4192	1,4295	1,4394	1,449
58	1,2096	1,2303	1,2497	1,2677	1,2848	1,3008	1,3161	1,3305	1,3444	1,3576	1,3703	1,3825	1,3942	1,4056	1,4165	1,4271	1,4374	1,4473	1,457
58,1	1,2167	1,2375	1,2569	1,2751	1,2921	1,3083	1,3235	1,3381	1,352	1,3652	1,378	1,3902	1,402	1,4134	1,4244	1,435	1,4453	1,4553	1,465
58,2	1,2238	1,2448	1,2642	1,2824	1,2996	1,3157	1,3311	1,3457	1,3596	1,3729	1,3857	1,398	1,4098	1,4212	1,4323	1,4429	1,4533	1,4633	1,473
58,3	1,231	1,252	1,2716	1,2898	1,307	1,3233	1,3387	1,3533	1,3673	1,3807	1,3935	1,4058	1,4177	1,4291	1,4402	1,4509	1,4613	1,4713	1,4811
58,4	1,2382	1,2593	1,2789	1,2973	1,3145	1,3308	1,3463	1,361	1,375	1,3884	1,4013	1,4137	1,4256	1,4371	1,4482	1,4589	1,4693	1,4794	1,4892
58,5	1,2455	1,2666	1,2863	1,3047	1,3221	1,3384	1,3539	1,3687	1,3828	1,3962	1,4092	1,4216	1,4335	1,4451	1,4562	1,467	1,4774	1,4876	1,4974
58,6	1,2528	1,274	1,2938	1,3123	1,3296	1,346	1,3616	1,3764	1,3906	1,4041	1,417	1,4295	1,4415	1,4531	1,4643	1,4751	1,4856	1,4957	1,5056
58,7	1,2601	1,2814	1,3013	1,3198	1,3373	1,3537	1,3693	1,3842	1,3984	1,412	1,425	1,4375	1,4495	1,4611	1,4723	1,4832	1,4937	1,5039	1,5138
58,8	1,2675	1,2889	1,3088	1,3274	1,3449	1,3614	1,3771	1,392	1,4063	1,4199	1,4329	1,4455	1,4576	1,4692	1,4805	1,4914	1,5019	1,5122	1,5221
58,9	1,2749	1,2964	1,3164	1,335	1,3526	1,3692	1,3849	1,3999	1,4142	1,4278	1,4409	1,4535	1,4657	1,4774	1,4887	1,4996	1,5102	1,5205	1,5305
59	1,2823	1,3039	1,324	1,3427	1,3603	1,377	1,3928	1,4078	1,4221	1,4358	1,449	1,4616	1,4738	1,4855	1,4969	1,5079	1,5185	1,5288	1,5388
59,1	1,2898	1,3115	1,3316	1,3504	1,3681	1,3848	1,4007	1,4157	1,4301	1,4439	1,4571	1,4698	1,482	1,4938	1,5051	1,5162	1,5268	1,5372	1,5472
59,2	1,2974	1,3191	1,3393	1,3582	1,3759	1,3927	1,4086	1,4237	1,4382	1,452	1,4652	1,4779	1,4902	1,502	1,5134	1,5245	1,5352	1,5456	1,5557
59,3	1,3049	1,3267	1,347	1,366	1,3838	1,4006	1,4166	1,4318	1,4462	1,4601	1,4734	1,4862	1,4985	1,5103	1,5218	1,5329	1,5436	1,554	1,5642
59,4	1,3125	1,3344	1,3548	1,3738	1,3917	1,4086	1,4246	1,4398	1,4544	1,4683	1,4816	1,4944	1,5068	1,5187	1,5302	1,5413	1,5521	1,5625	1,5727
59,5	1,3202	1,3421	1,3626	1,3817	1,3996	1,4166	1,4326	1,4479	1,4625	1,4765	1,4899	1,5027	1,5151	1,5271	1,5386	1,5498	1,5606	1,5711	1,5813
59,6	1,3279	1,3499	1,3704	1,3896	1,4076	1,4246	1,4407	1,4561	1,4707	1,4847	1,4982	1,5111	1,5235	1,5355	1,5471	1,5583	1,5691	1,5797	1,5899
59,7	1,3356	1,3577	1,3783	1,3975	1,4156	1,4327	1,4489	1,4643	1,479	1,493	1,5065	1,5195	1,5319	1,544	1,5556	1,5668	1,5777	1,5883	1,5986
59,8	1,3433	1,3656	1,3862	1,4055	1,4237	1,4408	1,4571	1,4725	1,4873	1,5014	1,5149	1,5279	1,5404	1,5525	1,5642	1,5754	1,5864	1,597	1,6073
59,9	1,3512	1,3735	1,3942	1,4135	1,4318	1,449	1,4653	1,4808	1,4956	1,5098	1,5233	1,5364	1,5489	1,5611	1,5728	1,5841	1,5951	1,6057	1,616
60	1,359	1,3814	1,4022	1,4216	1,4399	1,4572	1,4735	1,4891	1,504	1,5182	1,5318	1,5449	1,5575	1,5697	1,5814	1,5928	1,6038	1,6145	1,6248
60,1	1,3669	1,3894	1,4102	1,4297	1,4481	1,4654	1,4818	1,4975	1,5124	1,5266	1,5403	1,5535	1,5661	1,5783	1,5901	1,6015	1,6125	1,6232	1,6336
60,2	1,3748	1,3974	1,4183	1,4379	1,4563	1,4737	1,4902	1,5059	1,5208	1,5352	1,5489	1,5621	1,5748	1,587	1,5988	1,6103	1,6213	1,6321	1,6425
60,3	1,3828	1,4054	1,4264	1,4461	1,4646	1,482	1,4986	1,5143	1,5293	1,5437	1,5575	1,5707	1,5835	1,5957	1,6076	1,6191	1,6302	1,641	1,6515
60,4	1,3908	1,4135	1,4346	1,4544	1,4729	1,4904	1,507	1,5228	1,5379	1,5523	1,5661	1,5794	1,5922	1,6045	1,6164	1,6279	1,6391	1,6499	1,6604

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
57	1,3882	1,3971	1,4057	1,4141	1,4223	1,4303	1,4381	1,4457	1,4532	1,4606	1,4677	1,4748	1,4817	1,4885	1,4951	1,5016	1,508	1,5143	1,5205
57,1	1,3959	1,4048	1,4134	1,4218	1,43	1,4381	1,4459	1,4536	1,4611	1,4685	1,4757	1,4827	1,4896	1,4964	1,5031	1,5097	1,5161	1,5224	1,5286
57,2	1,4036	1,4125	1,4211	1,4296	1,4378	1,4459	1,4538	1,4615	1,469	1,4764	1,4836	1,4907	1,4977	1,5045	1,5112	1,5177	1,5242	1,5305	1,5368
57,3	1,4113	1,4202	1,4289	1,4374	1,4457	1,4538	1,4617	1,4694	1,477	1,4844	1,4916	1,4987	1,5057	1,5125	1,5193	1,5259	1,5323	1,5387	1,545
57,4	1,419	1,428	1,4367	1,4453	1,4536	1,4617	1,4696	1,4774	1,4849	1,4924	1,4997	1,5068	1,5138	1,5207	1,5274	1,534	1,5405	1,5469	1,5532
57,5	1,4268	1,4358	1,4446	1,4531	1,4615	1,4696	1,4776	1,4854	1,493	1,5004	1,5077	1,5149	1,5219	1,5288	1,5356	1,5422	1,5487	1,5551	1,5614
57,6	1,4347	1,4437	1,4525	1,4611	1,4694	1,4776	1,4856	1,4934	1,501	1,5085	1,5158	1,523	1,5301	1,537	1,5438	1,5504	1,557	1,5634	1,5697
57,7	1,4425	1,4516	1,4604	1,469	1,4774	1,4856	1,4936	1,5015	1,5091	1,5166	1,524	1,5312	1,5383	1,5452	1,552	1,5587	1,5653	1,5717	1,5781
57,8	1,4505	1,4595	1,4684	1,477	1,4855	1,4937	1,5017	1,5096	1,5173	1,5248	1,5322	1,5394	1,5465	1,5535	1,5603	1,567	1,5736	1,5801	1,5864
57,9	1,4584	1,4675	1,4764	1,4851	1,4935	1,5018	1,5099	1,5178	1,5255	1,533	1,5404	1,5477	1,5548	1,5618	1,5686	1,5754	1,582	1,5885	1,5949
58	1,4664	1,4756	1,4845	1,4932	1,5016	1,5099	1,518	1,5259	1,5337	1,5413	1,5487	1,556	1,5631	1,5701	1,577	1,5838	1,5904	1,5969	1,6033
58,1	1,4744	1,4836	1,4926	1,5013	1,5098	1,5181	1,5262	1,5342	1,542	1,5496	1,557	1,5643	1,5715	1,5785	1,5854	1,5922	1,5988	1,6054	1,6118
58,2	1,4825	1,4917	1,5007	1,5095	1,518	1,5263	1,5345	1,5425	1,5503	1,5579	1,5654	1,5727	1,5799	1,5869	1,5939	1,6007	1,6074	1,6139	1,6204
58,3	1,4906	1,4999	1,5089	1,5177	1,5262	1,5346	1,5428	1,5508	1,5586	1,5663	1,5738	1,5811	1,5883	1,5954	1,6024	1,6092	1,6159	1,6225	1,629
58,4	1,4988	1,5081	1,5171	1,5259	1,5345	1,5429	1,5511	1,5591	1,567	1,5747	1,5822	1,5896	1,5968	1,6039	1,6109	1,6177	1,6245	1,6311	1,6376
58,5	1,507	1,5163	1,5254	1,5342	1,5428	1,5512	1,5595	1,5675	1,5754	1,5831	1,5907	1,5981	1,6054	1,6125	1,6195	1,6264	1,6331	1,6397	1,6463
58,6	1,5152	1,5246	1,5337	1,5425	1,5512	1,5596	1,5679	1,576	1,5839	1,5916	1,5992	1,6066	1,6139	1,6211	1,6281	1,635	1,6418	1,6484	1,655
58,7	1,5235	1,5329	1,542	1,5509	1,5596	1,5681	1,5764	1,5845	1,5924	1,6002	1,6078	1,6152	1,6225	1,6297	1,6368	1,6437	1,6505	1,6571	1,6637
58,8	1,5318	1,5412	1,5504	1,5593	1,568	1,5765	1,5849	1,593	1,6009	1,6087	1,6164	1,6239	1,6312	1,6384	1,6455	1,6524	1,6592	1,6659	1,6725
58,9	1,5402	1,5496	1,5588	1,5678	1,5765	1,5851	1,5934	1,6016	1,6096	1,6174	1,625	1,6325	1,6399	1,6471	1,6542	1,6612	1,668	1,6747	1,6813
59	1,5485	1,558	1,5673	1,5762	1,585	1,5936	1,602	1,6102	1,6182	1,626	1,6337	1,6413	1,6486	1,6559	1,663	1,67	1,6769	1,6836	1,6902
59,1	1,557	1,5665	1,5758	1,5848	1,5936	1,6022	1,6106	1,6188	1,6269	1,6348	1,6425	1,65	1,6574	1,6647	1,6718	1,6788	1,6857	1,6925	1,6992
59,2	1,5655	1,575	1,5843	1,5934	1,6022	1,6108	1,6193	1,6275	1,6356	1,6435	1,6512	1,6588	1,6663	1,6735	1,6807	1,6877	1,6947	1,7014	1,7081
59,3	1,574	1,5836	1,5929	1,602	1,6109	1,6195	1,628	1,6363	1,6444	1,6523	1,6601	1,6677	1,6751	1,6825	1,6896	1,6967	1,7036	1,7104	1,7171
59,4	1,5826	1,5922	1,6015	1,6106	1,6196	1,6283	1,6367	1,645	1,6532	1,6611	1,6689	1,6766	1,684	1,6914	1,6986	1,7057	1,7126	1,7195	1,7262
59,5	1,5912	1,6008	1,6102	1,6194	1,6283	1,637	1,6455	1,6539	1,662	1,67	1,6778	1,6855	1,693	1,7004	1,7076	1,7147	1,7217	1,7286	1,7353
59,6	1,5998	1,6095	1,6189	1,6281	1,6371	1,6458	1,6544	1,6627	1,6709	1,6789	1,6868	1,6945	1,702	1,7094	1,7167	1,7238	1,7308	1,7377	1,7444
59,7	1,6085	1,6182	1,6277	1,6369	1,6459	1,6547	1,6633	1,6717	1,6799	1,6879	1,6958	1,7035	1,7111	1,7185	1,7258	1,7329	1,7399	1,7469	1,7537
59,8	1,6173	1,627	1,6365	1,6457	1,6548	1,6636	1,6722	1,6806	1,6889	1,6969	1,7048	1,7126	1,7202	1,7276	1,7349	1,7421	1,7491	1,7561	1,7629
59,9	1,6261	1,6358	1,6454	1,6546	1,6637	1,6725	1,6812	1,6896	1,6979	1,706	1,7139	1,7217	1,7293	1,7368	1,7441	1,7513	1,7584	1,7653	1,7722
60	1,6349	1,6447	1,6543	1,6636	1,6727	1,6815	1,6902	1,6987	1,707	1,7151	1,723	1,7308	1,7385	1,746	1,7533	1,7606	1,7677	1,7746	1,7815
60,1	1,6438	1,6536	1,6632	1,6725	1,6817	1,6906	1,6993	1,7078	1,7161	1,7242	1,7322	1,74	1,7477	1,7552	1,7626	1,7699	1,777	1,784	1,7909
60,2	1,6527	1,6626	1,6722	1,6816	1,6907	1,6997	1,7084	1,7169	1,7253	1,7334	1,7415	1,7493	1,757	1,7645	1,7719	1,7792	1,7864	1,7934	1,8003
60,3	1,6617	1,6716	1,6812	1,6906	1,6998	1,7088	1,7175	1,7261	1,7345	1,7427	1,7507	1,7586	1,7663	1,7739	1,7813	1,7886	1,7958	1,8028	1,8098
60,4	1,6707	1,6806	1,6903	1,6998	1,709	1,7179	1,7267	1,7353	1,7438	1,752	1,76	1,7679	1,7757	1,7833	1,7907	1,7981	1,8053	1,8123	1,8193

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
57	1,5266	1,5326	1,5385	1,5444	1,5501	1,5557	1,5613	1,5668	1,5722	1,5775	1,5828	1,588	1,5931	1,5981	1,6031	1,6081	1,6129	1,6178	1,6225
57,1	1,5348	1,5408	1,5467	1,5525	1,5583	1,564	1,5695	1,575	1,5805	1,5858	1,5911	1,5963	1,6014	1,6065	1,6115	1,6165	1,6214	1,6262	1,631
57,2	1,5429	1,549	1,5549	1,5608	1,5665	1,5722	1,5778	1,5833	1,5888	1,5941	1,5994	1,6047	1,6098	1,6149	1,6199	1,6249	1,6298	1,6346	1,6394
57,3	1,5511	1,5572	1,5632	1,569	1,5748	1,5805	1,5861	1,5917	1,5971	1,6025	1,6078	1,6131	1,6182	1,6233	1,6284	1,6334	1,6383	1,6432	1,648
57,4	1,5594	1,5654	1,5714	1,5773	1,5831	1,5888	1,5945	1,6	1,6055	1,6109	1,6163	1,6215	1,6267	1,6318	1,6369	1,6419	1,6468	1,6517	1,6565
57,5	1,5676	1,5737	1,5798	1,5857	1,5915	1,5972	1,6029	1,6085	1,614	1,6194	1,6247	1,63	1,6352	1,6403	1,6454	1,6504	1,6554	1,6603	1,6651
57,6	1,576	1,5821	1,5881	1,594	1,5999	1,6056	1,6113	1,6169	1,6224	1,6279	1,6332	1,6385	1,6437	1,6489	1,654	1,659	1,664	1,6689	1,6738
57,7	1,5843	1,5905	1,5965	1,6025	1,6083	1,6141	1,6198	1,6254	1,6309	1,6364	1,6418	1,6471	1,6523	1,6575	1,6626	1,6677	1,6727	1,6776	1,6825
57,8	1,5927	1,5989	1,6049	1,6109	1,6168	1,6226	1,6283	1,6339	1,6395	1,645	1,6504	1,6557	1,661	1,6662	1,6713	1,6764	1,6814	1,6863	1,6912
57,9	1,6012	1,6073	1,6134	1,6194	1,6253	1,6311	1,6369	1,6425	1,6481	1,6536	1,659	1,6644	1,6696	1,6748	1,68	1,6851	1,6901	1,6951	1,7
58	1,6096	1,6158	1,6219	1,628	1,6339	1,6397	1,6455	1,6511	1,6567	1,6623	1,6677	1,673	1,6783	1,6836	1,6887	1,6938	1,6989	1,7039	1,7088
58,1	1,6182	1,6244	1,6305	1,6366	1,6425	1,6484	1,6541	1,6598	1,6654	1,671	1,6764	1,6818	1,6871	1,6923	1,6975	1,7026	1,7077	1,7127	1,7176
58,2	1,6267	1,633	1,6391	1,6452	1,6511	1,657	1,6628	1,6685	1,6741	1,6797	1,6852	1,6906	1,6959	1,7012	1,7064	1,7115	1,7166	1,7216	1,7265
58,3	1,6353	1,6416	1,6478	1,6538	1,6598	1,6657	1,6715	1,6773	1,6829	1,6885	1,694	1,6994	1,7047	1,71	1,7152	1,7204	1,7255	1,7305	1,7355
58,4	1,644	1,6503	1,6565	1,6626	1,6685	1,6745	1,6803	1,686	1,6917	1,6973	1,7028	1,7082	1,7136	1,7189	1,7241	1,7293	1,7344	1,7395	1,7444
58,5	1,6527	1,659	1,6652	1,6713	1,6773	1,6833	1,6891	1,6949	1,7006	1,7062	1,7117	1,7171	1,7225	1,7278	1,7331	1,7383	1,7434	1,7485	1,7535
58,6	1,6614	1,6677	1,674	1,6801	1,6861	1,6921	1,698	1,7037	1,7095	1,7151	1,7206	1,7261	1,7315	1,7368	1,7421	1,7473	1,7524	1,7575	1,7625
58,7	1,6702	1,6765	1,6828	1,6889	1,695	1,701	1,7069	1,7127	1,7184	1,724	1,7296	1,7351	1,7405	1,7459	1,7512	1,7564	1,7615	1,7666	1,7717
58,8	1,679	1,6854	1,6916	1,6978	1,7039	1,7099	1,7158	1,7216	1,7274	1,733	1,7386	1,7441	1,7496	1,7549	1,7602	1,7655	1,7706	1,7758	1,7808
58,9	1,6879	1,6942	1,7005	1,7067	1,7128	1,7189	1,7248	1,7306	1,7364	1,7421	1,7477	1,7532	1,7587	1,764	1,7694	1,7746	1,7798	1,7849	1,79
59	1,6967	1,7032	1,7095	1,7157	1,7218	1,7279	1,7338	1,7397	1,7454	1,7512	1,7568	1,7623	1,7678	1,7732	1,7786	1,7838	1,789	1,7942	1,7993
59,1	1,7057	1,7121	1,7185	1,7247	1,7309	1,7369	1,7429	1,7488	1,7546	1,7603	1,7659	1,7715	1,777	1,7824	1,7878	1,7931	1,7983	1,8034	1,8086
59,2	1,7147	1,7212	1,7275	1,7338	1,7399	1,746	1,752	1,7579	1,7637	1,7695	1,7751	1,7807	1,7862	1,7917	1,797	1,8023	1,8076	1,8128	1,8179
59,3	1,7237	1,7302	1,7366	1,7429	1,7491	1,7552	1,7612	1,7671	1,7729	1,7787	1,7844	1,79	1,7955	1,8009	1,8063	1,8117	1,8169	1,8221	1,8273
59,4	1,7328	1,7393	1,7457	1,752	1,7582	1,7644	1,7704	1,7763	1,7822	1,7879	1,7936	1,7993	1,8048	1,8103	1,8157	1,821	1,8263	1,8315	1,8367
59,5	1,7419	1,7485	1,7549	1,7612	1,7674	1,7736	1,7796	1,7856	1,7915	1,7973	1,803	1,8086	1,8142	1,8197	1,8251	1,8305	1,8358	1,841	1,8462
59,6	1,7511	1,7576	1,7641	1,7704	1,7767	1,7828	1,7889	1,7949	1,8008	1,8066	1,8123	1,818	1,8236	1,8291	1,8346	1,8399	1,8452	1,8505	1,8557
59,7	1,7603	1,7669	1,7734	1,7797	1,786	1,7922	1,7983	1,8043	1,8102	1,816	1,8218	1,8275	1,8331	1,8386	1,8441	1,8494	1,8548	1,8601	1,8652
59,8	1,7696	1,7762	1,7827	1,7891	1,7954	1,8015	1,8077	1,8137	1,8196	1,8255	1,8312	1,8369	1,8426	1,8481	1,8536	1,859	1,8644	1,8696	1,8749
59,9	1,7789	1,7855	1,792	1,7984	1,8047	1,811	1,8171	1,8231	1,8291	1,835	1,8408	1,8465	1,8521	1,8577	1,8632	1,8686	1,874	1,8793	1,8845
60	1,7882	1,7949	1,8014	1,8078	1,8142	1,8204	1,8266	1,8326	1,8386	1,8445	1,8503	1,8561	1,8617	1,8673	1,8728	1,8783	1,8837	1,889	1,8942
60,1	1,7976	1,8043	1,8109	1,8173	1,8237	1,8299	1,8361	1,8422	1,8482	1,8541	1,8599	1,8657	1,8714	1,877	1,8825	1,888	1,8934	1,8987	1,904
60,2	1,8071	1,8138	1,8204	1,8268	1,8332	1,8395	1,8457	1,8518	1,8578	1,8637	1,8696	1,8754	1,8811	1,8867	1,8922	1,8977	1,9031	1,9085	1,9138
60,3	1,8166	1,8233	1,8299	1,8364	1,8428	1,8491	1,8553	1,8614	1,8675	1,8734	1,8793	1,8851	1,8908	1,8964	1,902	1,9075	1,913	1,9183	1,9236
60,4	1,8261	1,8329	1,8395	1,846	1,8524	1,8587	1,865	1,8711	1,8772	1,8832	1,889	1,8949	1,9006	1,9062	1,9119	1,9174	1,9228	1,9282	1,9335

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
57	1,6272	1,6319	1,6365	1,641	1,6455	1,65	1,6544	1,6587	1,663	1,6673	1,6715	1,6757	1,6798	1,6839	1,688	1,692	1,696	1,7	1,7039
57,1	1,6357	1,6403	1,645	1,6495	1,654	1,6585	1,6629	1,6673	1,6716	1,6759	1,6801	1,6843	1,6885	1,6926	1,6967	1,7007	1,7047	1,7087	1,7126
57,2	1,6442	1,6488	1,6535	1,6581	1,6626	1,6671	1,6715	1,6759	1,6802	1,6845	1,6888	1,693	1,6971	1,7013	1,7054	1,7094	1,7134	1,7174	1,7213
57,3	1,6527	1,6574	1,662	1,6666	1,6712	1,6757	1,6801	1,6845	1,6889	1,6932	1,6975	1,7017	1,7059	1,71	1,7141	1,7182	1,7222	1,7262	1,7301
57,4	1,6613	1,666	1,6707	1,6753	1,6798	1,6843	1,6888	1,6932	1,6976	1,7019	1,7062	1,7104	1,7146	1,7188	1,7229	1,727	1,731	1,735	1,739
57,5	1,6699	1,6746	1,6793	1,6839	1,6885	1,693	1,6975	1,7019	1,7063	1,7107	1,7149	1,7192	1,7234	1,7276	1,7317	1,7358	1,7399	1,7439	1,7479
57,6	1,6786	1,6833	1,688	1,6926	1,6972	1,7018	1,7062	1,7107	1,7151	1,7194	1,7238	1,728	1,7322	1,7364	1,7406	1,7447	1,7487	1,7528	1,7568
57,7	1,6873	1,692	1,6967	1,7014	1,706	1,7105	1,715	1,7195	1,7239	1,7283	1,7326	1,7369	1,7411	1,7453	1,7495	1,7536	1,7577	1,7617	1,7657
57,8	1,696	1,7008	1,7055	1,7102	1,7148	1,7194	1,7239	1,7283	1,7328	1,7372	1,7415	1,7458	1,75	1,7543	1,7584	1,7626	1,7666	1,7707	1,7747
57,9	1,7048	1,7096	1,7143	1,719	1,7236	1,7282	1,7328	1,7373	1,7417	1,7461	1,7504	1,7548	1,759	1,7632	1,7674	1,7716	1,7757	1,7797	1,7838
58	1,7136	1,7184	1,7232	1,7279	1,7325	1,7371	1,7417	1,7462	1,7506	1,755	1,7594	1,7637	1,768	1,7722	1,7764	1,7806	1,7847	1,7888	1,7929
58,1	1,7225	1,7273	1,7321	1,7368	1,7415	1,7461	1,7507	1,7552	1,7596	1,764	1,7684	1,7728	1,7771	1,7813	1,7855	1,7897	1,7938	1,7979	1,802
58,2	1,7314	1,7363	1,741	1,7458	1,7504	1,7551	1,7597	1,7642	1,7687	1,7731	1,7775	1,7819	1,7862	1,7904	1,7947	1,7988	1,803	1,8071	1,8112
58,3	1,7404	1,7452	1,75	1,7548	1,7595	1,7641	1,7687	1,7732	1,7777	1,7822	1,7866	1,791	1,7953	1,7996	1,8038	1,808	1,8122	1,8163	1,8204
58,4	1,7494	1,7542	1,759	1,7638	1,7685	1,7732	1,7778	1,7823	1,7869	1,7913	1,7958	1,8001	1,8045	1,8088	1,813	1,8172	1,8214	1,8256	1,8297
58,5	1,7584	1,7633	1,7681	1,7729	1,7776	1,7823	1,7869	1,7915	1,796	1,8005	1,8049	1,8094	1,8137	1,818	1,8223	1,8265	1,8307	1,8348	1,8389
58,6	1,7675	1,7724	1,7773	1,782	1,7868	1,7915	1,7961	1,8007	1,8052	1,8097	1,8142	1,8186	1,823	1,8273	1,8316	1,8358	1,84	1,8442	1,8483
58,7	1,7766	1,7815	1,7864	1,7912	1,796	1,8007	1,8053	1,8099	1,8145	1,819	1,8235	1,8279	1,8323	1,8366	1,8409	1,8452	1,8494	1,8536	1,8577
58,8	1,7858	1,7907	1,7956	1,8004	1,8052	1,8099	1,8146	1,8192	1,8238	1,8283	1,8328	1,8372	1,8416	1,846	1,8503	1,8546	1,8588	1,863	1,8671
58,9	1,795	1,8	1,8049	1,8097	1,8145	1,8192	1,8239	1,8285	1,8331	1,8377	1,8422	1,8466	1,851	1,8554	1,8597	1,864	1,8683	1,8725	1,8766
59	1,8043	1,8092	1,8141	1,819	1,8238	1,8286	1,8333	1,8379	1,8425	1,8471	1,8516	1,8561	1,8605	1,8649	1,8692	1,8735	1,8778	1,882	1,8861
59,1	1,8136	1,8186	1,8235	1,8284	1,8332	1,838	1,8427	1,8473	1,852	1,8565	1,8611	1,8655	1,87	1,8744	1,8787	1,883	1,8873	1,8915	1,8957
59,2	1,8229	1,8279	1,8329	1,8378	1,8426	1,8474	1,8521	1,8568	1,8614	1,866	1,8706	1,8751	1,8795	1,8839	1,8883	1,8926	1,8969	1,9011	1,9054
59,3	1,8323	1,8373	1,8423	1,8472	1,8521	1,8569	1,8616	1,8663	1,871	1,8756	1,8801	1,8846	1,8891	1,8935	1,8979	1,9023	1,9066	1,9108	1,915
59,4	1,8418	1,8468	1,8518	1,8567	1,8616	1,8664	1,8712	1,8759	1,8805	1,8851	1,8897	1,8943	1,8987	1,9032	1,9076	1,9119	1,9162	1,9205	1,9247
59,5	1,8513	1,8563	1,8613	1,8662	1,8711	1,876	1,8808	1,8855	1,8902	1,8948	1,8994	1,9039	1,9084	1,9129	1,9173	1,9216	1,926	1,9303	1,9345
59,6	1,8608	1,8659	1,8709	1,8758	1,8807	1,8856	1,8904	1,8951	1,8998	1,9045	1,9091	1,9136	1,9181	1,9226	1,927	1,9314	1,9358	1,9401	1,9443
59,7	1,8704	1,8755	1,8805	1,8855	1,8904	1,8952	1,9001	1,9048	1,9095	1,9142	1,9188	1,9234	1,9279	1,9324	1,9368	1,9412	1,9456	1,9499	1,9542
59,8	1,88	1,8851	1,8902	1,8952	1,9001	1,905	1,9098	1,9146	1,9193	1,924	1,9286	1,9332	1,9377	1,9422	1,9467	1,9511	1,9555	1,9598	1,9641
59,9	1,8897	1,8948	1,8999	1,9049	1,9098	1,9147	1,9196	1,9244	1,9291	1,9338	1,9384	1,943	1,9476	1,9521	1,9566	1,961	1,9654	1,9697	1,974
60	1,8994	1,9046	1,9096	1,9147	1,9196	1,9245	1,9294	1,9342	1,939	1,9437	1,9483	1,9529	1,9575	1,962	1,9665	1,971	1,9754	1,9797	1,984
60,1	1,9092	1,9143	1,9195	1,9245	1,9295	1,9344	1,9393	1,9441	1,9488	1,9536	1,9583	1,9629	1,9675	1,972	1,9765	1,981	1,9854	1,9898	1,9941
60,2	1,919	1,9242	1,9293	1,9343	1,9393	1,9443	1,9492	1,954	1,9588	1,9636	1,9682	1,9729	1,9775	1,982	1,9866	1,991	1,9955	1,9998	2,0042
60,3	1,9289	1,9341	1,9392	1,9443	1,9493	1,9542	1,9591	1,964	1,9688	1,9736	1,9783	1,9829	1,9876	1,9921	1,9966	2,0011	2,0056	2,01	2,0144
60,4	1,9388	1,944	1,9491	1,9542	1,9593	1,9642	1,9692	1,974	1,9789	1,9836	1,9884	1,993	1,9977	2,0022	2,0068	2,0113	2,0158	2,0202	2,0245

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
57	1,7078	1,7116	1,7154	1,7192	1,723	1,7267	1,7304	1,734	1,7376	1,7412	1,7448	1,7483	1,7518	1,7553	1,7588	1,7622	1,7656	1,769	1,7724
57,1	1,7165	1,7204	1,7242	1,728	1,7317	1,7354	1,7391	1,7428	1,7465	1,7501	1,7536	1,7572	1,7607	1,7642	1,7677	1,7711	1,7745	1,7779	1,7813
57,2	1,7253	1,7291	1,733	1,7368	1,7405	1,7443	1,748	1,7517	1,7553	1,7589	1,7625	1,7661	1,7696	1,7731	1,7766	1,7801	1,7835	1,7869	1,7903
57,3	1,7341	1,7379	1,7418	1,7456	1,7494	1,7532	1,7569	1,7606	1,7642	1,7679	1,7714	1,775	1,7786	1,7821	1,7856	1,789	1,7925	1,7959	1,7993
57,4	1,7429	1,7468	1,7507	1,7545	1,7583	1,7621	1,7658	1,7695	1,7732	1,7768	1,7804	1,784	1,7876	1,7911	1,7946	1,7981	1,8015	1,805	1,8084
57,5	1,7518	1,7557	1,7596	1,7634	1,7672	1,771	1,7748	1,7785	1,7822	1,7858	1,7894	1,793	1,7966	1,8001	1,8037	1,8071	1,8106	1,814	1,8175
57,6	1,7607	1,7646	1,7685	1,7724	1,7762	1,78	1,7838	1,7875	1,7912	1,7948	1,7985	1,8021	1,8057	1,8092	1,8128	1,8163	1,8197	1,8232	1,8266
57,7	1,7697	1,7736	1,7775	1,7814	1,7852	1,789	1,7928	1,7966	1,8003	1,8039	1,8076	1,8112	1,8148	1,8184	1,8219	1,8254	1,8289	1,8323	1,8358
57,8	1,7787	1,7827	1,7866	1,7904	1,7943	1,7981	1,8019	1,8057	1,8094	1,8131	1,8167	1,8204	1,824	1,8275	1,8311	1,8346	1,8381	1,8416	1,845
57,9	1,7878	1,7917	1,7957	1,7996	1,8034	1,8072	1,811	1,8148	1,8185	1,8222	1,8259	1,8295	1,8332	1,8368	1,8403	1,8439	1,8473	1,8508	1,8543
58	1,7969	1,8008	1,8048	1,8087	1,8126	1,8164	1,8202	1,824	1,8277	1,8315	1,8351	1,8388	1,8424	1,846	1,8496	1,8531	1,8566	1,8601	1,8636
58,1	1,806	1,81	1,814	1,8179	1,8217	1,8256	1,8294	1,8332	1,837	1,8407	1,8444	1,8481	1,8517	1,8553	1,8589	1,8625	1,866	1,8695	1,873
58,2	1,8152	1,8192	1,8232	1,8271	1,831	1,8349	1,8387	1,8425	1,8463	1,85	1,8537	1,8574	1,861	1,8647	1,8683	1,8718	1,8754	1,8789	1,8824
58,3	1,8244	1,8285	1,8324	1,8364	1,8403	1,8442	1,848	1,8518	1,8556	1,8593	1,8631	1,8668	1,8704	1,8741	1,8777	1,8813	1,8848	1,8883	1,8918
58,4	1,8337	1,8377	1,8417	1,8457	1,8496	1,8535	1,8574	1,8612	1,865	1,8687	1,8725	1,8762	1,8798	1,8835	1,8871	1,8907	1,8943	1,8978	1,9013
58,5	1,843	1,8471	1,8511	1,855	1,859	1,8629	1,8667	1,8706	1,8744	1,8782	1,8819	1,8856	1,8893	1,893	1,8966	1,9002	1,9038	1,9073	1,9109
58,6	1,8524	1,8564	1,8605	1,8644	1,8684	1,8723	1,8762	1,88	1,8839	1,8876	1,8914	1,8951	1,8988	1,9025	1,9061	1,9098	1,9134	1,9169	1,9204
58,7	1,8618	1,8659	1,8699	1,8739	1,8779	1,8818	1,8857	1,8895	1,8934	1,8972	1,9009	1,9047	1,9084	1,9121	1,9157	1,9193	1,923	1,9265	1,9301
58,8	1,8713	1,8753	1,8794	1,8834	1,8874	1,8913	1,8952	1,8991	1,9029	1,9067	1,9105	1,9143	1,918	1,9217	1,9254	1,929	1,9326	1,9362	1,9398
58,9	1,8808	1,8848	1,8889	1,8929	1,8969	1,9009	1,9048	1,9087	1,9125	1,9164	1,9202	1,9239	1,9276	1,9314	1,935	1,9387	1,9423	1,9459	1,9495
59	1,8903	1,8944	1,8985	1,9025	1,9065	1,9105	1,9144	1,9183	1,9222	1,926	1,9298	1,9336	1,9374	1,9411	1,9448	1,9484	1,9521	1,9557	1,9592
59,1	1,8999	1,904	1,9081	1,9121	1,9162	1,9201	1,9241	1,928	1,9319	1,9357	1,9396	1,9433	1,9471	1,9508	1,9545	1,9582	1,9619	1,9655	1,9691
59,2	1,9095	1,9137	1,9178	1,9218	1,9258	1,9298	1,9338	1,9377	1,9416	1,9455	1,9493	1,9531	1,9569	1,9606	1,9643	1,968	1,9717	1,9753	1,9789
59,3	1,9192	1,9234	1,9275	1,9315	1,9356	1,9396	1,9436	1,9475	1,9514	1,9553	1,9591	1,963	1,9667	1,9705	1,9742	1,9779	1,9816	1,9852	1,9888
59,4	1,929	1,9331	1,9372	1,9413	1,9454	1,9494	1,9534	1,9573	1,9612	1,9651	1,969	1,9728	1,9766	1,9804	1,9841	1,9878	1,9915	1,9952	1,9988
59,5	1,9387	1,9429	1,947	1,9511	1,9552	1,9592	1,9632	1,9672	1,9711	1,975	1,9789	1,9827	1,9866	1,9903	1,9941	1,9978	2,0015	2,0052	2,0088
59,6	1,9485	1,9527	1,9569	1,961	1,9651	1,9691	1,9731	1,9771	1,9811	1,985	1,9889	1,9927	1,9965	2,0003	2,0041	2,0078	2,0115	2,0152	2,0189
59,7	1,9584	1,9626	1,9668	1,9709	1,975	1,9791	1,9831	1,9871	1,991	1,995	1,9989	2,0027	2,0066	2,0104	2,0141	2,0179	2,0216	2,0253	2,029
59,8	1,9683	1,9726	1,9767	1,9809	1,985	1,989	1,9931	1,9971	2,0011	2,005	2,0089	2,0128	2,0166	2,0204	2,0242	2,028	2,0317	2,0354	2,0391
59,9	1,9783	1,9825	1,9867	1,9909	1,995	1,9991	2,0031	2,0071	2,0111	2,0151	2,019	2,0229	2,0268	2,0306	2,0344	2,0382	2,0419	2,0456	2,0493
60	1,9883	1,9926	1,9968	2,0009	2,0051	2,0092	2,0132	2,0173	2,0213	2,0252	2,0292	2,0331	2,0369	2,0408	2,0446	2,0484	2,0521	2,0558	2,0596
60,1	1,9984	2,0026	2,0069	2,011	2,0152	2,0193	2,0234	2,0274	2,0314	2,0354	2,0394	2,0433	2,0472	2,051	2,0548	2,0586	2,0624	2,0661	2,0699
60,2	2,0085	2,0128	2,017	2,0212	2,0254	2,0295	2,0336	2,0376	2,0417	2,0457	2,0496	2,0535	2,0574	2,0613	2,0651	2,0689	2,0727	2,0765	2,0802
60,3	2,0187	2,0229	2,0272	2,0314	2,0356	2,0397	2,0438	2,0479	2,0519	2,0559	2,0599	2,0639	2,0678	2,0716	2,0755	2,0793	2,0831	2,0869	2,0906
60,4	2,0289	2,0332	2,0375	2,0417	2,0459	2,05	2,0541	2,0582	2,0623	2,0663	2,0703	2,0742	2,0781	2,082	2,0859	2,0897	2,0935	2,0973	2,1011

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
57	1,7757	1,779	1,7823	1,7856	1,7888	1,792	1,7952	1,7984	1,8015	1,8047	1,8078	1,8109	1,8139	1,817	1,82	1,823	1,826	1,829	1,832
57,1	1,7847	1,788	1,7913	1,7945	1,7978	1,801	1,8042	1,8074	1,8106	1,8137	1,8168	1,8199	1,823	1,8261	1,8291	1,8321	1,8351	1,8381	1,8411
57,2	1,7936	1,797	1,8003	1,8035	1,8068	1,81	1,8133	1,8165	1,8196	1,8228	1,8259	1,829	1,8321	1,8352	1,8382	1,8413	1,8443	1,8473	1,8502
57,3	1,8027	1,806	1,8093	1,8126	1,8159	1,8191	1,8224	1,8256	1,8288	1,8319	1,835	1,8382	1,8413	1,8443	1,8474	1,8504	1,8535	1,8565	1,8594
57,4	1,8117	1,8151	1,8184	1,8217	1,825	1,8282	1,8315	1,8347	1,8379	1,8411	1,8442	1,8474	1,8505	1,8536	1,8566	1,8597	1,8627	1,8657	1,8687
57,5	1,8208	1,8242	1,8275	1,8309	1,8341	1,8374	1,8407	1,8439	1,8471	1,8503	1,8534	1,8566	1,8597	1,8628	1,8659	1,8689	1,872	1,875	1,878
57,6	1,83	1,8334	1,8367	1,84	1,8434	1,8466	1,8499	1,8531	1,8563	1,8595	1,8627	1,8658	1,869	1,8721	1,8752	1,8783	1,8813	1,8843	1,8874
57,7	1,8392	1,8426	1,8459	1,8493	1,8526	1,8559	1,8591	1,8624	1,8656	1,8688	1,872	1,8752	1,8783	1,8814	1,8845	1,8876	1,8907	1,8937	1,8967
57,8	1,8484	1,8518	1,8552	1,8586	1,8619	1,8652	1,8685	1,8717	1,8749	1,8782	1,8814	1,8845	1,8877	1,8908	1,8939	1,897	1,9001	1,9031	1,9062
57,9	1,8577	1,8611	1,8645	1,8679	1,8712	1,8745	1,8778	1,8811	1,8843	1,8875	1,8907	1,8939	1,8971	1,9002	1,9033	1,9064	1,9095	1,9126	1,9156
58	1,8671	1,8705	1,8739	1,8772	1,8806	1,8839	1,8872	1,8905	1,8937	1,897	1,9002	1,9034	1,9065	1,9097	1,9128	1,9159	1,919	1,9221	1,9251
58,1	1,8764	1,8799	1,8833	1,8866	1,89	1,8933	1,8966	1,8999	1,9032	1,9064	1,9096	1,9129	1,916	1,9192	1,9223	1,9255	1,9285	1,9316	1,9347
58,2	1,8858	1,8893	1,8927	1,8961	1,8994	1,9028	1,9061	1,9094	1,9127	1,916	1,9192	1,9224	1,9256	1,9287	1,9319	1,935	1,9381	1,9412	1,9443
58,3	1,8953	1,8988	1,9022	1,9056	1,909	1,9123	1,9157	1,919	1,9222	1,9255	1,9287	1,932	1,9352	1,9384	1,9415	1,9447	1,9478	1,9509	1,954
58,4	1,9048	1,9083	1,9117	1,9151	1,9185	1,9219	1,9252	1,9285	1,9318	1,9351	1,9384	1,9416	1,9448	1,948	1,9512	1,9543	1,9574	1,9606	1,9636
58,5	1,9144	1,9178	1,9213	1,9247	1,9281	1,9315	1,9348	1,9382	1,9415	1,9447	1,948	1,9513	1,9545	1,9577	1,9609	1,964	1,9672	1,9703	1,9734
58,6	1,924	1,9274	1,9309	1,9343	1,9377	1,9411	1,9445	1,9478	1,9511	1,9545	1,9577	1,961	1,9642	1,9674	1,9706	1,9738	1,9769	1,9801	1,9832
58,7	1,9336	1,9371	1,9406	1,944	1,9474	1,9508	1,9542	1,9576	1,9609	1,9642	1,9675	1,9707	1,974	1,9772	1,9804	1,9836	1,9868	1,9899	1,993
58,8	1,9433	1,9468	1,9503	1,9537	1,9572	1,9606	1,964	1,9673	1,9707	1,974	1,9773	1,9805	1,9838	1,987	1,9903	1,9934	1,9966	1,9998	2,0029
58,9	1,953	1,9565	1,96	1,9635	1,9669	1,9704	1,9738	1,9771	1,9805	1,9838	1,9871	1,9904	1,9937	1,9969	2,0001	2,0033	2,0065	2,0097	2,0128
59	1,9628	1,9663	1,9698	1,9733	1,9768	1,9802	1,9836	1,987	1,9904	1,9937	1,997	2,0003	2,0036	2,0068	2,0101	2,0133	2,0165	2,0196	2,0228
59,1	1,9726	1,9762	1,9797	1,9832	1,9866	1,9901	1,9935	1,9969	2,0003	2,0036	2,007	2,0103	2,0135	2,0168	2,0201	2,0233	2,0265	2,0296	2,0328
59,2	1,9825	1,9861	1,9896	1,9931	1,9966	2	2,0035	2,0069	2,0102	2,0136	2,0169	2,0202	2,0236	2,0268	2,0301	2,0333	2,0365	2,0397	2,0429
59,3	1,9924	1,996	1,9995	2,003	2,0065	2,01	2,0134	2,0169	2,0202	2,0236	2,027	2,0303	2,0336	2,0369	2,0402	2,0434	2,0466	2,0498	2,053
59,4	2,0024	2,006	2,0095	2,013	2,0165	2,02	2,0235	2,0269	2,0303	2,0337	2,0371	2,0404	2,0437	2,047	2,0503	2,0535	2,0568	2,06	2,0632
59,5	2,0124	2,016	2,0196	2,0231	2,0266	2,0301	2,0336	2,037	2,0404	2,0438	2,0472	2,0505	2,0539	2,0572	2,0605	2,0637	2,0669	2,0702	2,0734
59,6	2,0225	2,0261	2,0297	2,0332	2,0367	2,0402	2,0437	2,0471	2,0506	2,054	2,0574	2,0607	2,0641	2,0674	2,0707	2,074	2,0772	2,0804	2,0837
59,7	2,0326	2,0362	2,0398	2,0434	2,0469	2,0504	2,0539	2,0574	2,0608	2,0642	2,0676	2,071	2,0743	2,0776	2,0809	2,0842	2,0875	2,0907	2,094
59,8	2,0427	2,0464	2,05	2,0535	2,0571	2,0606	2,0641	2,0676	2,071	2,0745	2,0779	2,0812	2,0846	2,0879	2,0913	2,0946	2,0978	2,1011	2,1043
59,9	2,053	2,0566	2,0602	2,0638	2,0673	2,0709	2,0744	2,0779	2,0813	2,0848	2,0882	2,0916	2,095	2,0983	2,1016	2,1049	2,1082	2,1115	2,1147
60	2,0632	2,0669	2,0705	2,0741	2,0777	2,0812	2,0847	2,0882	2,0917	2,0951	2,0986	2,102	2,1054	2,1087	2,1121	2,1154	2,1187	2,1219	2,1252
60,1	2,0735	2,0772	2,0808	2,0844	2,088	2,0916	2,0951	2,0986	2,1021	2,1056	2,109	2,1124	2,1158	2,1192	2,1225	2,1258	2,1292	2,1324	2,1357
60,2	2,0839	2,0876	2,0912	2,0948	2,0984	2,102	2,1055	2,1091	2,1126	2,116	2,1195	2,1229	2,1263	2,1297	2,133	2,1364	2,1397	2,143	2,1463
60,3	2,0943	2,098	2,1016	2,1053	2,1089	2,1125	2,116	2,1195	2,123	2,1265	2,13	2,1334	2,1368	2,1402	2,1436	2,147	2,1503	2,1536	2,1569
60,4	2,1048	2,1085	2,1121	2,1158	2,1194	2,123	2,1265	2,1301	2,1336	2,1371	2,1406	2,144	2,1474	2,1508	2,1542	2,1576	2,1609	2,1642	2,1676

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
57	1,8349	1,8378	1,8407	1,8436	1,8465	1,8493	1,8521	1,855	1,8578	1,8606	1,8633	1,8661	1,8688	1,8716	1,8743	1,877	1,8797	1,8823	1,885
57,1	1,844	1,8469	1,8499	1,8528	1,8556	1,8585	1,8613	1,8642	1,867	1,8698	1,8726	1,8753	1,8781	1,8808	1,8835	1,8862	1,8889	1,8916	1,8943
57,2	1,8532	1,8561	1,8591	1,862	1,8649	1,8677	1,8706	1,8734	1,8762	1,879	1,8818	1,8846	1,8874	1,8901	1,8928	1,8956	1,8983	1,9009	1,9036
57,3	1,8624	1,8654	1,8683	1,8712	1,8741	1,877	1,8799	1,8827	1,8855	1,8884	1,8911	1,8939	1,8967	1,8994	1,9022	1,9049	1,9076	1,9103	1,913
57,4	1,8717	1,8746	1,8776	1,8805	1,8834	1,8863	1,8892	1,892	1,8949	1,8977	1,9005	1,9033	1,9061	1,9088	1,9116	1,9143	1,917	1,9197	1,9224
57,5	1,881	1,884	1,8869	1,8898	1,8928	1,8957	1,8985	1,9014	1,9043	1,9071	1,9099	1,9127	1,9155	1,9182	1,921	1,9237	1,9265	1,9292	1,9319
57,6	1,8903	1,8933	1,8963	1,8992	1,9021	1,9051	1,9079	1,9108	1,9137	1,9165	1,9193	1,9222	1,9249	1,9277	1,9305	1,9332	1,936	1,9387	1,9414
57,7	1,8997	1,9027	1,9057	1,9086	1,9116	1,9145	1,9174	1,9203	1,9231	1,926	1,9288	1,9317	1,9344	1,9372	1,94	1,9428	1,9455	1,9482	1,9509
57,8	1,9092	1,9122	1,9151	1,9181	1,9211	1,924	1,9269	1,9298	1,9327	1,9355	1,9384	1,9412	1,944	1,9468	1,9496	1,9523	1,9551	1,9578	1,9605
57,9	1,9186	1,9217	1,9246	1,9276	1,9306	1,9335	1,9364	1,9393	1,9422	1,9451	1,9479	1,9508	1,9536	1,9564	1,9592	1,962	1,9647	1,9675	1,9702
58	1,9282	1,9312	1,9342	1,9372	1,9401	1,9431	1,946	1,9489	1,9518	1,9547	1,9575	1,9604	1,9632	1,966	1,9688	1,9716	1,9744	1,9771	1,9799
58,1	1,9377	1,9408	1,9438	1,9468	1,9497	1,9527	1,9556	1,9586	1,9615	1,9643	1,9672	1,9701	1,9729	1,9757	1,9785	1,9813	1,9841	1,9869	1,9896
58,2	1,9474	1,9504	1,9534	1,9564	1,9594	1,9624	1,9653	1,9682	1,9711	1,9741	1,9769	1,9798	1,9826	1,9855	1,9883	1,9911	1,9939	1,9966	1,9994
58,3	1,957	1,9601	1,9631	1,9661	1,9691	1,9721	1,975	1,978	1,9809	1,9838	1,9867	1,9896	1,9924	1,9953	1,9981	2,0009	2,0037	2,0065	2,0092
58,4	1,9667	1,9698	1,9728	1,9758	1,9788	1,9818	1,9848	1,9877	1,9907	1,9936	1,9965	1,9994	2,0022	2,0051	2,0079	2,0107	2,0135	2,0163	2,0191
58,5	1,9765	1,9795	1,9826	1,9856	1,9886	1,9916	1,9946	1,9976	2,0005	2,0034	2,0063	2,0092	2,0121	2,0149	2,0178	2,0206	2,0234	2,0262	2,029
58,6	1,9863	1,9893	1,9924	1,9954	1,9985	2,0015	2,0045	2,0074	2,0104	2,0133	2,0162	2,0191	2,022	2,0249	2,0277	2,0306	2,0334	2,0362	2,039
58,7	1,9961	1,9992	2,0023	2,0053	2,0084	2,0114	2,0144	2,0173	2,0203	2,0232	2,0262	2,0291	2,032	2,0348	2,0377	2,0406	2,0434	2,0462	2,049
58,8	2,006	2,0091	2,0122	2,0152	2,0183	2,0213	2,0243	2,0273	2,0303	2,0332	2,0361	2,0391	2,042	2,0449	2,0477	2,0506	2,0534	2,0563	2,0591
58,9	2,0159	2,019	2,0221	2,0252	2,0283	2,0313	2,0343	2,0373	2,0403	2,0432	2,0462	2,0491	2,052	2,0549	2,0578	2,0607	2,0635	2,0664	2,0692
59	2,0259	2,029	2,0321	2,0352	2,0383	2,0413	2,0443	2,0473	2,0503	2,0533	2,0563	2,0592	2,0621	2,065	2,0679	2,0708	2,0737	2,0765	2,0793
59,1	2,036	2,0391	2,0422	2,0453	2,0484	2,0514	2,0544	2,0574	2,0604	2,0634	2,0664	2,0693	2,0723	2,0752	2,0781	2,081	2,0838	2,0867	2,0895
59,2	2,046	2,0492	2,0523	2,0554	2,0585	2,0615	2,0646	2,0676	2,0706	2,0736	2,0766	2,0795	2,0825	2,0854	2,0883	2,0912	2,0941	2,0969	2,0998
59,3	2,0562	2,0593	2,0624	2,0656	2,0686	2,0717	2,0748	2,0778	2,0808	2,0838	2,0868	2,0898	2,0927	2,0957	2,0986	2,1015	2,1044	2,1072	2,1101
59,4	2,0663	2,0695	2,0726	2,0757	2,0788	2,0819	2,085	2,088	2,0911	2,0941	2,0971	2,1	2,103	2,1059	2,1089	2,1118	2,1147	2,1176	2,1204
59,5	2,0766	2,0797	2,0829	2,086	2,0891	2,0922	2,0953	2,0983	2,1014	2,1044	2,1074	2,1104	2,1134	2,1163	2,1192	2,1222	2,1251	2,128	2,1308
59,6	2,0868	2,09	2,0932	2,0963	2,0994	2,1025	2,1056	2,1087	2,1117	2,1148	2,1178	2,1208	2,1238	2,1267	2,1296	2,1326	2,1355	2,1384	2,1413
59,7	2,0972	2,1004	2,1035	2,1067	2,1098	2,1129	2,116	2,1191	2,1221	2,1252	2,1282	2,1312	2,1342	2,1372	2,1401	2,1431	2,146	2,1489	2,1518
59,8	2,1075	2,1107	2,1139	2,1171	2,1202	2,1233	2,1264	2,1295	2,1326	2,1356	2,1387	2,1417	2,1447	2,1477	2,1506	2,1536	2,1565	2,1594	2,1623
59,9	2,118	2,1212	2,1244	2,1275	2,1307	2,1338	2,1369	2,14	2,1431	2,1461	2,1492	2,1522	2,1552	2,1582	2,1612	2,1641	2,1671	2,17	2,1729
60	2,1284	2,1316	2,1348	2,138	2,1412	2,1443	2,1474	2,1506	2,1536	2,1567	2,1598	2,1628	2,1658	2,1688	2,1718	2,1748	2,1777	2,1807	2,1836
60,1	2,139	2,1422	2,1454	2,1486	2,1517	2,1549	2,158	2,1611	2,1642	2,1673	2,1704	2,1734	2,1765	2,1794	2,1824	2,1854	2,1884	2,1913	2,1943
60,2	2,1495	2,1528	2,156	2,1592	2,1624	2,1655	2,1687	2,1718	2,1749	2,178	2,1811	2,1841	2,1871	2,1902	2,1932	2,1961	2,1991	2,2021	2,205
60,3	2,1602	2,1634	2,1666	2,1698	2,173	2,1762	2,1793	2,1825	2,1856	2,1887	2,1918	2,1948	2,1979	2,2009	2,2039	2,2069	2,2099	2,2129	2,2158
60,4	2,1708	2,1741	2,1773	2,1805	2,1837	2,1869	2,1901	2,1932	2,1964	2,1995	2,2025	2,2056	2,2087	2,2117	2,2147	2,2178	2,2207	2,2237	2,2267

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
57	1,8876	1,8902	1,8928	1,8954	1,898	1,9006	1,9032	1,9057
57,1	1,8969	1,8996	1,9022	1,9048	1,9074	1,91	1,9125	1,9151
57,2	1,9063	1,9089	1,9115	1,9141	1,9168	1,9193	1,9219	1,9245
57,3	1,9157	1,9183	1,9209	1,9236	1,9262	1,9288	1,9314	1,9339
57,4	1,9251	1,9277	1,9304	1,933	1,9357	1,9383	1,9408	1,9434
57,5	1,9346	1,9372	1,9399	1,9425	1,9452	1,9478	1,9504	1,953
57,6	1,9441	1,9468	1,9494	1,9521	1,9547	1,9573	1,9599	1,9625
57,7	1,9536	1,9563	1,959	1,9617	1,9643	1,9669	1,9696	1,9722
57,8	1,9633	1,9659	1,9686	1,9713	1,9739	1,9766	1,9792	1,9818
57,9	1,9729	1,9756	1,9783	1,981	1,9836	1,9863	1,9889	1,9916
58	1,9826	1,9853	1,988	1,9907	1,9934	1,996	1,9987	2,0013
58,1	1,9924	1,9951	1,9978	2,0005	2,0031	2,0058	2,0085	2,0111
58,2	2,0021	2,0049	2,0076	2,0103	2,013	2,0156	2,0183	2,021
58,3	2,012	2,0147	2,0174	2,0202	2,0228	2,0255	2,0282	2,0308
58,4	2,0219	2,0246	2,0274	2,0301	2,0328	2,0355	2,0381	2,0408
58,5	2,0318	2,0345	2,0373	2,04	2,0427	2,0454	2,0481	2,0508
58,6	2,0418	2,0445	2,0473	2,05	2,0527	2,0554	2,0581	2,0608
58,7	2,0518	2,0546	2,0573	2,0601	2,0628	2,0655	2,0682	2,0709
58,8	2,0619	2,0646	2,0674	2,0702	2,0729	2,0756	2,0783	2,081
58,9	2,072	2,0748	2,0775	2,0803	2,0831	2,0858	2,0885	2,0912
59	2,0821	2,0849	2,0877	2,0905	2,0932	2,096	2,0987	2,1014
59,1	2,0924	2,0952	2,098	2,1007	2,1035	2,1063	2,109	2,1117
59,2	2,1026	2,1054	2,1082	2,111	2,1138	2,1165	2,1193	2,122
59,3	2,1129	2,1158	2,1186	2,1214	2,1241	2,1269	2,1297	2,1324
59,4	2,1233	2,1261	2,1289	2,1317	2,1345	2,1373	2,1401	2,1428
59,5	2,1337	2,1365	2,1394	2,1422	2,145	2,1478	2,1505	2,1533
59,6	2,1441	2,147	2,1498	2,1527	2,1555	2,1583	2,161	2,1638
59,7	2,1546	2,1575	2,1604	2,1632	2,166	2,1688	2,1716	2,1744
59,8	2,1652	2,1681	2,1709	2,1738	2,1766	2,1794	2,1822	2,185
59,9	2,1758	2,1787	2,1816	2,1844	2,1872	2,1901	2,1929	2,1957
60	2,1865	2,1894	2,1922	2,1951	2,198	2,2008	2,2036	2,2064
60,1	2,1972	2,2001	2,203	2,2058	2,2087	2,2115	2,2144	2,2172
60,2	2,2079	2,2109	2,2137	2,2166	2,2195	2,2223	2,2252	2,228
60,3	2,2188	2,2217	2,2246	2,2275	2,2303	2,2332	2,2361	2,2389
60,4	2,2296	2,2326	2,2355	2,2384	2,2412	2,2441	2,247	2,2498

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
60,5	1,3989	1,4217	1,4428	1,4627	1,4813	1,4989	1,5155	1,5314	1,5465	1,5609	1,5748	1,5881	1,601	1,6133	1,6253	1,6369	1,6481	1,6589	1,6695
60,6	1,407	1,4299	1,4511	1,471	1,4897	1,5073	1,524	1,5399	1,5551	1,5696	1,5835	1,5969	1,6098	1,6222	1,6342	1,6458	1,657	1,6679	1,6785
60,7	1,4151	1,4381	1,4594	1,4794	1,4981	1,5158	1,5326	1,5486	1,5638	1,5784	1,5923	1,6057	1,6187	1,6311	1,6432	1,6548	1,6661	1,677	1,6876
60,8	1,4233	1,4464	1,4678	1,4878	1,5066	1,5244	1,5412	1,5572	1,5725	1,5871	1,6012	1,6146	1,6276	1,6401	1,6522	1,6639	1,6752	1,6861	1,6968
60,9	1,4315	1,4547	1,4762	1,4963	1,5151	1,533	1,5499	1,566	1,5813	1,596	1,61	1,6235	1,6366	1,6491	1,6612	1,6729	1,6843	1,6953	1,706
61	1,4398	1,463	1,4846	1,5048	1,5237	1,5416	1,5586	1,5747	1,5901	1,6048	1,619	1,6325	1,6456	1,6582	1,6703	1,6821	1,6935	1,7045	1,7153
61,1	1,4481	1,4714	1,4931	1,5133	1,5324	1,5503	1,5673	1,5835	1,599	1,6138	1,6279	1,6415	1,6546	1,6673	1,6795	1,6913	1,7027	1,7138	1,7246
61,2	1,4565	1,4799	1,5016	1,5219	1,541	1,559	1,5761	1,5924	1,6079	1,6227	1,6369	1,6506	1,6637	1,6764	1,6887	1,7005	1,712	1,7231	1,7339
61,3	1,4649	1,4884	1,5102	1,5306	1,5497	1,5678	1,585	1,6013	1,6168	1,6317	1,646	1,6597	1,6729	1,6856	1,6979	1,7098	1,7213	1,7325	1,7433
61,4	1,4734	1,4969	1,5188	1,5393	1,5585	1,5766	1,5939	1,6102	1,6258	1,6408	1,6551	1,6688	1,6821	1,6949	1,7072	1,7191	1,7307	1,7419	1,7528
61,5	1,4819	1,5055	1,5275	1,548	1,5673	1,5855	1,6028	1,6192	1,6349	1,6499	1,6642	1,678	1,6913	1,7042	1,7165	1,7285	1,7401	1,7513	1,7623
61,6	1,4904	1,5141	1,5362	1,5568	1,5762	1,5945	1,6118	1,6283	1,644	1,659	1,6735	1,6873	1,7006	1,7135	1,7259	1,7379	1,7496	1,7608	1,7718
61,7	1,499	1,5228	1,5449	1,5656	1,5851	1,6034	1,6208	1,6374	1,6531	1,6682	1,6827	1,6966	1,71	1,7229	1,7353	1,7474	1,7591	1,7704	1,7814
61,8	1,5076	1,5315	1,5537	1,5745	1,594	1,6124	1,6299	1,6465	1,6623	1,6775	1,692	1,7059	1,7194	1,7323	1,7448	1,7569	1,7686	1,78	1,791
61,9	1,5163	1,5403	1,5626	1,5834	1,603	1,6215	1,639	1,6557	1,6716	1,6868	1,7013	1,7153	1,7288	1,7418	1,7544	1,7665	1,7783	1,7897	1,8007
62	1,525	1,5491	1,5715	1,5924	1,612	1,6306	1,6482	1,6649	1,6808	1,6961	1,7107	1,7248	1,7383	1,7513	1,7639	1,7761	1,7879	1,7994	1,8105
62,1	1,5338	1,558	1,5804	1,6014	1,6212	1,6398	1,6574	1,6742	1,6902	1,7055	1,7202	1,7343	1,7478	1,7609	1,7736	1,7858	1,7977	1,8091	1,8203
62,2	1,5426	1,5669	1,5894	1,6105	1,6303	1,649	1,6667	1,6835	1,6996	1,7149	1,7297	1,7438	1,7574	1,7706	1,7832	1,7955	1,8074	1,8189	1,8301
62,3	1,5515	1,5759	1,5985	1,6196	1,6395	1,6582	1,676	1,6929	1,709	1,7244	1,7392	1,7534	1,7671	1,7802	1,793	1,8053	1,8172	1,8288	1,84
62,4	1,5604	1,5849	1,6076	1,6288	1,6487	1,6675	1,6854	1,7023	1,7185	1,734	1,7488	1,7631	1,7768	1,79	1,8028	1,8151	1,8271	1,8387	1,85
62,5	1,5694	1,5939	1,6167	1,638	1,658	1,6769	1,6948	1,7118	1,728	1,7436	1,7585	1,7727	1,7865	1,7998	1,8126	1,825	1,837	1,8487	1,86
62,6	1,5784	1,603	1,6259	1,6473	1,6673	1,6863	1,7043	1,7213	1,7376	1,7532	1,7681	1,7825	1,7963	1,8096	1,8225	1,8349	1,847	1,8587	1,87
62,7	1,5875	1,6122	1,6351	1,6566	1,6767	1,6958	1,7138	1,7309	1,7473	1,7629	1,7779	1,7923	1,8062	1,8195	1,8324	1,8449	1,857	1,8687	1,8801
62,8	1,5966	1,6214	1,6444	1,6659	1,6862	1,7053	1,7234	1,7406	1,757	1,7726	1,7877	1,8021	1,8161	1,8295	1,8424	1,8549	1,8671	1,8788	1,8903
62,9	1,6057	1,6306	1,6537	1,6754	1,6956	1,7148	1,733	1,7502	1,7667	1,7824	1,7975	1,812	1,826	1,8395	1,8525	1,865	1,8772	1,889	1,9005
63	1,615	1,6399	1,6631	1,6848	1,7052	1,7244	1,7426	1,76	1,7765	1,7923	1,8074	1,822	1,836	1,8495	1,8626	1,8752	1,8874	1,8992	1,9108
63,1	1,6242	1,6493	1,6726	1,6943	1,7148	1,7341	1,7524	1,7698	1,7863	1,8022	1,8174	1,832	1,8461	1,8596	1,8727	1,8854	1,8976	1,9095	1,9211
63,2	1,6335	1,6587	1,6821	1,7039	1,7244	1,7438	1,7621	1,7796	1,7962	1,8122	1,8274	1,8421	1,8562	1,8698	1,8829	1,8956	1,9079	1,9199	1,9315
63,3	1,6429	1,6681	1,6916	1,7135	1,7341	1,7536	1,772	1,7895	1,8062	1,8222	1,8375	1,8522	1,8663	1,88	1,8932	1,9059	1,9183	1,9302	1,9419
63,4	1,6523	1,6777	1,7012	1,7232	1,7439	1,7634	1,7818	1,7994	1,8162	1,8322	1,8476	1,8623	1,8766	1,8902	1,9035	1,9163	1,9287	1,9407	1,9524
63,5	1,6618	1,6872	1,7108	1,7329	1,7537	1,7732	1,7918	1,8094	1,8263	1,8423	1,8578	1,8726	1,8868	1,9006	1,9138	1,9267	1,9391	1,9512	1,9629
63,6	1,6713	1,6968	1,7205	1,7427	1,7635	1,7832	1,8018	1,8195	1,8364	1,8525	1,868	1,8828	1,8971	1,9109	1,9243	1,9371	1,9496	1,9617	1,9735
63,7	1,6809	1,7065	1,7303	1,7525	1,7734	1,7931	1,8118	1,8296	1,8465	1,8627	1,8783	1,8932	1,9075	1,9214	1,9347	1,9477	1,9602	1,9723	1,9841
63,8	1,6905	1,7162	1,7401	1,7624	1,7834	1,8032	1,8219	1,8397	1,8567	1,873	1,8886	1,9036	1,918	1,9318	1,9453	1,9582	1,9708	1,983	1,9948
63,9	1,7002	1,726	1,7499	1,7723	1,7934	1,8133	1,8321	1,85	1,867	1,8833	1,899	1,914	1,9285	1,9424	1,9559	1,9689	1,9815	1,9937	2,0056

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
60,5	1,6797	1,6897	1,6994	1,7089	1,7181	1,7272	1,736	1,7446	1,7531	1,7613	1,7694	1,7773	1,7851	1,7927	1,8002	1,8076	1,8148	1,8219	1,8289
60,6	1,6888	1,6988	1,7086	1,7181	1,7274	1,7364	1,7453	1,7539	1,7624	1,7707	1,7788	1,7868	1,7946	1,8022	1,8097	1,8171	1,8243	1,8315	1,8385
60,7	1,698	1,708	1,7178	1,7274	1,7367	1,7458	1,7546	1,7633	1,7718	1,7801	1,7883	1,7963	1,8041	1,8118	1,8193	1,8267	1,834	1,8411	1,8481
60,8	1,7072	1,7173	1,7271	1,7367	1,746	1,7551	1,764	1,7727	1,7813	1,7896	1,7978	1,8058	1,8136	1,8214	1,8289	1,8363	1,8436	1,8508	1,8579
60,9	1,7164	1,7265	1,7364	1,746	1,7554	1,7645	1,7735	1,7822	1,7908	1,7991	1,8073	1,8154	1,8233	1,831	1,8386	1,846	1,8533	1,8605	1,8676
61	1,7257	1,7359	1,7457	1,7554	1,7648	1,774	1,783	1,7917	1,8003	1,8087	1,8169	1,825	1,8329	1,8407	1,8483	1,8558	1,8631	1,8703	1,8774
61,1	1,7351	1,7452	1,7552	1,7648	1,7743	1,7835	1,7925	1,8013	1,8099	1,8183	1,8266	1,8347	1,8426	1,8504	1,858	1,8655	1,8729	1,8801	1,8873
61,2	1,7444	1,7547	1,7646	1,7743	1,7838	1,793	1,8021	1,8109	1,8195	1,828	1,8363	1,8444	1,8524	1,8602	1,8679	1,8754	1,8828	1,89	1,8972
61,3	1,7539	1,7641	1,7741	1,7839	1,7934	1,8026	1,8117	1,8206	1,8292	1,8377	1,846	1,8542	1,8622	1,87	1,8777	1,8853	1,8927	1,9	1,9071
61,4	1,7634	1,7737	1,7837	1,7934	1,803	1,8123	1,8214	1,8303	1,839	1,8475	1,8558	1,864	1,872	1,8799	1,8876	1,8952	1,9026	1,9099	1,9171
61,5	1,7729	1,7832	1,7933	1,8031	1,8127	1,822	1,8311	1,84	1,8488	1,8573	1,8657	1,8739	1,8819	1,8898	1,8976	1,9052	1,9127	1,92	1,9272
61,6	1,7825	1,7928	1,8029	1,8128	1,8224	1,8317	1,8409	1,8499	1,8586	1,8672	1,8756	1,8838	1,8919	1,8998	1,9076	1,9152	1,9227	1,9301	1,9373
61,7	1,7921	1,8025	1,8126	1,8225	1,8321	1,8415	1,8507	1,8597	1,8685	1,8771	1,8856	1,8938	1,9019	1,9098	1,9176	1,9253	1,9328	1,9402	1,9475
61,8	1,8018	1,8122	1,8224	1,8323	1,842	1,8514	1,8606	1,8696	1,8785	1,8871	1,8955	1,9038	1,912	1,9199	1,9278	1,9354	1,943	1,9504	1,9577
61,9	1,8115	1,822	1,8322	1,8421	1,8518	1,8613	1,8706	1,8796	1,8884	1,8971	1,9056	1,9139	1,9221	1,9301	1,9379	1,9456	1,9532	1,9606	1,9679
62	1,8213	1,8318	1,842	1,852	1,8617	1,8713	1,8805	1,8896	1,8985	1,9072	1,9157	1,9241	1,9322	1,9403	1,9481	1,9559	1,9634	1,9709	1,9783
62,1	1,8311	1,8417	1,8519	1,862	1,8717	1,8813	1,8906	1,8997	1,9086	1,9173	1,9259	1,9342	1,9424	1,9505	1,9584	1,9662	1,9738	1,9813	1,9886
62,2	1,841	1,8516	1,8619	1,8719	1,8817	1,8913	1,9007	1,9098	1,9187	1,9275	1,9361	1,9445	1,9527	1,9608	1,9687	1,9765	1,9841	1,9917	1,999
62,3	1,8509	1,8616	1,8719	1,882	1,8918	1,9014	1,9108	1,92	1,929	1,9377	1,9463	1,9548	1,963	1,9711	1,9791	1,9869	1,9946	2,0021	2,0095
62,4	1,8609	1,8716	1,882	1,8921	1,902	1,9116	1,921	1,9302	1,9392	1,948	1,9566	1,9651	1,9734	1,9815	1,9895	1,9973	2,0051	2,0126	2,0201
62,5	1,871	1,8817	1,8921	1,9022	1,9121	1,9218	1,9312	1,9405	1,9495	1,9583	1,967	1,9755	1,9838	1,992	2	2,0079	2,0156	2,0232	2,0306
62,6	1,881	1,8918	1,9022	1,9124	1,9224	1,9321	1,9415	1,9508	1,9599	1,9687	1,9774	1,9859	1,9943	2,0025	2,0105	2,0184	2,0262	2,0338	2,0413
62,7	1,8912	1,902	1,9124	1,9227	1,9326	1,9424	1,9519	1,9612	1,9703	1,9792	1,9879	1,9964	2,0048	2,0131	2,0211	2,029	2,0368	2,0444	2,052
62,8	1,9014	1,9122	1,9227	1,933	1,943	1,9527	1,9623	1,9716	1,9808	1,9897	1,9984	2,007	2,0154	2,0237	2,0318	2,0397	2,0475	2,0552	2,0627
62,9	1,9116	1,9225	1,933	1,9433	1,9534	1,9632	1,9727	1,9821	1,9913	2,0002	2,009	2,0176	2,026	2,0343	2,0424	2,0504	2,0583	2,0659	2,0735
63	1,9219	1,9328	1,9434	1,9537	1,9638	1,9737	1,9833	1,9927	2,0019	2,0108	2,0197	2,0283	2,0367	2,0451	2,0532	2,0612	2,0691	2,0768	2,0844
63,1	1,9323	1,9432	1,9538	1,9642	1,9743	1,9842	1,9938	2,0033	2,0125	2,0215	2,0303	2,039	2,0475	2,0558	2,064	2,072	2,0799	2,0877	2,0953
63,2	1,9427	1,9537	1,9643	1,9747	1,9849	1,9948	2,0045	2,0139	2,0232	2,0322	2,0411	2,0498	2,0583	2,0667	2,0749	2,0829	2,0908	2,0986	2,1063
63,3	1,9532	1,9642	1,9749	1,9853	1,9955	2,0054	2,0151	2,0246	2,0339	2,043	2,0519	2,0606	2,0692	2,0776	2,0858	2,0939	2,1018	2,1096	2,1173
63,4	1,9637	1,9747	1,9855	1,9959	2,0061	2,0161	2,0259	2,0354	2,0447	2,0538	2,0628	2,0715	2,0801	2,0885	2,0968	2,1049	2,1129	2,1207	2,1284
63,5	1,9743	1,9853	1,9961	2,0066	2,0169	2,0269	2,0367	2,0462	2,0556	2,0647	2,0737	2,0825	2,0911	2,0995	2,1078	2,1159	2,1239	2,1318	2,1395
63,6	1,9849	1,996	2,0068	2,0174	2,0277	2,0377	2,0475	2,0571	2,0665	2,0757	2,0847	2,0935	2,1021	2,1106	2,1189	2,1271	2,1351	2,143	2,1507
63,7	1,9956	2,0067	2,0176	2,0282	2,0385	2,0486	2,0584	2,068	2,0774	2,0867	2,0957	2,1045	2,1132	2,1217	2,13	2,1382	2,1463	2,1542	2,162
63,8	2,0063	2,0175	2,0284	2,039	2,0494	2,0595	2,0694	2,079	2,0885	2,0977	2,1068	2,1156	2,1244	2,1329	2,1413	2,1495	2,1576	2,1655	2,1733
63,9	2,0171	2,0283	2,0393	2,0499	2,0603	2,0705	2,0804	2,0901	2,0995	2,1088	2,1179	2,1268	2,1355	2,1441	2,1525	2,1608	2,1689	2,1768	2,1847

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
60,5	1,8357	1,8425	1,8491	1,8556	1,8621	1,8684	1,8747	1,8809	1,8869	1,8929	1,8988	1,9047	1,9104	1,9161	1,9217	1,9273	1,9327	1,9382	1,9435
60,6	1,8453	1,8521	1,8588	1,8654	1,8718	1,8782	1,8845	1,8907	1,8967	1,9028	1,9087	1,9145	1,9203	1,926	1,9316	1,9372	1,9427	1,9481	1,9535
60,7	1,855	1,8618	1,8685	1,8751	1,8816	1,888	1,8943	1,9005	1,9066	1,9126	1,9186	1,9245	1,9303	1,936	1,9416	1,9472	1,9527	1,9581	1,9635
60,8	1,8648	1,8716	1,8783	1,8849	1,8914	1,8978	1,9042	1,9104	1,9165	1,9226	1,9285	1,9344	1,9402	1,946	1,9517	1,9573	1,9628	1,9682	1,9736
60,9	1,8746	1,8814	1,8881	1,8948	1,9013	1,9077	1,9141	1,9203	1,9265	1,9325	1,9385	1,9444	1,9503	1,956	1,9617	1,9673	1,9729	1,9784	1,9838
61	1,8844	1,8912	1,898	1,9047	1,9112	1,9177	1,924	1,9303	1,9365	1,9426	1,9486	1,9545	1,9604	1,9661	1,9719	1,9775	1,983	1,9885	1,994
61,1	1,8943	1,9012	1,9079	1,9146	1,9212	1,9277	1,934	1,9403	1,9465	1,9527	1,9587	1,9646	1,9705	1,9763	1,982	1,9877	1,9933	1,9988	2,0042
61,2	1,9042	1,9111	1,9179	1,9246	1,9312	1,9377	1,9441	1,9504	1,9566	1,9628	1,9688	1,9748	1,9807	1,9865	1,9923	1,9979	2,0035	2,0091	2,0145
61,3	1,9142	1,9211	1,9279	1,9347	1,9413	1,9478	1,9542	1,9606	1,9668	1,9729	1,979	1,985	1,9909	1,9968	2,0025	2,0082	2,0138	2,0194	2,0249
61,4	1,9242	1,9312	1,938	1,9448	1,9514	1,9579	1,9644	1,9707	1,977	1,9832	1,9893	1,9953	2,0012	2,0071	2,0129	2,0186	2,0242	2,0298	2,0353
61,5	1,9343	1,9413	1,9481	1,9549	1,9616	1,9681	1,9746	1,981	1,9873	1,9935	1,9996	2,0056	2,0116	2,0174	2,0232	2,029	2,0346	2,0402	2,0457
61,6	1,9444	1,9514	1,9583	1,9651	1,9718	1,9784	1,9849	1,9913	1,9976	2,0038	2,0099	2,016	2,022	2,0279	2,0337	2,0394	2,0451	2,0507	2,0562
61,7	1,9546	1,9617	1,9686	1,9754	1,9821	1,9887	1,9952	2,0016	2,0079	2,0142	2,0203	2,0264	2,0324	2,0383	2,0441	2,0499	2,0556	2,0612	2,0668
61,8	1,9649	1,9719	1,9788	1,9857	1,9924	1,999	2,0056	2,012	2,0184	2,0246	2,0308	2,0369	2,0429	2,0488	2,0547	2,0605	2,0662	2,0718	2,0774
61,9	1,9751	1,9822	1,9892	1,996	2,0028	2,0094	2,016	2,0224	2,0288	2,0351	2,0413	2,0474	2,0534	2,0594	2,0653	2,0711	2,0768	2,0825	2,0881
62	1,9855	1,9926	1,9996	2,0065	2,0132	2,0199	2,0265	2,033	2,0393	2,0456	2,0519	2,058	2,064	2,07	2,0759	2,0817	2,0875	2,0932	2,0988
62,1	1,9959	2,003	2,01	2,0169	2,0237	2,0304	2,037	2,0435	2,0499	2,0562	2,0625	2,0686	2,0747	2,0807	2,0866	2,0925	2,0982	2,1039	2,1096
62,2	2,0063	2,0135	2,0205	2,0274	2,0343	2,041	2,0476	2,0541	2,0605	2,0669	2,0732	2,0793	2,0854	2,0914	2,0974	2,1032	2,109	2,1147	2,1204
62,3	2,0168	2,024	2,0311	2,038	2,0448	2,0516	2,0582	2,0648	2,0712	2,0776	2,0839	2,0901	2,0962	2,1022	2,1082	2,1141	2,1199	2,1256	2,1313
62,4	2,0274	2,0346	2,0416	2,0486	2,0555	2,0623	2,0689	2,0755	2,082	2,0883	2,0947	2,1009	2,107	2,1131	2,119	2,1249	2,1308	2,1365	2,1422
62,5	2,038	2,0452	2,0523	2,0593	2,0662	2,073	2,0797	2,0863	2,0928	2,0992	2,1055	2,1117	2,1179	2,124	2,1299	2,1359	2,1417	2,1475	2,1532
62,6	2,0487	2,0559	2,063	2,07	2,077	2,0838	2,0905	2,0971	2,1036	2,11	2,1164	2,1226	2,1288	2,1349	2,1409	2,1469	2,1527	2,1585	2,1643
62,7	2,0594	2,0666	2,0738	2,0808	2,0878	2,0946	2,1013	2,108	2,1145	2,121	2,1273	2,1336	2,1398	2,1459	2,1519	2,1579	2,1638	2,1696	2,1754
62,8	2,0701	2,0774	2,0846	2,0917	2,0986	2,1055	2,1122	2,1189	2,1255	2,1319	2,1383	2,1446	2,1509	2,157	2,163	2,169	2,1749	2,1808	2,1865
62,9	2,081	2,0883	2,0955	2,1026	2,1095	2,1164	2,1232	2,1299	2,1365	2,143	2,1494	2,1557	2,1619	2,1681	2,1742	2,1802	2,1861	2,192	2,1978
63	2,0918	2,0992	2,1064	2,1135	2,1205	2,1274	2,1342	2,141	2,1476	2,1541	2,1605	2,1668	2,1731	2,1793	2,1854	2,1914	2,1973	2,2032	2,209
63,1	2,1028	2,1102	2,1174	2,1245	2,1316	2,1385	2,1453	2,152	2,1587	2,1652	2,1717	2,178	2,1843	2,1905	2,1966	2,2027	2,2086	2,2145	2,2204
63,2	2,1138	2,1212	2,1285	2,1356	2,1427	2,1496	2,1565	2,1632	2,1699	2,1764	2,1829	2,1893	2,1956	2,2018	2,2079	2,214	2,22	2,2259	2,2318
63,3	2,1248	2,1323	2,1395	2,1467	2,1538	2,1608	2,1676	2,1744	2,1811	2,1877	2,1942	2,2006	2,2069	2,2131	2,2193	2,2254	2,2314	2,2373	2,2432
63,4	2,1359	2,1434	2,1507	2,1579	2,165	2,172	2,1789	2,1857	2,1924	2,199	2,2055	2,2119	2,2183	2,2245	2,2307	2,2368	2,2429	2,2488	2,2547
63,5	2,1471	2,1546	2,1619	2,1692	2,1763	2,1833	2,1902	2,197	2,2038	2,2104	2,2169	2,2234	2,2297	2,236	2,2422	2,2484	2,2544	2,2604	2,2663
63,6	2,1583	2,1658	2,1732	2,1805	2,1876	2,1947	2,2016	2,2084	2,2152	2,2218	2,2284	2,2349	2,2413	2,2475	2,2538	2,2599	2,266	2,272	2,2779
63,7	2,1696	2,1771	2,1845	2,1918	2,199	2,2061	2,213	2,2199	2,2267	2,2333	2,2399	2,2464	2,2528	2,2591	2,2654	2,2715	2,2776	2,2837	2,2896
63,8	2,1809	2,1885	2,1959	2,2032	2,2104	2,2175	2,2245	2,2314	2,2382	2,2449	2,2515	2,258	2,2644	2,2708	2,2771	2,2832	2,2893	2,2954	2,3014
63,9	2,1924	2,1999	2,2074	2,2147	2,2219	2,2291	2,2361	2,243	2,2498	2,2565	2,2631	2,2697	2,2761	2,2825	2,2888	2,295	2,3011	2,3072	2,3131

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
60,5	1,9488	1,954	1,9591	1,9642	1,9693	1,9743	1,9792	1,9841	1,989	1,9938	1,9985	2,0032	2,0078	2,0124	2,017	2,0215	2,026	2,0304	2,0348
60,6	1,9588	1,964	1,9692	1,9743	1,9794	1,9844	1,9893	1,9943	1,9991	2,0039	2,0087	2,0134	2,018	2,0227	2,0272	2,0318	2,0362	2,0407	2,0451
60,7	1,9688	1,9741	1,9793	1,9844	1,9895	1,9946	1,9995	2,0044	2,0093	2,0141	2,0189	2,0236	2,0283	2,0329	2,0375	2,0421	2,0466	2,051	2,0554
60,8	1,979	1,9842	1,9895	1,9946	1,9997	2,0047	2,0097	2,0147	2,0196	2,0244	2,0292	2,0339	2,0386	2,0433	2,0479	2,0524	2,0569	2,0614	2,0659
60,9	1,9891	1,9944	1,9996	2,0048	2,0099	2,015	2,02	2,025	2,0299	2,0347	2,0395	2,0443	2,049	2,0536	2,0583	2,0628	2,0674	2,0719	2,0763
61	1,9993	2,0046	2,0099	2,0151	2,0202	2,0253	2,0303	2,0353	2,0402	2,0451	2,0499	2,0547	2,0594	2,0641	2,0687	2,0733	2,0778	2,0823	2,0868
61,1	2,0096	2,0149	2,0202	2,0254	2,0306	2,0356	2,0407	2,0457	2,0506	2,0555	2,0603	2,0651	2,0699	2,0745	2,0792	2,0838	2,0884	2,0929	2,0974
61,2	2,0199	2,0253	2,0305	2,0358	2,041	2,046	2,0511	2,0561	2,0611	2,066	2,0708	2,0756	2,0804	2,0851	2,0897	2,0944	2,099	2,1035	2,108
61,3	2,0303	2,0357	2,0409	2,0462	2,0514	2,0565	2,0616	2,0666	2,0716	2,0765	2,0814	2,0862	2,091	2,0957	2,1004	2,105	2,1096	2,1141	2,1186
61,4	2,0407	2,0461	2,0514	2,0567	2,0619	2,067	2,0721	2,0771	2,0821	2,0871	2,0919	2,0968	2,1016	2,1063	2,111	2,1157	2,1202	2,1248	2,1293
61,5	2,0512	2,0566	2,0619	2,0672	2,0724	2,0776	2,0827	2,0877	2,0927	2,0977	2,1026	2,1074	2,1122	2,117	2,1217	2,1264	2,131	2,1356	2,1401
61,6	2,0617	2,0671	2,0725	2,0778	2,083	2,0882	2,0933	2,0984	2,1034	2,1084	2,1133	2,1181	2,123	2,1277	2,1325	2,1372	2,1418	2,1464	2,1509
61,7	2,0723	2,0777	2,0831	2,0884	2,0937	2,0989	2,104	2,1091	2,1141	2,1191	2,124	2,1289	2,1337	2,1385	2,1433	2,148	2,1526	2,1572	2,1618
61,8	2,0829	2,0884	2,0938	2,0991	2,1044	2,1096	2,1147	2,1198	2,1249	2,1299	2,1348	2,1397	2,1446	2,1494	2,1541	2,1589	2,1635	2,1681	2,1727
61,9	2,0936	2,0991	2,1045	2,1098	2,1151	2,1204	2,1255	2,1307	2,1357	2,1407	2,1457	2,1506	2,1555	2,1603	2,1651	2,1698	2,1745	2,1791	2,1837
62	2,1044	2,1098	2,1153	2,1206	2,1259	2,1312	2,1364	2,1415	2,1466	2,1516	2,1566	2,1615	2,1664	2,1713	2,176	2,1808	2,1855	2,1901	2,1947
62,1	2,1152	2,1206	2,1261	2,1315	2,1368	2,1421	2,1473	2,1524	2,1575	2,1626	2,1676	2,1725	2,1774	2,1823	2,1871	2,1918	2,1965	2,2012	2,2058
62,2	2,126	2,1315	2,137	2,1424	2,1477	2,153	2,1582	2,1634	2,1685	2,1736	2,1786	2,1836	2,1885	2,1933	2,1982	2,2029	2,2077	2,2123	2,217
62,3	2,1369	2,1424	2,1479	2,1533	2,1587	2,164	2,1692	2,1744	2,1795	2,1846	2,1897	2,1946	2,1996	2,2045	2,2093	2,2141	2,2188	2,2235	2,2282
62,4	2,1478	2,1534	2,1589	2,1643	2,1697	2,175	2,1803	2,1855	2,1907	2,1958	2,2008	2,2058	2,2107	2,2156	2,2205	2,2253	2,2301	2,2348	2,2395
62,5	2,1589	2,1644	2,1699	2,1754	2,1808	2,1861	2,1914	2,1966	2,2018	2,2069	2,212	2,217	2,222	2,2269	2,2317	2,2366	2,2414	2,2461	2,2508
62,6	2,1699	2,1755	2,1811	2,1865	2,1919	2,1973	2,2026	2,2078	2,213	2,2182	2,2232	2,2283	2,2333	2,2382	2,2431	2,2479	2,2527	2,2574	2,2621
62,7	2,181	2,1867	2,1922	2,1977	2,2032	2,2085	2,2138	2,2191	2,2243	2,2294	2,2345	2,2396	2,2446	2,2495	2,2544	2,2593	2,2641	2,2689	2,2736
62,8	2,1922	2,1979	2,2034	2,2089	2,2144	2,2198	2,2251	2,2304	2,2356	2,2408	2,2459	2,251	2,256	2,2609	2,2659	2,2707	2,2755	2,2803	2,2851
62,9	2,2035	2,2091	2,2147	2,2202	2,2257	2,2311	2,2365	2,2418	2,247	2,2522	2,2573	2,2624	2,2674	2,2724	2,2773	2,2822	2,2871	2,2919	2,2966
63	2,2148	2,2204	2,226	2,2316	2,2371	2,2425	2,2479	2,2532	2,2584	2,2637	2,2688	2,2739	2,2789	2,2839	2,2889	2,2938	2,2986	2,3035	2,3082
63,1	2,2261	2,2318	2,2374	2,243	2,2485	2,2539	2,2593	2,2647	2,2699	2,2751	2,2803	2,2854	2,2905	2,2955	2,3005	2,3054	2,3103	2,3151	2,3199
63,2	2,2375	2,2432	2,2489	2,2545	2,26	2,2655	2,2709	2,2762	2,2815	2,2867	2,2919	2,297	2,3021	2,3072	2,3122	2,3171	2,322	2,3268	2,3316
63,3	2,249	2,2547	2,2604	2,266	2,2715	2,277	2,2825	2,2878	2,2931	2,2984	2,3036	2,3087	2,3138	2,3189	2,3239	2,3288	2,3337	2,3386	2,3434
63,4	2,2605	2,2663	2,272	2,2776	2,2831	2,2886	2,2941	2,2995	2,3048	2,3101	2,3153	2,3205	2,3255	2,3306	2,3356	2,3406	2,3455	2,3504	2,3552
63,5	2,2721	2,2779	2,2836	2,2892	2,2948	2,3003	2,3058	2,3112	2,3165	2,3218	2,327	2,3322	2,3374	2,3424	2,3475	2,3525	2,3574	2,3623	2,3671
63,6	2,2838	2,2896	2,2953	2,3009	2,3065	2,3121	2,3176	2,323	2,3283	2,3336	2,3389	2,3441	2,3492	2,3543	2,3594	2,3644	2,3693	2,3742	2,3791
63,7	2,2955	2,3013	2,307	2,3127	2,3183	2,3239	2,3294	2,3348	2,3402	2,3455	2,3508	2,356	2,3612	2,3663	2,3713	2,3763	2,3813	2,3862	2,3911
63,8	2,3072	2,3131	2,3188	2,3245	2,3302	2,3357	2,3413	2,3467	2,3521	2,3574	2,3627	2,368	2,3731	2,3783	2,3834	2,3884	2,3934	2,3983	2,4032
63,9	2,3191	2,3249	2,3307	2,3364	2,3421	2,3477	2,3532	2,3587	2,3641	2,3694	2,3747	2,38	2,3852	2,3903	2,3954	2,4005	2,4055	2,4105	2,4154

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
60,5	2,0391	2,0435	2,0477	2,052	2,0562	2,0603	2,0645	2,0686	2,0726	2,0767	2,0807	2,0846	2,0885	2,0925	2,0963	2,1002	2,104	2,1078	2,1116
60,6	2,0495	2,0538	2,0581	2,0623	2,0665	2,0707	2,0749	2,079	2,0831	2,0871	2,0911	2,0951	2,099	2,1029	2,1068	2,1107	2,1145	2,1183	2,1221
60,7	2,0598	2,0642	2,0685	2,0727	2,077	2,0812	2,0853	2,0894	2,0935	2,0976	2,1016	2,1056	2,1096	2,1135	2,1174	2,1213	2,1251	2,1289	2,1327
60,8	2,0702	2,0746	2,0789	2,0832	2,0874	2,0916	2,0958	2,1	2,1041	2,1081	2,1122	2,1162	2,1201	2,1241	2,128	2,1319	2,1357	2,1396	2,1434
60,9	2,0807	2,0851	2,0894	2,0937	2,098	2,1022	2,1064	2,1105	2,1146	2,1187	2,1228	2,1268	2,1308	2,1347	2,1387	2,1426	2,1464	2,1503	2,1541
61	2,0912	2,0956	2,1	2,1043	2,1085	2,1128	2,117	2,1211	2,1253	2,1294	2,1334	2,1375	2,1414	2,1454	2,1494	2,1533	2,1572	2,161	2,1648
61,1	2,1018	2,1062	2,1106	2,1149	2,1192	2,1234	2,1276	2,1318	2,1359	2,1401	2,1441	2,1482	2,1522	2,1562	2,1601	2,1641	2,1679	2,1718	2,1756
61,2	2,1124	2,1168	2,1212	2,1255	2,1298	2,1341	2,1383	2,1425	2,1467	2,1508	2,1549	2,159	2,163	2,167	2,171	2,1749	2,1788	2,1827	2,1865
61,3	2,1231	2,1275	2,1319	2,1363	2,1406	2,1449	2,1491	2,1533	2,1575	2,1616	2,1657	2,1698	2,1738	2,1778	2,1818	2,1857	2,1897	2,1936	2,1974
61,4	2,1338	2,1383	2,1427	2,147	2,1514	2,1556	2,1599	2,1641	2,1683	2,1725	2,1766	2,1807	2,1847	2,1887	2,1927	2,1967	2,2006	2,2045	2,2084
61,5	2,1446	2,1491	2,1535	2,1579	2,1622	2,1665	2,1708	2,175	2,1792	2,1834	2,1875	2,1916	2,1957	2,1997	2,2037	2,2077	2,2116	2,2155	2,2194
61,6	2,1555	2,1599	2,1644	2,1687	2,1731	2,1774	2,1817	2,1859	2,1902	2,1943	2,1985	2,2026	2,2067	2,2107	2,2147	2,2187	2,2227	2,2266	2,2305
61,7	2,1663	2,1708	2,1753	2,1797	2,184	2,1884	2,1927	2,1969	2,2012	2,2053	2,2095	2,2136	2,2177	2,2218	2,2258	2,2298	2,2338	2,2377	2,2416
61,8	2,1773	2,1818	2,1862	2,1907	2,195	2,1994	2,2037	2,208	2,2122	2,2164	2,2206	2,2247	2,2288	2,2329	2,237	2,241	2,245	2,2489	2,2528
61,9	2,1883	2,1928	2,1973	2,2017	2,2061	2,2105	2,2148	2,2191	2,2233	2,2275	2,2317	2,2359	2,24	2,2441	2,2481	2,2522	2,2562	2,2601	2,2641
62	2,1993	2,2039	2,2084	2,2128	2,2172	2,2216	2,2259	2,2302	2,2345	2,2387	2,2429	2,2471	2,2512	2,2553	2,2594	2,2634	2,2674	2,2714	2,2754
62,1	2,2104	2,215	2,2195	2,2239	2,2284	2,2328	2,2371	2,2414	2,2457	2,25	2,2542	2,2584	2,2625	2,2666	2,2707	2,2748	2,2788	2,2828	2,2867
62,2	2,2216	2,2261	2,2307	2,2352	2,2396	2,244	2,2484	2,2527	2,257	2,2613	2,2655	2,2697	2,2738	2,278	2,2821	2,2861	2,2902	2,2942	2,2982
62,3	2,2328	2,2374	2,2419	2,2464	2,2509	2,2553	2,2597	2,264	2,2683	2,2726	2,2769	2,281	2,2852	2,2894	2,2935	2,2976	2,3016	2,3056	2,3096
62,4	2,2441	2,2487	2,2532	2,2577	2,2622	2,2667	2,2711	2,2754	2,2797	2,284	2,2883	2,2925	2,2967	2,3008	2,305	2,3091	2,3131	2,3172	2,3211
62,5	2,2554	2,26	2,2646	2,2691	2,2736	2,2781	2,2825	2,2868	2,2912	2,2955	2,2998	2,304	2,3082	2,3124	2,3165	2,3206	2,3247	2,3287	2,3327
62,6	2,2668	2,2714	2,276	2,2805	2,285	2,2895	2,2939	2,2983	2,3027	2,307	2,3113	2,3155	2,3198	2,3239	2,3281	2,3322	2,3363	2,3404	2,3444
62,7	2,2783	2,2829	2,2875	2,292	2,2966	2,3011	2,3055	2,3099	2,3143	2,3186	2,3229	2,3271	2,3314	2,3356	2,3397	2,3439	2,348	2,352	2,3561
62,8	2,2898	2,2944	2,299	2,3036	2,3081	2,3126	2,3171	2,3215	2,3259	2,3302	2,3345	2,3388	2,3431	2,3473	2,3514	2,3556	2,3597	2,3638	2,3678
62,9	2,3013	2,306	2,3106	2,3152	2,3197	2,3242	2,3287	2,3332	2,3376	2,3419	2,3463	2,3505	2,3548	2,359	2,3632	2,3674	2,3715	2,3756	2,3797
63	2,3129	2,3176	2,3223	2,3269	2,3314	2,3359	2,3404	2,3449	2,3493	2,3537	2,358	2,3623	2,3666	2,3708	2,375	2,3792	2,3833	2,3875	2,3915
63,1	2,3246	2,3293	2,334	2,3386	2,3432	2,3477	2,3522	2,3567	2,3611	2,3655	2,3698	2,3742	2,3785	2,3827	2,3869	2,3911	2,3953	2,3994	2,4035
63,2	2,3364	2,3411	2,3457	2,3504	2,355	2,3595	2,364	2,3685	2,3729	2,3774	2,3817	2,3861	2,3904	2,3946	2,3989	2,4031	2,4072	2,4114	2,4155
63,3	2,3482	2,3529	2,3576	2,3622	2,3668	2,3714	2,3759	2,3804	2,3849	2,3893	2,3937	2,398	2,4024	2,4066	2,4109	2,4151	2,4193	2,4234	2,4276
63,4	2,36	2,3648	2,3695	2,3741	2,3788	2,3834	2,3879	2,3924	2,3969	2,4013	2,4057	2,41	2,4144	2,4187	2,4229	2,4272	2,4314	2,4355	2,4397
63,5	2,3719	2,3767	2,3814	2,3861	2,3907	2,3953	2,3999	2,4044	2,4089	2,4133	2,4178	2,4222	2,4265	2,4308	2,4351	2,4393	2,4435	2,4477	2,4519
63,6	2,3839	2,3887	2,3934	2,3981	2,4028	2,4074	2,412	2,4165	2,421	2,4255	2,4299	2,4343	2,4386	2,443	2,4472	2,4515	2,4557	2,4599	2,4641
63,7	2,396	2,4008	2,4055	2,4102	2,4149	2,4195	2,4241	2,4287	2,4332	2,4376	2,4421	2,4465	2,4509	2,4552	2,4595	2,4638	2,468	2,4722	2,4764
63,8	2,4081	2,4129	2,4176	2,4224	2,4271	2,4317	2,4363	2,4409	2,4454	2,4499	2,4543	2,4588	2,4631	2,4675	2,4718	2,4761	2,4804	2,4846	2,4888
63,9	2,4202	2,4251	2,4299	2,4346	2,4393	2,4439	2,4486	2,4531	2,4577	2,4622	2,4667	2,4711	2,4755	2,4799	2,4842	2,4885	2,4928	2,497	2,5012

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
60,5	2,1153	2,119	2,1227	2,1263	2,1299	2,1335	2,1371	2,1407	2,1442	2,1477	2,1512	2,1546	2,1581	2,1615	2,1649	2,1683	2,1716	2,1749	2,1783
60,6	2,1258	2,1296	2,1332	2,1369	2,1406	2,1442	2,1478	2,1513	2,1549	2,1584	2,1619	2,1653	2,1688	2,1722	2,1756	2,179	2,1824	2,1857	2,189
60,7	2,1365	2,1402	2,1439	2,1476	2,1512	2,1548	2,1584	2,162	2,1656	2,1691	2,1726	2,1761	2,1795	2,183	2,1864	2,1898	2,1932	2,1965	2,1999
60,8	2,1471	2,1509	2,1546	2,1583	2,1619	2,1656	2,1692	2,1728	2,1763	2,1799	2,1834	2,1869	2,1903	2,1938	2,1972	2,2006	2,204	2,2074	2,2107
60,9	2,1578	2,1616	2,1653	2,169	2,1727	2,1763	2,18	2,1836	2,1871	2,1907	2,1942	2,1977	2,2012	2,2047	2,2081	2,2115	2,2149	2,2183	2,2217
61	2,1686	2,1724	2,1761	2,1798	2,1835	2,1872	2,1908	2,1944	2,198	2,2016	2,2051	2,2086	2,2121	2,2156	2,219	2,2225	2,2259	2,2293	2,2326
61,1	2,1794	2,1832	2,187	2,1907	2,1944	2,1981	2,2017	2,2053	2,2089	2,2125	2,2161	2,2196	2,2231	2,2266	2,23	2,2335	2,2369	2,2403	2,2437
61,2	2,1903	2,1941	2,1979	2,2016	2,2053	2,209	2,2127	2,2163	2,2199	2,2235	2,2271	2,2306	2,2341	2,2376	2,2411	2,2445	2,248	2,2514	2,2547
61,3	2,2012	2,2051	2,2088	2,2126	2,2163	2,22	2,2237	2,2273	2,2309	2,2345	2,2381	2,2417	2,2452	2,2487	2,2522	2,2556	2,2591	2,2625	2,2659
61,4	2,2122	2,2161	2,2198	2,2236	2,2273	2,231	2,2347	2,2384	2,242	2,2456	2,2492	2,2528	2,2563	2,2598	2,2633	2,2668	2,2703	2,2737	2,2771
61,5	2,2233	2,2271	2,2309	2,2347	2,2384	2,2421	2,2459	2,2495	2,2531	2,2568	2,2604	2,2639	2,2675	2,271	2,2745	2,278	2,2815	2,2849	2,2883
61,6	2,2344	2,2382	2,242	2,2458	2,2496	2,2533	2,257	2,2607	2,2643	2,268	2,2716	2,2752	2,2787	2,2823	2,2858	2,2893	2,2928	2,2962	2,2996
61,7	2,2455	2,2494	2,2532	2,257	2,2608	2,2645	2,2682	2,2719	2,2756	2,2792	2,2829	2,2865	2,29	2,2936	2,2971	2,3006	2,3041	2,3076	2,311
61,8	2,2567	2,2606	2,2644	2,2682	2,272	2,2758	2,2795	2,2832	2,2869	2,2905	2,2942	2,2978	2,3014	2,3049	2,3085	2,312	2,3155	2,319	2,3224
61,9	2,268	2,2719	2,2757	2,2795	2,2833	2,2871	2,2908	2,2946	2,2983	2,3019	2,3056	2,3092	2,3128	2,3164	2,3199	2,3234	2,327	2,3304	2,3339
62	2,2793	2,2832	2,287	2,2909	2,2947	2,2985	2,3022	2,306	2,3097	2,3134	2,317	2,3206	2,3242	2,3278	2,3314	2,3349	2,3385	2,342	2,3454
62,1	2,2907	2,2946	2,2984	2,3023	2,3061	2,3099	2,3137	2,3174	2,3211	2,3248	2,3285	2,3321	2,3358	2,3394	2,3429	2,3465	2,35	2,3535	2,357
62,2	2,3021	2,306	2,3099	2,3137	2,3176	2,3214	2,3252	2,3289	2,3327	2,3364	2,3401	2,3437	2,3473	2,351	2,3545	2,3581	2,3616	2,3652	2,3686
62,3	2,3136	2,3175	2,3214	2,3253	2,3291	2,3329	2,3367	2,3405	2,3443	2,348	2,3516	2,3553	2,359	2,3626	2,3662	2,3698	2,3733	2,3769	2,3804
62,4	2,3251	2,3291	2,333	2,3369	2,3407	2,3446	2,3483	2,3521	2,3559	2,3596	2,3633	2,367	2,3707	2,3743	2,3779	2,3815	2,385	2,3886	2,3921
62,5	2,3367	2,3407	2,3446	2,3485	2,3524	2,3562	2,36	2,3638	2,3676	2,3713	2,3751	2,3788	2,3824	2,3861	2,3897	2,3933	2,3969	2,4004	2,4039
62,6	2,3484	2,3523	2,3563	2,3602	2,3641	2,3679	2,3718	2,3756	2,3794	2,3831	2,3868	2,3905	2,3942	2,3979	2,4015	2,4051	2,4087	2,4123	2,4158
62,7	2,3601	2,3641	2,368	2,372	2,3758	2,3797	2,3836	2,3874	2,3912	2,3949	2,3987	2,4024	2,4061	2,4098	2,4134	2,417	2,4206	2,4242	2,4278
62,8	2,3719	2,3759	2,3798	2,3838	2,3877	2,3916	2,3954	2,3992	2,403	2,4068	2,4106	2,4143	2,418	2,4217	2,4253	2,429	2,4326	2,4362	2,4398
62,9	2,3837	2,3877	2,3917	2,3956	2,3996	2,4035	2,4073	2,4112	2,415	2,4188	2,4225	2,4263	2,43	2,4337	2,4374	2,441	2,4446	2,4482	2,4518
63	2,3956	2,3996	2,4036	2,4076	2,4115	2,4154	2,4193	2,4231	2,427	2,4308	2,4346	2,4383	2,442	2,4458	2,4494	2,4531	2,4567	2,4603	2,4639
63,1	2,4075	2,4116	2,4156	2,4196	2,4235	2,4274	2,4313	2,4352	2,439	2,4429	2,4466	2,4504	2,4542	2,4579	2,4616	2,4652	2,4689	2,4725	2,4761
63,2	2,4196	2,4236	2,4276	2,4316	2,4356	2,4395	2,4434	2,4473	2,4512	2,455	2,4588	2,4625	2,4663	2,47	2,4737	2,4774	2,4811	2,4847	2,4883
63,3	2,4316	2,4357	2,4397	2,4437	2,4477	2,4517	2,4556	2,4595	2,4633	2,4672	2,471	2,4748	2,4785	2,4823	2,486	2,4897	2,4934	2,497	2,5006
63,4	2,4438	2,4478	2,4519	2,4559	2,4599	2,4639	2,4678	2,4717	2,4756	2,4794	2,4833	2,4871	2,4908	2,4946	2,4983	2,502	2,5057	2,5094	2,513
63,5	2,456	2,46	2,4641	2,4681	2,4721	2,4761	2,4801	2,484	2,4879	2,4917	2,4956	2,4994	2,5032	2,5069	2,5107	2,5144	2,5181	2,5218	2,5254
63,6	2,4682	2,4723	2,4764	2,4805	2,4845	2,4884	2,4924	2,4963	2,5002	2,5041	2,508	2,5118	2,5156	2,5194	2,5231	2,5269	2,5306	2,5343	2,5379
63,7	2,4805	2,4847	2,4888	2,4928	2,4968	2,5008	2,5048	2,5088	2,5127	2,5165	2,5204	2,5243	2,5281	2,5319	2,5356	2,5394	2,5431	2,5468	2,5505
63,8	2,4929	2,4971	2,5011	2,5052	2,5093	2,5133	2,5173	2,5212	2,5252	2,5291	2,5329	2,5368	2,5406	2,5444	2,5482	2,5519	2,5557	2,5594	2,5631
63,9	2,5054	2,5095	2,5136	2,5177	2,5218	2,5258	2,5298	2,5338	2,5377	2,5416	2,5455	2,5494	2,5532	2,557	2,5608	2,5646	2,5683	2,5721	2,5758

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
60,5	2,1815	2,1848	2,1881	2,1913	2,1945	2,1977	2,2009	2,204	2,2072	2,2103	2,2134	2,2165	2,2195	2,2226	2,2256	2,2286	2,2316	2,2346	2,2376
60,6	2,1923	2,1956	2,1989	2,2021	2,2053	2,2085	2,2117	2,2149	2,218	2,2212	2,2243	2,2274	2,2304	2,2335	2,2365	2,2396	2,2426	2,2456	2,2485
60,7	2,2032	2,2065	2,2097	2,213	2,2162	2,2194	2,2226	2,2258	2,2289	2,2321	2,2352	2,2383	2,2414	2,2444	2,2475	2,2505	2,2536	2,2566	2,2596
60,8	2,214	2,2173	2,2206	2,2239	2,2271	2,2304	2,2336	2,2367	2,2399	2,2431	2,2462	2,2493	2,2524	2,2555	2,2585	2,2616	2,2646	2,2676	2,2706
60,9	2,225	2,2283	2,2316	2,2349	2,2381	2,2413	2,2445	2,2478	2,2509	2,2541	2,2572	2,2603	2,2635	2,2665	2,2696	2,2727	2,2757	2,2787	2,2817
61	2,236	2,2393	2,2426	2,2459	2,2491	2,2524	2,2556	2,2588	2,262	2,2652	2,2683	2,2715	2,2746	2,2777	2,2808	2,2838	2,2869	2,2899	2,2929
61,1	2,247	2,2503	2,2537	2,257	2,2602	2,2635	2,2667	2,2699	2,2731	2,2763	2,2795	2,2826	2,2857	2,2889	2,292	2,295	2,2981	2,3011	2,3042
61,2	2,2581	2,2615	2,2648	2,2681	2,2714	2,2746	2,2779	2,2811	2,2843	2,2875	2,2907	2,2938	2,297	2,3001	2,3032	2,3063	2,3093	2,3124	2,3154
61,3	2,2693	2,2726	2,276	2,2793	2,2826	2,2858	2,2891	2,2923	2,2956	2,2987	2,3019	2,3051	2,3082	2,3114	2,3145	2,3176	2,3207	2,3237	2,3268
61,4	2,2805	2,2838	2,2872	2,2905	2,2938	2,2971	2,3004	2,3036	2,3068	2,3101	2,3132	2,3164	2,3196	2,3227	2,3258	2,3289	2,332	2,3351	2,3382
61,5	2,2917	2,2951	2,2985	2,3018	2,3051	2,3084	2,3117	2,3149	2,3182	2,3214	2,3246	2,3278	2,331	2,3341	2,3372	2,3403	2,3434	2,3465	2,3496
61,6	2,3031	2,3064	2,3098	2,3132	2,3165	2,3198	2,3231	2,3263	2,3296	2,3328	2,336	2,3392	2,3424	2,3456	2,3487	2,3518	2,355	2,358	2,3611
61,7	2,3144	2,3178	2,3212	2,3246	2,3279	2,3312	2,3345	2,3378	2,3411	2,3443	2,3475	2,3507	2,3539	2,3571	2,3602	2,3634	2,3665	2,3696	2,3727
61,8	2,3259	2,3292	2,3326	2,336	2,3394	2,3427	2,346	2,3493	2,3525	2,3558	2,359	2,3623	2,3655	2,3686	2,3718	2,3749	2,3781	2,3812	2,3843
61,9	2,3373	2,3408	2,3441	2,3475	2,3509	2,3542	2,3575	2,3609	2,3641	2,3674	2,3706	2,3739	2,3771	2,3803	2,3834	2,3866	2,3897	2,3929	2,396
62	2,3489	2,3523	2,3557	2,3591	2,3625	2,3658	2,3692	2,3725	2,3758	2,379	2,3823	2,3855	2,3888	2,3919	2,3951	2,3983	2,4014	2,4046	2,4077
62,1	2,3605	2,3639	2,3673	2,3707	2,3741	2,3775	2,3808	2,3841	2,3875	2,3907	2,394	2,3972	2,4005	2,4037	2,4069	2,4101	2,4132	2,4164	2,4195
62,2	2,3721	2,3756	2,379	2,3824	2,3858	2,3892	2,3925	2,3959	2,3992	2,4025	2,4058	2,409	2,4123	2,4155	2,4187	2,4219	2,4251	2,4282	2,4313
62,3	2,3838	2,3873	2,3908	2,3942	2,3976	2,4009	2,4043	2,4077	2,411	2,4143	2,4176	2,4209	2,4241	2,4273	2,4305	2,4337	2,4369	2,4401	2,4432
62,4	2,3956	2,3991	2,4026	2,406	2,4094	2,4128	2,4161	2,4195	2,4228	2,4262	2,4295	2,4327	2,436	2,4393	2,4425	2,4457	2,4489	2,452	2,4552
62,5	2,4074	2,4109	2,4144	2,4178	2,4213	2,4247	2,4281	2,4314	2,4348	2,4381	2,4414	2,4447	2,448	2,4512	2,4545	2,4577	2,4609	2,4641	2,4672
62,6	2,4193	2,4228	2,4263	2,4298	2,4332	2,4366	2,44	2,4434	2,4468	2,4501	2,4534	2,4567	2,46	2,4632	2,4665	2,4697	2,473	2,4761	2,4793
62,7	2,4313	2,4348	2,4383	2,4417	2,4452	2,4486	2,452	2,4554	2,4588	2,4621	2,4655	2,4688	2,4721	2,4753	2,4786	2,4818	2,4851	2,4883	2,4914
62,8	2,4433	2,4468	2,4503	2,4538	2,4573	2,4607	2,4641	2,4675	2,4709	2,4742	2,4776	2,4809	2,4842	2,4875	2,4908	2,494	2,4972	2,5005	2,5036
62,9	2,4554	2,4589	2,4624	2,4659	2,4694	2,4728	2,4762	2,4796	2,4831	2,4864	2,4898	2,4931	2,4964	2,4997	2,503	2,5062	2,5095	2,5127	2,5159
63	2,4675	2,471	2,4746	2,4781	2,4815	2,485	2,4884	2,4919	2,4953	2,4987	2,502	2,5054	2,5087	2,512	2,5153	2,5185	2,5218	2,525	2,5282
63,1	2,4797	2,4832	2,4868	2,4903	2,4938	2,4973	2,5007	2,5041	2,5076	2,5109	2,5143	2,5177	2,521	2,5243	2,5276	2,5309	2,5342	2,5374	2,5407
63,2	2,4919	2,4955	2,499	2,5026	2,5061	2,5095	2,513	2,5165	2,5199	2,5233	2,5267	2,53	2,5334	2,5367	2,54	2,5433	2,5466	2,5499	2,5531
63,3	2,5042	2,5078	2,5114	2,5149	2,5184	2,5219	2,5254	2,5288	2,5323	2,5357	2,5391	2,5425	2,5458	2,5492	2,5525	2,5558	2,5591	2,5624	2,5656
63,4	2,5166	2,5202	2,5238	2,5273	2,5309	2,5344	2,5378	2,5413	2,5448	2,5482	2,5516	2,555	2,5584	2,5617	2,565	2,5683	2,5716	2,5749	2,5782
63,5	2,529	2,5327	2,5362	2,5398	2,5433	2,5469	2,5504	2,5538	2,5573	2,5607	2,5641	2,5676	2,5709	2,5743	2,5776	2,581	2,5843	2,5876	2,5908
63,6	2,5416	2,5452	2,5488	2,5523	2,5559	2,5594	2,5629	2,5664	2,5699	2,5733	2,5768	2,5802	2,5836	2,5869	2,5903	2,5936	2,5969	2,6002	2,6035
63,7	2,5541	2,5577	2,5613	2,5649	2,5685	2,572	2,5755	2,5791	2,5825	2,586	2,5894	2,5929	2,5963	2,5996	2,603	2,6064	2,6097	2,613	2,6163
63,8	2,5667	2,5704	2,574	2,5776	2,5812	2,5847	2,5882	2,5918	2,5953	2,5987	2,6022	2,6056	2,609	2,6124	2,6158	2,6192	2,6225	2,6258	2,6291
63,9	2,5794	2,5831	2,5867	2,5903	2,5939	2,5975	2,601	2,6045	2,6081	2,6115	2,615	2,6184	2,6218	2,6253	2,6287	2,632	2,6354	2,6387	2,642

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
60,5	2,2406	2,2435	2,2464	2,2493	2,2522	2,2551	2,2579	2,2608
60,6	2,2515	2,2545	2,2574	2,2603	2,2632	2,2661	2,269	2,2718
60,7	2,2625	2,2655	2,2684	2,2713	2,2743	2,2772	2,28	2,2829
60,8	2,2736	2,2766	2,2795	2,2824	2,2854	2,2883	2,2912	2,294
60,9	2,2847	2,2877	2,2907	2,2936	2,2965	2,2995	2,3024	2,3053
61	2,2959	2,2989	2,3019	2,3048	2,3078	2,3107	2,3136	2,3165
61,1	2,3071	2,3101	2,3131	2,3161	2,319	2,322	2,3249	2,3278
61,2	2,3184	2,3215	2,3244	2,3274	2,3304	2,3333	2,3362	2,3391
61,3	2,3298	2,3328	2,3358	2,3388	2,3418	2,3447	2,3477	2,3506
61,4	2,3412	2,3442	2,3472	2,3502	2,3532	2,3562	2,3591	2,362
61,5	2,3527	2,3557	2,3587	2,3617	2,3647	2,3677	2,3706	2,3736
61,6	2,3642	2,3672	2,3702	2,3733	2,3762	2,3792	2,3822	2,3851
61,7	2,3757	2,3788	2,3818	2,3849	2,3879	2,3909	2,3938	2,3968
61,8	2,3874	2,3904	2,3935	2,3965	2,3995	2,4025	2,4055	2,4085
61,9	2,399	2,4021	2,4052	2,4082	2,4113	2,4143	2,4172	2,4202
62	2,4108	2,4139	2,417	2,42	2,423	2,4261	2,4291	2,432
62,1	2,4226	2,4257	2,4288	2,4318	2,4349	2,4379	2,4409	2,4439
62,2	2,4345	2,4376	2,4406	2,4437	2,4468	2,4498	2,4528	2,4558
62,3	2,4464	2,4495	2,4526	2,4557	2,4587	2,4618	2,4648	2,4678
62,4	2,4583	2,4615	2,4646	2,4677	2,4707	2,4738	2,4768	2,4799
62,5	2,4704	2,4735	2,4766	2,4797	2,4828	2,4859	2,4889	2,492
62,6	2,4825	2,4856	2,4887	2,4918	2,4949	2,498	2,5011	2,5041
62,7	2,4946	2,4978	2,5009	2,504	2,5071	2,5102	2,5133	2,5164
62,8	2,5068	2,51	2,5131	2,5163	2,5194	2,5225	2,5256	2,5287
62,9	2,5191	2,5223	2,5255	2,5286	2,5317	2,5348	2,5379	2,541
63	2,5315	2,5346	2,5378	2,541	2,5441	2,5472	2,5503	2,5534
63,1	2,5439	2,5471	2,5502	2,5534	2,5565	2,5597	2,5628	2,5659
63,2	2,5563	2,5595	2,5627	2,5659	2,569	2,5722	2,5753	2,5784
63,3	2,5688	2,572	2,5753	2,5784	2,5816	2,5848	2,5879	2,591
63,4	2,5814	2,5846	2,5879	2,5911	2,5942	2,5974	2,6005	2,6037
63,5	2,5941	2,5973	2,6005	2,6037	2,6069	2,6101	2,6133	2,6164
63,6	2,6068	2,61	2,6133	2,6165	2,6197	2,6228	2,626	2,6292
63,7	2,6196	2,6228	2,6261	2,6293	2,6325	2,6357	2,6389	2,642
63,8	2,6324	2,6357	2,6389	2,6422	2,6454	2,6486	2,6518	2,6549
63,9	2,6453	2,6486	2,6519	2,6551	2,6583	2,6616	2,6647	2,6679

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
64	1,7099	1,7358	1,7598	1,7823	1,8035	1,8234	1,8423	1,8602	1,8774	1,8937	1,9094	1,9245	1,939	1,953	1,9665	1,9796	1,9922	2,0045	2,0164
64,1	1,7197	1,7457	1,7698	1,7924	1,8136	1,8336	1,8525	1,8706	1,8877	1,9042	1,9199	1,935	1,9496	1,9636	1,9772	1,9903	2,003	2,0153	2,0273
64,2	1,7295	1,7556	1,7798	1,8025	1,8238	1,8438	1,8629	1,8809	1,8982	1,9147	1,9305	1,9457	1,9603	1,9744	1,988	2,0011	2,0139	2,0262	2,0382
64,3	1,7394	1,7656	1,7899	1,8126	1,834	1,8541	1,8732	1,8914	1,9087	1,9252	1,9411	1,9563	1,971	1,9851	1,9988	2,012	2,0248	2,0372	2,0492
64,4	1,7494	1,7756	1,8	1,8228	1,8443	1,8645	1,8837	1,9019	1,9192	1,9358	1,9518	1,967	1,9818	1,9959	2,0096	2,0229	2,0357	2,0482	2,0603
64,5	1,7593	1,7857	1,8102	1,8331	1,8546	1,8749	1,8941	1,9124	1,9299	1,9465	1,9625	1,9778	1,9926	2,0068	2,0206	2,0339	2,0468	2,0593	2,0714
64,6	1,7694	1,7959	1,8205	1,8434	1,865	1,8854	1,9047	1,923	1,9405	1,9572	1,9733	1,9887	2,0035	2,0178	2,0316	2,0449	2,0579	2,0704	2,0825
64,7	1,7795	1,8061	1,8308	1,8538	1,8755	1,8959	1,9153	1,9337	1,9513	1,968	1,9841	1,9996	2,0144	2,0288	2,0426	2,056	2,069	2,0816	2,0938
64,8	1,7897	1,8164	1,8411	1,8643	1,886	1,9065	1,926	1,9444	1,962	1,9789	1,995	2,0105	2,0255	2,0399	2,0537	2,0672	2,0802	2,0928	2,105
64,9	1,7999	1,8267	1,8515	1,8748	1,8966	1,9172	1,9367	1,9552	1,9729	1,9898	2,006	2,0216	2,0365	2,051	2,0649	2,0784	2,0914	2,1041	2,1164
65	1,8102	1,8371	1,862	1,8853	1,9072	1,9279	1,9474	1,966	1,9838	2,0008	2,017	2,0326	2,0477	2,0622	2,0761	2,0897	2,1028	2,1155	2,1278
65,1	1,8205	1,8475	1,8725	1,8959	1,9179	1,9386	1,9583	1,977	1,9948	2,0118	2,0281	2,0438	2,0589	2,0734	2,0874	2,101	2,1142	2,1269	2,1393
65,2	1,8309	1,858	1,8831	1,9066	1,9286	1,9495	1,9692	1,9879	2,0058	2,0229	2,0392	2,055	2,0701	2,0847	2,0988	2,1124	2,1256	2,1384	2,1508
65,3	1,8414	1,8685	1,8937	1,9173	1,9394	1,9603	1,9801	1,9989	2,0169	2,034	2,0504	2,0662	2,0814	2,0961	2,1102	2,1239	2,1371	2,15	2,1624
65,4	1,8519	1,8792	1,9045	1,9281	1,9503	1,9713	1,9911	2,01	2,028	2,0452	2,0617	2,0775	2,0928	2,1075	2,1217	2,1354	2,1487	2,1616	2,1741
65,5	1,8625	1,8898	1,9152	1,9389	1,9612	1,9823	2,0022	2,0212	2,0392	2,0565	2,073	2,0889	2,1042	2,119	2,1332	2,147	2,1603	2,1733	2,1858
65,6	1,8731	1,9005	1,926	1,9499	1,9722	1,9933	2,0133	2,0323	2,0505	2,0678	2,0844	2,1004	2,1157	2,1305	2,1448	2,1586	2,172	2,185	2,1976
65,7	1,8838	1,9113	1,9369	1,9608	1,9833	2,0045	2,0245	2,0436	2,0618	2,0792	2,0959	2,1119	2,1273	2,1421	2,1565	2,1703	2,1838	2,1968	2,2094
65,8	1,8945	1,9222	1,9479	1,9718	1,9944	2,0157	2,0358	2,055	2,0732	2,0907	2,1074	2,1235	2,1389	2,1538	2,1682	2,1821	2,1956	2,2087	2,2214
65,9	1,9053	1,9331	1,9589	1,983	2,0056	2,0269	2,0471	2,0663	2,0847	2,1022	2,119	2,1351	2,1506	2,1656	2,18	2,194	2,2075	2,2206	2,2333
66	1,9162	1,9441	1,9699	1,9941	2,0168	2,0382	2,0585	2,0778	2,0962	2,1138	2,1306	2,1468	2,1624	2,1774	2,1918	2,2059	2,2194	2,2326	2,2454
66,1	1,9271	1,9551	1,9811	2,0053	2,0281	2,0496	2,07	2,0893	2,1078	2,1254	2,1423	2,1586	2,1742	2,1892	2,2038	2,2179	2,2315	2,2447	2,2575
66,2	1,9381	1,9662	1,9923	2,0166	2,0395	2,061	2,0815	2,1009	2,1194	2,1371	2,1541	2,1704	2,1861	2,2012	2,2158	2,2299	2,2436	2,2568	2,2697
66,3	1,9492	1,9773	2,0035	2,0279	2,0509	2,0725	2,093	2,1125	2,1311	2,1489	2,1659	2,1823	2,198	2,2132	2,2278	2,242	2,2557	2,269	2,2819
66,4	1,9603	1,9886	2,0148	2,0393	2,0624	2,0841	2,1047	2,1242	2,1429	2,1607	2,1778	2,1942	2,21	2,2252	2,2399	2,2542	2,2679	2,2813	2,2942
66,5	1,9715	1,9999	2,0262	2,0508	2,0739	2,0957	2,1164	2,136	2,1547	2,1726	2,1898	2,2063	2,2221	2,2374	2,2521	2,2664	2,2802	2,2936	2,3066
66,6	1,9827	2,0112	2,0376	2,0623	2,0855	2,1074	2,1282	2,1479	2,1666	2,1846	2,2018	2,2183	2,2343	2,2496	2,2644	2,2787	2,2926	2,306	2,319
66,7	1,994	2,0226	2,0491	2,0739	2,0972	2,1192	2,14	2,1598	2,1786	2,1967	2,2139	2,2305	2,2465	2,2618	2,2767	2,2911	2,305	2,3185	2,3316
66,8	2,0054	2,0341	2,0607	2,0856	2,109	2,131	2,1519	2,1717	2,1907	2,2088	2,2261	2,2427	2,2588	2,2742	2,2891	2,3035	2,3175	2,331	2,3442
66,9	2,0168	2,0456	2,0724	2,0973	2,1208	2,1429	2,1639	2,1838	2,2028	2,2209	2,2383	2,255	2,2711	2,2866	2,3016	2,316	2,3301	2,3436	2,3568
67	2,0283	2,0573	2,0841	2,1091	2,1327	2,1549	2,1759	2,1959	2,215	2,2332	2,2506	2,2674	2,2835	2,2991	2,3141	2,3286	2,3427	2,3563	2,3695
67,1	2,0399	2,0689	2,0959	2,121	2,1446	2,1669	2,188	2,2081	2,2272	2,2455	2,263	2,2798	2,296	2,3116	2,3267	2,3413	2,3554	2,3691	2,3823
67,2	2,0515	2,0806	2,1077	2,1329	2,1566	2,179	2,2002	2,2203	2,2395	2,2579	2,2755	2,2923	2,3086	2,3242	2,3394	2,354	2,3681	2,3819	2,3952
67,3	2,0632	2,0925	2,1196	2,1449	2,1687	2,1912	2,2124	2,2326	2,2519	2,2703	2,2879	2,3049	2,3212	2,3369	2,3521	2,3668	2,381	2,3948	2,4081
67,4	2,075	2,1044	2,1316	2,157	2,1809	2,2034	2,2247	2,245	2,2644	2,2828	2,3005	2,3176	2,3339	2,3497	2,3649	2,3796	2,3939	2,4077	2,4211

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7

64	2,028	2,0393	2,0502	2,0609	2,0713	2,0815	2,0915	2,1012	2,1107	2,12	2,1291	2,138	2,1468	2,1554	2,1639	2,1721	2,1803	2,1882	2,1961
64,1	2,0389	2,0502	2,0612	2,0719	2,0824	2,0926	2,1026	2,1124	2,1219	2,1313	2,1404	2,1494	2,1581	2,1668	2,1752	2,1835	2,1917	2,1997	2,2076
64,2	2,0499	2,0612	2,0723	2,083	2,0935	2,1038	2,1138	2,1236	2,1332	2,1425	2,1517	2,1607	2,1695	2,1782	2,1867	2,195	2,2032	2,2112	2,2191
64,3	2,0609	2,0723	2,0834	2,0942	2,1047	2,115	2,1251	2,1349	2,1445	2,1539	2,1631	2,1721	2,181	2,1897	2,1982	2,2065	2,2148	2,2228	2,2308
64,4	2,072	2,0834	2,0945	2,1054	2,116	2,1263	2,1364	2,1462	2,1559	2,1653	2,1745	2,1836	2,1925	2,2012	2,2097	2,2181	2,2264	2,2345	2,2424
64,5	2,0832	2,0946	2,1058	2,1167	2,1273	2,1376	2,1477	2,1576	2,1673	2,1768	2,1861	2,1952	2,204	2,2128	2,2214	2,2298	2,2381	2,2462	2,2542
64,6	2,0944	2,1059	2,1171	2,128	2,1386	2,149	2,1592	2,1691	2,1788	2,1883	2,1976	2,2067	2,2157	2,2245	2,233	2,2415	2,2498	2,258	2,266
64,7	2,1056	2,1172	2,1284	2,1394	2,15	2,1605	2,1707	2,1806	2,1904	2,1999	2,2092	2,2184	2,2274	2,2362	2,2448	2,2533	2,2616	2,2698	2,2778
64,8	2,117	2,1285	2,1398	2,1508	2,1615	2,172	2,1822	2,1922	2,202	2,2116	2,2209	2,2301	2,2391	2,248	2,2566	2,2651	2,2735	2,2817	2,2898
64,9	2,1283	2,14	2,1513	2,1623	2,1731	2,1836	2,1938	2,2039	2,2137	2,2233	2,2327	2,2419	2,2509	2,2598	2,2685	2,277	2,2854	2,2937	2,3018
65	2,1398	2,1515	2,1628	2,1739	2,1847	2,1952	2,2055	2,2156	2,2254	2,2351	2,2445	2,2538	2,2628	2,2717	2,2804	2,289	2,2974	2,3057	2,3138
65,1	2,1513	2,163	2,1744	2,1855	2,1964	2,2069	2,2173	2,2274	2,2372	2,2469	2,2564	2,2656	2,2748	2,2837	2,2924	2,301	2,3095	2,3178	2,3259
65,2	2,1629	2,1746	2,1861	2,1972	2,2081	2,2187	2,2291	2,2392	2,2491	2,2588	2,2683	2,2776	2,2868	2,2957	2,3045	2,3131	2,3216	2,3299	2,3381
65,3	2,1745	2,1863	2,1978	2,209	2,2199	2,2306	2,2409	2,2511	2,2611	2,2708	2,2803	2,2897	2,2988	2,3078	2,3166	2,3253	2,3338	2,3421	2,3503
65,4	2,1862	2,1981	2,2096	2,2208	2,2318	2,2424	2,2529	2,2631	2,2731	2,2828	2,2924	2,3018	2,311	2,32	2,3288	2,3375	2,346	2,3544	2,3626
65,5	2,198	2,2099	2,2214	2,2327	2,2437	2,2544	2,2649	2,2751	2,2851	2,2949	2,3045	2,3139	2,3232	2,3322	2,3411	2,3498	2,3584	2,3668	2,375
65,6	2,2098	2,2218	2,2333	2,2447	2,2557	2,2664	2,2769	2,2872	2,2973	2,3071	2,3167	2,3262	2,3354	2,3445	2,3534	2,3622	2,3708	2,3792	2,3875
65,7	2,2217	2,2337	2,2453	2,2567	2,2677	2,2785	2,2891	2,2994	2,3095	2,3193	2,329	2,3385	2,3478	2,3569	2,3658	2,3746	2,3832	2,3917	2,4
65,8	2,2337	2,2457	2,2574	2,2687	2,2798	2,2907	2,3013	2,3116	2,3217	2,3316	2,3413	2,3508	2,3602	2,3693	2,3782	2,3871	2,3957	2,4042	2,4126
65,9	2,2457	2,2578	2,2695	2,2809	2,292	2,3029	2,3135	2,3239	2,334	2,344	2,3537	2,3633	2,3726	2,3818	2,3908	2,3996	2,4083	2,4168	2,4252
66	2,2578	2,2699	2,2816	2,2931	2,3043	2,3152	2,3258	2,3363	2,3464	2,3564	2,3662	2,3758	2,3851	2,3943	2,4034	2,4122	2,4209	2,4295	2,4379
66,1	2,27	2,2821	2,2939	2,3054	2,3166	2,3275	2,3382	2,3487	2,3589	2,3689	2,3787	2,3883	2,3977	2,407	2,416	2,4249	2,4337	2,4423	2,4507
66,2	2,2822	2,2943	2,3062	2,3177	2,329	2,34	2,3507	2,3612	2,3714	2,3815	2,3913	2,401	2,4104	2,4197	2,4288	2,4377	2,4465	2,4551	2,4635
66,3	2,2945	2,3067	2,3185	2,3301	2,3414	2,3525	2,3632	2,3737	2,384	2,3941	2,404	2,4137	2,4231	2,4324	2,4416	2,4505	2,4593	2,468	2,4765
66,4	2,3068	2,3191	2,331	2,3426	2,354	2,365	2,3758	2,3864	2,3967	2,4068	2,4167	2,4264	2,4359	2,4453	2,4544	2,4634	2,4722	2,4809	2,4895
66,5	2,3193	2,3315	2,3435	2,3552	2,3665	2,3776	2,3885	2,3991	2,4095	2,4196	2,4295	2,4393	2,4488	2,4582	2,4674	2,4764	2,4853	2,494	2,5025
66,6	2,3317	2,3441	2,3561	2,3678	2,3792	2,3903	2,4012	2,4118	2,4223	2,4324	2,4424	2,4522	2,4618	2,4711	2,4804	2,4894	2,4983	2,507	2,5156
66,7	2,3443	2,3567	2,3687	2,3805	2,3919	2,4031	2,414	2,4247	2,4351	2,4454	2,4554	2,4652	2,4748	2,4842	2,4935	2,5025	2,5115	2,5202	2,5288
66,8	2,3569	2,3694	2,3814	2,3932	2,4047	2,4159	2,4269	2,4376	2,4481	2,4583	2,4684	2,4782	2,4879	2,4973	2,5066	2,5157	2,5247	2,5335	2,5421
66,9	2,3696	2,3821	2,3942	2,4061	2,4176	2,4288	2,4398	2,4506	2,4611	2,4714	2,4815	2,4913	2,501	2,5105	2,5198	2,529	2,538	2,5468	2,5555
67	2,3824	2,3949	2,4071	2,4189	2,4305	2,4418	2,4529	2,4636	2,4742	2,4845	2,4946	2,5045	2,5143	2,5238	2,5331	2,5423	2,5513	2,5602	2,5689
67,1	2,3952	2,4078	2,42	2,4319	2,4435	2,4549	2,4659	2,4768	2,4874	2,4977	2,5079	2,5178	2,5276	2,5371	2,5465	2,5557	2,5647	2,5736	2,5824
67,2	2,4081	2,4207	2,433	2,445	2,4566	2,468	2,4791	2,49	2,5006	2,511	2,5212	2,5311	2,5409	2,5505	2,5599	2,5692	2,5782	2,5872	2,5959
67,3	2,4211	2,4338	2,4461	2,4581	2,4698	2,4812	2,4923	2,5033	2,5139	2,5243	2,5346	2,5446	2,5544	2,564	2,5734	2,5827	2,5918	2,6008	2,6096
67,4	2,4342	2,4469	2,4592	2,4713	2,483	2,4945	2,5056	2,5166	2,5273	2,5377	2,548	2,5581	2,5679	2,5776	2,587	2,5963	2,6055	2,6144	2,6233

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
64	2,2038	2,2114	2,2189	2,2262	2,2335	2,2407	2,2477	2,2546	2,2614	2,2682	2,2748	2,2814	2,2879	2,2943	2,3006	2,3068	2,313	2,319	2,325
64,1	2,2153	2,223	2,2305	2,2379	2,2451	2,2523	2,2594	2,2663	2,2732	2,2799	2,2866	2,2932	2,2997	2,3061	2,3124	2,3187	2,3248	2,3309	2,337
64,2	2,2269	2,2346	2,2421	2,2495	2,2568	2,264	2,2711	2,2781	2,2849	2,2917	2,2984	2,305	2,3115	2,318	2,3243	2,3306	2,3368	2,3429	2,349
64,3	2,2386	2,2462	2,2538	2,2612	2,2686	2,2758	2,2829	2,2899	2,2968	2,3036	2,3103	2,3169	2,3235	2,3299	2,3363	2,3426	2,3488	2,3549	2,361
64,4	2,2503	2,258	2,2655	2,273	2,2804	2,2876	2,2947	2,3017	2,3087	2,3155	2,3223	2,3289	2,3355	2,3419	2,3483	2,3546	2,3609	2,367	2,3731
64,5	2,262	2,2698	2,2774	2,2848	2,2922	2,2995	2,3066	2,3137	2,3206	2,3275	2,3343	2,3409	2,3475	2,354	2,3604	2,3668	2,373	2,3792	2,3853
64,6	2,2739	2,2816	2,2892	2,2967	2,3042	2,3114	2,3186	2,3257	2,3327	2,3396	2,3463	2,353	2,3596	2,3661	2,3726	2,3789	2,3852	2,3914	2,3976
64,7	2,2858	2,2935	2,3012	2,3087	2,3161	2,3234	2,3306	2,3378	2,3448	2,3517	2,3585	2,3652	2,3718	2,3783	2,3848	2,3912	2,3975	2,4037	2,4099
64,8	2,2977	2,3055	2,3132	2,3208	2,3282	2,3355	2,3428	2,3499	2,3569	2,3638	2,3707	2,3774	2,3841	2,3906	2,3971	2,4035	2,4098	2,4161	2,4222
64,9	2,3097	2,3176	2,3253	2,3328	2,3403	2,3477	2,3549	2,3621	2,3691	2,3761	2,3829	2,3897	2,3964	2,403	2,4095	2,4159	2,4222	2,4285	2,4347
65	2,3218	2,3297	2,3374	2,345	2,3525	2,3599	2,3672	2,3743	2,3814	2,3884	2,3953	2,402	2,4088	2,4153	2,4219	2,4283	2,4347	2,441	2,4472
65,1	2,3339	2,3418	2,3496	2,3572	2,3648	2,3722	2,3795	2,3867	2,3938	2,4008	2,4077	2,4144	2,4212	2,4278	2,4343	2,4408	2,4472	2,4535	2,4598
65,2	2,3461	2,3541	2,3618	2,3695	2,3771	2,3845	2,3918	2,3991	2,4062	2,4132	2,4201	2,427	2,4337	2,4403	2,4469	2,4534	2,4598	2,4661	2,4724
65,3	2,3584	2,3664	2,3742	2,3819	2,3894	2,3969	2,4043	2,4115	2,4186	2,4257	2,4326	2,4395	2,4463	2,4529	2,4595	2,466	2,4725	2,4788	2,4851
65,4	2,3707	2,3787	2,3866	2,3943	2,4019	2,4094	2,4167	2,424	2,4312	2,4382	2,4452	2,4521	2,4589	2,4656	2,4722	2,4787	2,4852	2,4915	2,4979
65,5	2,3832	2,3912	2,399	2,4068	2,4144	2,4219	2,4293	2,4366	2,4438	2,4509	2,4579	2,4648	2,4716	2,4783	2,485	2,4915	2,498	2,5044	2,5107
65,6	2,3956	2,4036	2,4116	2,4193	2,427	2,4345	2,4419	2,4493	2,4565	2,4636	2,4706	2,4775	2,4844	2,4911	2,4978	2,5044	2,5108	2,5172	2,5236
65,7	2,4082	2,4162	2,4241	2,432	2,4396	2,4472	2,4546	2,462	2,4692	2,4764	2,4834	2,4904	2,4972	2,504	2,5107	2,5172	2,5238	2,5302	2,5366
65,8	2,4208	2,4288	2,4368	2,4446	2,4523	2,4599	2,4674	2,4748	2,482	2,4892	2,4963	2,5033	2,5101	2,5169	2,5236	2,5302	2,5368	2,5432	2,5496
65,9	2,4334	2,4416	2,4495	2,4574	2,4651	2,4727	2,4802	2,4876	2,4949	2,5021	2,5092	2,5162	2,5231	2,5299	2,5366	2,5433	2,5498	2,5563	2,5627
66	2,4462	2,4543	2,4623	2,4702	2,478	2,4856	2,4931	2,5006	2,5079	2,5151	2,5222	2,5292	2,5361	2,543	2,5497	2,5564	2,563	2,5695	2,5759
66,1	2,459	2,4672	2,4752	2,4831	2,4909	2,4986	2,5061	2,5136	2,5209	2,5281	2,5353	2,5423	2,5493	2,5561	2,5629	2,5696	2,5762	2,5827	2,5892
66,2	2,4719	2,4801	2,4881	2,496	2,5039	2,5116	2,5191	2,5266	2,534	2,5412	2,5484	2,5555	2,5624	2,5693	2,5761	2,5828	2,5895	2,596	2,6025
66,3	2,4848	2,493	2,5011	2,5091	2,5169	2,5246	2,5323	2,5397	2,5471	2,5544	2,5616	2,5687	2,5757	2,5826	2,5894	2,5962	2,6028	2,6094	2,6159
66,4	2,4978	2,5061	2,5142	2,5222	2,53	2,5378	2,5454	2,5529	2,5604	2,5677	2,5749	2,582	2,589	2,596	2,6028	2,6096	2,6162	2,6228	2,6293
66,5	2,5109	2,5192	2,5273	2,5354	2,5433	2,551	2,5587	2,5662	2,5737	2,581	2,5883	2,5954	2,6024	2,6094	2,6162	2,623	2,6297	2,6363	2,6429
66,6	2,5241	2,5324	2,5406	2,5486	2,5565	2,5643	2,572	2,5796	2,587	2,5944	2,6017	2,6088	2,6159	2,6229	2,6298	2,6366	2,6433	2,6499	2,6565
66,7	2,5373	2,5457	2,5539	2,5619	2,5699	2,5777	2,5854	2,593	2,6005	2,6079	2,6152	2,6224	2,6294	2,6364	2,6434	2,6502	2,6569	2,6636	2,6702
66,8	2,5506	2,559	2,5672	2,5753	2,5833	2,5911	2,5989	2,6065	2,614	2,6214	2,6287	2,636	2,6431	2,6501	2,657	2,6639	2,6707	2,6773	2,6839
66,9	2,564	2,5724	2,5806	2,5888	2,5968	2,6046	2,6124	2,6201	2,6276	2,6351	2,6424	2,6496	2,6568	2,6638	2,6708	2,6777	2,6844	2,6911	2,6978
67	2,5774	2,5859	2,5941	2,6023	2,6103	2,6182	2,626	2,6337	2,6413	2,6487	2,6561	2,6634	2,6705	2,6776	2,6846	2,6915	2,6983	2,705	2,7117
67,1	2,591	2,5994	2,6077	2,6159	2,624	2,6319	2,6397	2,6474	2,655	2,6625	2,6699	2,6772	2,6844	2,6915	2,6985	2,7054	2,7122	2,719	2,7257
67,2	2,6045	2,613	2,6214	2,6296	2,6377	2,6456	2,6535	2,6612	2,6688	2,6763	2,6837	2,6911	2,6983	2,7054	2,7124	2,7194	2,7263	2,733	2,7397
67,3	2,6182	2,6267	2,6351	2,6433	2,6515	2,6595	2,6673	2,6751	2,6827	2,6903	2,6977	2,705	2,7123	2,7194	2,7265	2,7335	2,7403	2,7472	2,7539
67,4	2,632	2,6405	2,6489	2,6572	2,6653	2,6733	2,6812	2,689	2,6967	2,7043	2,7117	2,7191	2,7264	2,7335	2,7406	2,7476	2,7545	2,7613	2,7681

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
64	2,331	2,3368	2,3426	2,3484	2,354	2,3596	2,3652	2,3707	2,3761	2,3815	2,3868	2,3921	2,3973	2,4025	2,4076	2,4127	2,4177	2,4226	2,4276
64,1	2,3429	2,3488	2,3546	2,3604	2,3661	2,3717	2,3773	2,3828	2,3882	2,3936	2,3989	2,4042	2,4095	2,4147	2,4198	2,4249	2,4299	2,4349	2,4398
64,2	2,3549	2,3608	2,3667	2,3724	2,3782	2,3838	2,3894	2,3949	2,4004	2,4058	2,4112	2,4165	2,4217	2,4269	2,4321	2,4372	2,4422	2,4472	2,4522
64,3	2,367	2,3729	2,3788	2,3846	2,3903	2,396	2,4016	2,4071	2,4126	2,418	2,4234	2,4288	2,434	2,4392	2,4444	2,4495	2,4546	2,4596	2,4646
64,4	2,3791	2,3851	2,391	2,3968	2,4025	2,4082	2,4138	2,4194	2,4249	2,4304	2,4358	2,4411	2,4464	2,4516	2,4568	2,4619	2,467	2,4721	2,4771
64,5	2,3913	2,3973	2,4032	2,409	2,4148	2,4205	2,4261	2,4317	2,4373	2,4427	2,4482	2,4535	2,4588	2,4641	2,4693	2,4744	2,4795	2,4846	2,4896
64,6	2,4036	2,4096	2,4155	2,4214	2,4272	2,4329	2,4385	2,4441	2,4497	2,4552	2,4606	2,466	2,4713	2,4766	2,4818	2,487	2,4921	2,4971	2,5022
64,7	2,4159	2,4219	2,4279	2,4338	2,4396	2,4453	2,451	2,4566	2,4622	2,4677	2,4731	2,4785	2,4838	2,4891	2,4944	2,4996	2,5047	2,5098	2,5148
64,8	2,4283	2,4343	2,4403	2,4462	2,452	2,4578	2,4635	2,4691	2,4747	2,4802	2,4857	2,4911	2,4965	2,5018	2,507	2,5122	2,5174	2,5225	2,5276
64,9	2,4408	2,4468	2,4528	2,4587	2,4646	2,4703	2,4761	2,4817	2,4873	2,4929	2,4984	2,5038	2,5092	2,5145	2,5198	2,525	2,5302	2,5353	2,5404
65	2,4533	2,4594	2,4654	2,4713	2,4772	2,483	2,4887	2,4944	2,5	2,5056	2,5111	2,5165	2,5219	2,5273	2,5326	2,5378	2,543	2,5481	2,5532
65,1	2,4659	2,472	2,478	2,4839	2,4898	2,4957	2,5014	2,5071	2,5128	2,5183	2,5239	2,5293	2,5347	2,5401	2,5454	2,5507	2,5559	2,5611	2,5661
65,2	2,4786	2,4847	2,4907	2,4967	2,5026	2,5084	2,5142	2,5199	2,5256	2,5312	2,5367	2,5422	2,5476	2,553	2,5583	2,5636	2,5689	2,574	2,5791
65,3	2,4913	2,4974	2,5035	2,5095	2,5154	2,5212	2,5271	2,5328	2,5385	2,5441	2,5496	2,5551	2,5606	2,566	2,5713	2,5766	2,5819	2,5871	2,5922
65,4	2,5041	2,5102	2,5163	2,5223	2,5283	2,5342	2,5399	2,5457	2,5514	2,5571	2,5626	2,5682	2,5736	2,579	2,5844	2,5897	2,595	2,6002	2,6053
65,5	2,5169	2,5231	2,5292	2,5352	2,5412	2,5471	2,5529	2,5587	2,5644	2,5701	2,5757	2,5812	2,5867	2,5921	2,5975	2,6029	2,6081	2,6133	2,6185
65,6	2,5299	2,536	2,5422	2,5482	2,5542	2,5601	2,566	2,5718	2,5775	2,5832	2,5888	2,5944	2,5999	2,6053	2,6107	2,6161	2,6214	2,6266	2,6318
65,7	2,5429	2,5491	2,5552	2,5613	2,5673	2,5732	2,5791	2,5849	2,5907	2,5964	2,602	2,6076	2,6131	2,6186	2,624	2,6294	2,6347	2,6399	2,6451
65,8	2,5559	2,5622	2,5683	2,5744	2,5804	2,5864	2,5923	2,5981	2,6039	2,6096	2,6153	2,6209	2,6264	2,6319	2,6373	2,6427	2,6481	2,6533	2,6585
65,9	2,5691	2,5753	2,5815	2,5876	2,5937	2,5996	2,6055	2,6114	2,6172	2,6229	2,6286	2,6342	2,6398	2,6453	2,6507	2,6561	2,6615	2,6668	2,672
66	2,5822	2,5885	2,5947	2,6009	2,6069	2,6129	2,6189	2,6247	2,6306	2,6363	2,642	2,6476	2,6532	2,6588	2,6642	2,6696	2,675	2,6803	2,6856
66,1	2,5955	2,6018	2,6081	2,6142	2,6203	2,6263	2,6323	2,6381	2,644	2,6498	2,6555	2,6611	2,6667	2,6723	2,6778	2,6832	2,6886	2,6939	2,6992
66,2	2,6089	2,6152	2,6215	2,6276	2,6337	2,6398	2,6457	2,6517	2,6575	2,6633	2,669	2,6747	2,6803	2,6859	2,6914	2,6968	2,7022	2,7076	2,7129
66,3	2,6223	2,6286	2,6349	2,6411	2,6472	2,6533	2,6593	2,6652	2,6711	2,6769	2,6827	2,6883	2,694	2,6996	2,7051	2,7106	2,716	2,7213	2,7267
66,4	2,6358	2,6421	2,6484	2,6546	2,6608	2,6669	2,6729	2,6788	2,6847	2,6906	2,6963	2,7021	2,7077	2,7133	2,7189	2,7244	2,7298	2,7352	2,7405
66,5	2,6493	2,6557	2,662	2,6683	2,6744	2,6805	2,6866	2,6926	2,6985	2,7043	2,7101	2,7158	2,7215	2,7271	2,7327	2,7382	2,7437	2,7491	2,7544
66,6	2,663	2,6694	2,6757	2,682	2,6882	2,6943	2,7003	2,7063	2,7123	2,7181	2,7239	2,7297	2,7354	2,741	2,7466	2,7522	2,7576	2,763	2,7684
66,7	2,6767	2,6831	2,6895	2,6957	2,702	2,7081	2,7142	2,7202	2,7261	2,732	2,7379	2,7436	2,7494	2,755	2,7606	2,7662	2,7716	2,7771	2,7825
66,8	2,6905	2,6969	2,7033	2,7096	2,7158	2,722	2,7281	2,7341	2,7401	2,746	2,7519	2,7576	2,7634	2,7691	2,7747	2,7802	2,7857	2,7912	2,7966
66,9	2,7043	2,7108	2,7172	2,7235	2,7298	2,7359	2,7421	2,7481	2,7541	2,76	2,7659	2,7717	2,7775	2,7832	2,7888	2,7944	2,8	2,8054	2,8109
67	2,7182	2,7247	2,7312	2,7375	2,7438	2,75	2,7561	2,7622	2,7682	2,7742	2,7801	2,7859	2,7917	2,7974	2,803	2,8086	2,8142	2,8197	2,8251
67,1	2,7323	2,7388	2,7452	2,7516	2,7579	2,7641	2,7703	2,7764	2,7824	2,7884	2,7943	2,8001	2,8059	2,8116	2,8173	2,823	2,8285	2,8341	2,8395
67,2	2,7463	2,7529	2,7593	2,7657	2,7721	2,7783	2,7845	2,7906	2,7966	2,8026	2,8086	2,8144	2,8202	2,826	2,8317	2,8374	2,8429	2,8485	2,854
67,3	2,7605	2,7671	2,7736	2,7799	2,7863	2,7925	2,7988	2,8049	2,811	2,817	2,8229	2,8288	2,8347	2,8404	2,8461	2,8518	2,8574	2,863	2,8685
67,4	2,7747	2,7813	2,7878	2,7942	2,8006	2,8069	2,8131	2,8193	2,8254	2,8314	2,8374	2,8433	2,8491	2,8549	2,8607	2,8664	2,872	2,8776	2,8831

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
64	2,4325	2,4373	2,4421	2,4469	2,4516	2,4563	2,4609	2,4655	2,4701	2,4746	2,479	2,4835	2,4879	2,4923	2,4966	2,501	2,5052	2,5095	2,5137
64,1	2,4447	2,4496	2,4544	2,4592	2,4639	2,4686	2,4733	2,4779	2,4825	2,487	2,4915	2,496	2,5004	2,5048	2,5091	2,5135	2,5178	2,522	2,5263
64,2	2,4571	2,462	2,4668	2,4716	2,4764	2,481	2,4857	2,4903	2,4949	2,4995	2,504	2,5085	2,5129	2,5173	2,5217	2,5261	2,5304	2,5346	2,5389
64,3	2,4695	2,4744	2,4793	2,4841	2,4888	2,4936	2,4982	2,5029	2,5075	2,512	2,5166	2,5211	2,5255	2,5299	2,5344	2,5387	2,543	2,5473	2,5516
64,4	2,482	2,4869	2,4918	2,4966	2,5014	2,5061	2,5108	2,5155	2,5201	2,5247	2,5292	2,5337	2,5382	2,5427	2,5471	2,5514	2,5558	2,5601	2,5643
64,5	2,4946	2,4995	2,5044	2,5092	2,514	2,5188	2,5234	2,5281	2,5328	2,5374	2,5419	2,5465	2,5509	2,5554	2,5598	2,5642	2,5686	2,5729	2,5771
64,6	2,5072	2,5121	2,517	2,5219	2,5267	2,5314	2,5362	2,5409	2,5455	2,5501	2,5547	2,5592	2,5637	2,5682	2,5726	2,577	2,5814	2,5857	2,59
64,7	2,5198	2,5248	2,5297	2,5346	2,5394	2,5442	2,5489	2,5536	2,5583	2,5629	2,5675	2,5721	2,5766	2,5811	2,5855	2,5899	2,5943	2,5987	2,603
64,8	2,5326	2,5375	2,5425	2,5474	2,5522	2,557	2,5618	2,5665	2,5712	2,5758	2,5804	2,585	2,5895	2,594	2,5985	2,6029	2,6073	2,6117	2,616
64,9	2,5454	2,5504	2,5553	2,5602	2,5651	2,5699	2,5747	2,5794	2,5841	2,5888	2,5934	2,598	2,6025	2,6071	2,6115	2,616	2,6204	2,6248	2,6291
65	2,5583	2,5633	2,5682	2,5732	2,578	2,5829	2,5877	2,5924	2,5971	2,6018	2,6064	2,611	2,6156	2,6201	2,6246	2,6291	2,6335	2,6379	2,6423
65,1	2,5712	2,5763	2,5812	2,5862	2,591	2,5959	2,6007	2,6055	2,6102	2,6149	2,6195	2,6242	2,6287	2,6333	2,6378	2,6423	2,6467	2,6511	2,6555
65,2	2,5842	2,5893	2,5943	2,5992	2,6041	2,609	2,6138	2,6186	2,6233	2,6281	2,6327	2,6374	2,6419	2,6465	2,651	2,6555	2,66	2,6644	2,6688
65,3	2,5973	2,6024	2,6074	2,6123	2,6173	2,6221	2,627	2,6318	2,6365	2,6413	2,646	2,6506	2,6552	2,6598	2,6643	2,6688	2,6733	2,6777	2,6821
65,4	2,6105	2,6155	2,6206	2,6256	2,6305	2,6354	2,6402	2,6451	2,6498	2,6546	2,6593	2,6639	2,6686	2,6731	2,6777	2,6822	2,6867	2,6912	2,6956
65,5	2,6237	2,6288	2,6338	2,6388	2,6438	2,6487	2,6536	2,6584	2,6632	2,6679	2,6726	2,6773	2,682	2,6866	2,6912	2,6957	2,7002	2,7046	2,7091
65,6	2,637	2,6421	2,6471	2,6521	2,6571	2,6621	2,667	2,6718	2,6766	2,6814	2,6861	2,6908	2,6955	2,7001	2,7047	2,7092	2,7137	2,7182	2,7226
65,7	2,6503	2,6554	2,6605	2,6655	2,6705	2,6755	2,6804	2,6853	2,6901	2,6949	2,6996	2,7043	2,709	2,7136	2,7183	2,7228	2,7274	2,7318	2,7363
65,8	2,6637	2,6689	2,674	2,679	2,684	2,689	2,6939	2,6988	2,7037	2,7085	2,7132	2,7179	2,7226	2,7273	2,7319	2,7365	2,741	2,7455	2,75
65,9	2,6773	2,6824	2,6875	2,6926	2,6976	2,7026	2,7075	2,7124	2,7173	2,7221	2,7269	2,7316	2,7363	2,741	2,7456	2,7502	2,7548	2,7593	2,7638
66	2,6908	2,696	2,7011	2,7062	2,7112	2,7162	2,7212	2,7261	2,731	2,7358	2,7406	2,7454	2,7501	2,7548	2,7594	2,764	2,7686	2,7731	2,7777
66,1	2,7045	2,7096	2,7148	2,7199	2,7249	2,73	2,735	2,7399	2,7448	2,7496	2,7544	2,7592	2,7639	2,7686	2,7733	2,7779	2,7825	2,7871	2,7916
66,2	2,7182	2,7234	2,7285	2,7337	2,7388	2,7438	2,7487	2,7537	2,7586	2,7635	2,7683	2,7731	2,7779	2,7826	2,7873	2,7919	2,7965	2,8011	2,8056
66,3	2,732	2,7372	2,7424	2,7475	2,7526	2,7576	2,7626	2,7676	2,7725	2,7774	2,7823	2,7871	2,7918	2,7966	2,8013	2,8059	2,8105	2,8151	2,8197
66,4	2,7458	2,7511	2,7563	2,7614	2,7665	2,7716	2,7766	2,7816	2,7865	2,7914	2,7963	2,8011	2,8059	2,8106	2,8153	2,82	2,8247	2,8293	2,8338
66,5	2,7597	2,765	2,7702	2,7754	2,7805	2,7856	2,7906	2,7956	2,8006	2,8055	2,8104	2,8153	2,82	2,8248	2,8295	2,8342	2,8389	2,8435	2,8481
66,6	2,7738	2,779	2,7843	2,7895	2,7946	2,7997	2,8048	2,8098	2,8148	2,8197	2,8246	2,8295	2,8343	2,839	2,8438	2,8485	2,8532	2,8578	2,8624
66,7	2,7878	2,7932	2,7984	2,8036	2,8088	2,8139	2,819	2,824	2,829	2,8339	2,8389	2,8437	2,8485	2,8533	2,8581	2,8628	2,8675	2,8721	2,8768
66,8	2,802	2,8073	2,8126	2,8178	2,823	2,8281	2,8332	2,8383	2,8433	2,8482	2,8532	2,8581	2,8629	2,8677	2,8725	2,8772	2,8819	2,8866	2,8912
66,9	2,8163	2,8216	2,8269	2,8321	2,8373	2,8425	2,8476	2,8526	2,8577	2,8626	2,8676	2,8725	2,8773	2,8822	2,887	2,8917	2,8964	2,9011	2,9057
67	2,8306	2,8359	2,8412	2,8465	2,8517	2,8569	2,862	2,8671	2,8721	2,8771	2,8821	2,887	2,8919	2,8967	2,9015	2,9063	2,911	2,9157	2,9204
67,1	2,845	2,8503	2,8556	2,8609	2,8662	2,8713	2,8765	2,8816	2,8866	2,8917	2,8966	2,9016	2,9065	2,9113	2,9161	2,9209	2,9257	2,9304	2,9351
67,2	2,8594	2,8648	2,8702	2,8754	2,8807	2,8859	2,8911	2,8962	2,9013	2,9063	2,9113	2,9162	2,9211	2,926	2,9308	2,9357	2,9404	2,9451	2,9498
67,3	2,874	2,8794	2,8847	2,89	2,8953	2,9005	2,9057	2,9109	2,916	2,921	2,926	2,931	2,9359	2,9408	2,9456	2,9505	2,9552	2,96	2,9647
67,4	2,8886	2,894	2,8994	2,9047	2,91	2,9152	2,9204	2,9256	2,9307	2,9358	2,9408	2,9458	2,9507	2,9556	2,9605	2,9653	2,9701	2,9749	2,9796

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
64	2,5179	2,522	2,5262	2,5303	2,5343	2,5384	2,5424	2,5464	2,5503	2,5543	2,5582	2,562	2,5659	2,5697	2,5735	2,5773	2,5811	2,5848	2,5885
64,1	2,5305	2,5346	2,5388	2,5429	2,547	2,551	2,555	2,559	2,563	2,567	2,5709	2,5748	2,5786	2,5825	2,5863	2,5901	2,5938	2,5976	2,6013
64,2	2,5431	2,5473	2,5514	2,5556	2,5596	2,5637	2,5678	2,5718	2,5758	2,5797	2,5836	2,5875	2,5914	2,5953	2,5991	2,6029	2,6067	2,6104	2,6142
64,3	2,5558	2,56	2,5642	2,5683	2,5724	2,5765	2,5805	2,5846	2,5886	2,5926	2,5965	2,6004	2,6043	2,6081	2,612	2,6158	2,6196	2,6234	2,6271
64,4	2,5686	2,5728	2,577	2,5811	2,5852	2,5893	2,5934	2,5974	2,6015	2,6054	2,6094	2,6133	2,6172	2,6211	2,625	2,6288	2,6326	2,6364	2,6401
64,5	2,5814	2,5856	2,5898	2,594	2,5981	2,6022	2,6063	2,6104	2,6144	2,6184	2,6224	2,6263	2,6302	2,6341	2,638	2,6418	2,6456	2,6494	2,6532
64,6	2,5943	2,5986	2,6028	2,6069	2,6111	2,6152	2,6193	2,6234	2,6274	2,6314	2,6354	2,6394	2,6433	2,6472	2,6511	2,6549	2,6587	2,6626	2,6663
64,7	2,6073	2,6115	2,6158	2,6199	2,6241	2,6282	2,6324	2,6364	2,6405	2,6445	2,6485	2,6525	2,6564	2,6603	2,6642	2,6681	2,6719	2,6758	2,6796
64,8	2,6203	2,6246	2,6288	2,633	2,6372	2,6414	2,6455	2,6496	2,6536	2,6577	2,6617	2,6657	2,6696	2,6736	2,6775	2,6813	2,6852	2,689	2,6928
64,9	2,6334	2,6377	2,6419	2,6462	2,6504	2,6545	2,6587	2,6628	2,6668	2,6709	2,6749	2,6789	2,6829	2,6868	2,6907	2,6946	2,6985	2,7023	2,7062
65	2,6466	2,6509	2,6552	2,6594	2,6636	2,6678	2,6719	2,676	2,6801	2,6842	2,6882	2,6922	2,6962	2,7002	2,7041	2,708	2,7119	2,7158	2,7196
65,1	2,6598	2,6641	2,6684	2,6727	2,6769	2,6811	2,6852	2,6894	2,6935	2,6975	2,7016	2,7056	2,7096	2,7136	2,7175	2,7214	2,7254	2,7292	2,7331
65,2	2,6731	2,6775	2,6817	2,686	2,6903	2,6945	2,6986	2,7028	2,7069	2,711	2,715	2,7191	2,7231	2,7271	2,731	2,735	2,7389	2,7428	2,7466
65,3	2,6865	2,6908	2,6951	2,6994	2,7037	2,7079	2,7121	2,7163	2,7204	2,7245	2,7286	2,7326	2,7366	2,7406	2,7446	2,7485	2,7525	2,7564	2,7602
65,4	2,7	2,7043	2,7086	2,7129	2,7172	2,7214	2,7256	2,7298	2,7339	2,7381	2,7422	2,7462	2,7503	2,7543	2,7582	2,7622	2,7661	2,77	2,7739
65,5	2,7135	2,7178	2,7222	2,7265	2,7308	2,735	2,7392	2,7434	2,7476	2,7517	2,7558	2,7599	2,7639	2,7679	2,772	2,7759	2,7799	2,7838	2,7877
65,6	2,7271	2,7315	2,7358	2,7401	2,7444	2,7487	2,7529	2,7571	2,7613	2,7654	2,7696	2,7736	2,7777	2,7817	2,7857	2,7897	2,7937	2,7976	2,8015
65,7	2,7407	2,7451	2,7495	2,7538	2,7581	2,7624	2,7666	2,7709	2,7751	2,7792	2,7833	2,7874	2,7915	2,7956	2,7996	2,8036	2,8076	2,8115	2,8154
65,8	2,7545	2,7589	2,7633	2,7676	2,7719	2,7762	2,7805	2,7847	2,7889	2,7931	2,7972	2,8013	2,8054	2,8095	2,8135	2,8175	2,8215	2,8255	2,8294
65,9	2,7683	2,7727	2,7771	2,7815	2,7858	2,7901	2,7944	2,7986	2,8028	2,807	2,8112	2,8153	2,8194	2,8235	2,8275	2,8316	2,8356	2,8395	2,8435
66	2,7821	2,7866	2,791	2,7954	2,7997	2,804	2,8083	2,8126	2,8168	2,821	2,8252	2,8293	2,8334	2,8375	2,8416	2,8456	2,8496	2,8536	2,8576
66,1	2,7961	2,8005	2,805	2,8094	2,8137	2,818	2,8224	2,8266	2,8309	2,8351	2,8393	2,8434	2,8476	2,8517	2,8557	2,8598	2,8638	2,8678	2,8718
66,2	2,8101	2,8146	2,819	2,8234	2,8278	2,8321	2,8365	2,8408	2,845	2,8492	2,8535	2,8576	2,8618	2,8659	2,87	2,874	2,8781	2,8821	2,8861
66,3	2,8242	2,8287	2,8332	2,8376	2,842	2,8463	2,8507	2,855	2,8592	2,8635	2,8677	2,8719	2,876	2,8802	2,8843	2,8883	2,8924	2,8964	2,9004
66,4	2,8384	2,8429	2,8473	2,8518	2,8562	2,8606	2,8649	2,8692	2,8735	2,8778	2,882	2,8862	2,8904	2,8945	2,8986	2,9027	2,9068	2,9108	2,9149
66,5	2,8526	2,8571	2,8616	2,8661	2,8705	2,8749	2,8793	2,8836	2,8879	2,8922	2,8964	2,9006	2,9048	2,909	2,9131	2,9172	2,9213	2,9253	2,9294
66,6	2,867	2,8715	2,876	2,8805	2,8849	2,8893	2,8937	2,898	2,9023	2,9066	2,9109	2,9151	2,9193	2,9235	2,9276	2,9318	2,9358	2,9399	2,9439
66,7	2,8814	2,8859	2,8904	2,8949	2,8994	2,9038	2,9082	2,9125	2,9169	2,9211	2,9254	2,9297	2,9339	2,9381	2,9422	2,9463	2,9505	2,9546	2,9586
66,8	2,8958	2,9004	2,9049	2,9094	2,9139	2,9183	2,9227	2,9271	2,9314	2,9357	2,94	2,9443	2,9485	2,9527	2,9569	2,961	2,9652	2,9693	2,9733
66,9	2,9104	2,915	2,9195	2,924	2,9285	2,9329	2,9374	2,9417	2,9461	2,9505	2,9548	2,959	2,9633	2,9675	2,9717	2,9758	2,98	2,9841	2,9882
67	2,925	2,9296	2,9342	2,9387	2,9432	2,9476	2,9521	2,9565	2,9609	2,9652	2,9695	2,9738	2,9781	2,9823	2,9865	2,9907	2,9948	2,999	3,003
67,1	2,9397	2,9443	2,9489	2,9534	2,958	2,9624	2,9669	2,9713	2,9757	2,9801	2,9844	2,9887	2,993	2,9972	3,0014	3,0056	3,0098	3,0139	3,018
67,2	2,9545	2,9591	2,9637	2,9683	2,9728	2,9773	2,9818	2,9862	2,9906	2,995	2,9993	3,0036	3,0079	3,0122	3,0164	3,0206	3,0248	3,029	3,0331
67,3	2,9694	2,974	2,9786	2,9832	2,9877	2,9922	2,9967	3,0012	3,0056	3,01	3,0144	3,0187	3,023	3,0273	3,0315	3,0357	3,0399	3,0441	3,0482
67,4	2,9843	2,989	2,9936	2,9982	3,0028	3,0073	3,0118	3,0162	3,0207	3,0251	3,0295	3,0338	3,0381	3,0424	3,0466	3,0509	3,0551	3,0593	3,0634

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
64	2,5922	2,5958	2,5995	2,6031	2,6067	2,6103	2,6138	2,6174	2,6209	2,6244	2,6279	2,6313	2,6348	2,6382	2,6416	2,6449	2,6483	2,6516	2,655
64,1	2,605	2,6087	2,6123	2,616	2,6196	2,6232	2,6267	2,6303	2,6338	2,6373	2,6408	2,6443	2,6477	2,6512	2,6546	2,6579	2,6613	2,6647	2,668
64,2	2,6179	2,6216	2,6252	2,6289	2,6325	2,6361	2,6397	2,6433	2,6468	2,6503	2,6538	2,6573	2,6607	2,6642	2,6676	2,671	2,6744	2,6777	2,6811
64,3	2,6308	2,6345	2,6382	2,6419	2,6455	2,6491	2,6527	2,6563	2,6598	2,6634	2,6669	2,6704	2,6738	2,6773	2,6807	2,6841	2,6875	2,6909	2,6943
64,4	2,6439	2,6476	2,6513	2,6549	2,6586	2,6622	2,6658	2,6694	2,673	2,6765	2,68	2,6835	2,687	2,6905	2,6939	2,6973	2,7007	2,7041	2,7075
64,5	2,657	2,6607	2,6644	2,668	2,6717	2,6753	2,679	2,6826	2,6861	2,6897	2,6932	2,6967	2,7002	2,7037	2,7071	2,7106	2,714	2,7174	2,7208
64,6	2,6701	2,6738	2,6775	2,6812	2,6849	2,6886	2,6922	2,6958	2,6994	2,703	2,7065	2,71	2,7135	2,717	2,7205	2,7239	2,7273	2,7308	2,7341
64,7	2,6833	2,6871	2,6908	2,6945	2,6982	2,7018	2,7055	2,7091	2,7127	2,7163	2,7198	2,7234	2,7269	2,7304	2,7339	2,7373	2,7407	2,7442	2,7476
64,8	2,6966	2,7004	2,7041	2,7078	2,7115	2,7152	2,7188	2,7225	2,7261	2,7297	2,7332	2,7368	2,7403	2,7438	2,7473	2,7508	2,7542	2,7577	2,7611
64,9	2,71	2,7137	2,7175	2,7212	2,7249	2,7286	2,7323	2,7359	2,7395	2,7431	2,7467	2,7503	2,7538	2,7573	2,7608	2,7643	2,7678	2,7712	2,7746
65	2,7234	2,7272	2,731	2,7347	2,7384	2,7421	2,7458	2,7494	2,7531	2,7567	2,7603	2,7638	2,7674	2,7709	2,7744	2,7779	2,7814	2,7849	2,7883
65,1	2,7369	2,7407	2,7445	2,7482	2,7519	2,7557	2,7593	2,763	2,7666	2,7703	2,7739	2,7775	2,781	2,7846	2,7881	2,7916	2,7951	2,7986	2,802
65,2	2,7505	2,7543	2,758	2,7618	2,7656	2,7693	2,773	2,7767	2,7803	2,7839	2,7876	2,7912	2,7947	2,7983	2,8018	2,8054	2,8088	2,8123	2,8158
65,3	2,7641	2,7679	2,7717	2,7755	2,7792	2,783	2,7867	2,7904	2,794	2,7977	2,8013	2,8049	2,8085	2,8121	2,8156	2,8192	2,8227	2,8262	2,8296
65,4	2,7778	2,7816	2,7854	2,7892	2,793	2,7968	2,8005	2,8042	2,8079	2,8115	2,8152	2,8188	2,8224	2,826	2,8295	2,833	2,8366	2,8401	2,8436
65,5	2,7916	2,7954	2,7992	2,803	2,8068	2,8106	2,8143	2,818	2,8217	2,8254	2,829	2,8327	2,8363	2,8399	2,8435	2,847	2,8505	2,8541	2,8575
65,6	2,8054	2,8093	2,8131	2,8169	2,8207	2,8245	2,8282	2,832	2,8357	2,8394	2,843	2,8467	2,8503	2,8539	2,8575	2,861	2,8646	2,8681	2,8716
65,7	2,8193	2,8232	2,8271	2,8309	2,8347	2,8385	2,8422	2,846	2,8497	2,8534	2,8571	2,8607	2,8644	2,868	2,8716	2,8752	2,8787	2,8822	2,8857
65,8	2,8333	2,8372	2,8411	2,8449	2,8487	2,8525	2,8563	2,8601	2,8638	2,8675	2,8712	2,8748	2,8785	2,8821	2,8857	2,8893	2,8929	2,8964	2,9
65,9	2,8474	2,8513	2,8552	2,859	2,8629	2,8667	2,8705	2,8742	2,878	2,8817	2,8854	2,8891	2,8927	2,8964	2,9	2,9036	2,9072	2,9107	2,9142
66	2,8615	2,8655	2,8694	2,8732	2,877	2,8809	2,8847	2,8885	2,8922	2,8959	2,8997	2,9033	2,907	2,9107	2,9143	2,9179	2,9215	2,9251	2,9286
66,1	2,8758	2,8797	2,8836	2,8875	2,8913	2,8951	2,899	2,9028	2,9065	2,9103	2,914	2,9177	2,9214	2,9251	2,9287	2,9323	2,9359	2,9395	2,9431
66,2	2,89	2,894	2,8979	2,9018	2,9057	2,9095	2,9133	2,9171	2,9209	2,9247	2,9284	2,9321	2,9358	2,9395	2,9432	2,9468	2,9504	2,954	2,9576
66,3	2,9044	2,9084	2,9123	2,9162	2,9201	2,9239	2,9278	2,9316	2,9354	2,9392	2,9429	2,9466	2,9503	2,954	2,9577	2,9613	2,965	2,9686	2,9722
66,4	2,9188	2,9228	2,9268	2,9307	2,9346	2,9385	2,9423	2,9461	2,9499	2,9537	2,9575	2,9612	2,9649	2,9686	2,9723	2,976	2,9796	2,9832	2,9868
66,5	2,9334	2,9374	2,9413	2,9453	2,9492	2,9531	2,9569	2,9607	2,9646	2,9684	2,9721	2,9759	2,9796	2,9833	2,987	2,9907	2,9943	2,998	3,0016
66,6	2,948	2,952	2,9559	2,9599	2,9638	2,9677	2,9716	2,9754	2,9793	2,9831	2,9868	2,9906	2,9944	2,9981	3,0018	3,0055	3,0091	3,0128	3,0164
66,7	2,9626	2,9666	2,9706	2,9746	2,9785	2,9824	2,9863	2,9902	2,994	2,9978	3,0016	3,0054	3,0092	3,0129	3,0166	3,0203	3,024	3,0277	3,0313
66,8	2,9774	2,9814	2,9854	2,9894	2,9933	2,9973	3,0012	3,005	3,0089	3,0127	3,0165	3,0203	3,0241	3,0279	3,0316	3,0353	3,039	3,0426	3,0463
66,9	2,9922	2,9962	3,0003	3,0043	3,0082	3,0121	3,0161	3,0199	3,0238	3,0277	3,0315	3,0353	3,0391	3,0429	3,0466	3,0503	3,054	3,0577	3,0614
67	3,0071	3,0112	3,0152	3,0192	3,0232	3,0271	3,031	3,0349	3,0388	3,0427	3,0465	3,0503	3,0541	3,0579	3,0617	3,0654	3,0691	3,0728	3,0765
67,1	3,0221	3,0262	3,0302	3,0342	3,0382	3,0422	3,0461	3,05	3,0539	3,0578	3,0616	3,0655	3,0693	3,0731	3,0769	3,0806	3,0843	3,088	3,0917
67,2	3,0372	3,0413	3,0453	3,0493	3,0533	3,0573	3,0613	3,0652	3,0691	3,073	3,0768	3,0807	3,0845	3,0883	3,0921	3,0959	3,0996	3,1033	3,107
67,3	3,0523	3,0564	3,0605	3,0645	3,0685	3,0725	3,0765	3,0804	3,0844	3,0882	3,0921	3,096	3,0998	3,1036	3,1074	3,1112	3,1149	3,1187	3,1224
67,4	3,0675	3,0716	3,0757	3,0798	3,0838	3,0878	3,0918	3,0958	3,0997	3,1036	3,1075	3,1114	3,1152	3,1191	3,1229	3,1266	3,1304	3,1342	3,1379

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
64	2,6583	2,6616	2,6648	2,6681	2,6714	2,6746	2,6778	2,681
64,1	2,6713	2,6746	2,6779	2,6812	2,6844	2,6877	2,6909	2,6941
64,2	2,6844	2,6877	2,691	2,6943	2,6976	2,7008	2,704	2,7073
64,3	2,6976	2,7009	2,7042	2,7075	2,7108	2,714	2,7173	2,7205
64,4	2,7108	2,7142	2,7175	2,7208	2,7241	2,7273	2,7306	2,7338
64,5	2,7241	2,7275	2,7308	2,7341	2,7374	2,7407	2,744	2,7472
64,6	2,7375	2,7409	2,7442	2,7475	2,7508	2,7541	2,7574	2,7606
64,7	2,751	2,7543	2,7577	2,761	2,7643	2,7676	2,7709	2,7742
64,8	2,7645	2,7679	2,7712	2,7746	2,7779	2,7812	2,7845	2,7878
64,9	2,778	2,7814	2,7848	2,7882	2,7915	2,7948	2,7981	2,8014
65	2,7917	2,7951	2,7985	2,8018	2,8052	2,8085	2,8119	2,8151
65,1	2,8054	2,8088	2,8122	2,8156	2,8189	2,8223	2,8256	2,8289
65,2	2,8192	2,8226	2,826	2,8294	2,8328	2,8362	2,8395	2,8428
65,3	2,8331	2,8365	2,8399	2,8433	2,8467	2,8501	2,8534	2,8568
65,4	2,847	2,8505	2,8539	2,8573	2,8607	2,8641	2,8674	2,8708
65,5	2,861	2,8645	2,8679	2,8713	2,8748	2,8781	2,8815	2,8848
65,6	2,8751	2,8786	2,882	2,8854	2,8889	2,8923	2,8957	2,899
65,7	2,8893	2,8927	2,8962	2,8996	2,9031	2,9065	2,9099	2,9132
65,8	2,9035	2,907	2,9104	2,9139	2,9173	2,9207	2,9242	2,9275
65,9	2,9178	2,9213	2,9248	2,9283	2,9317	2,9351	2,9385	2,9419
66	2,9322	2,9357	2,9392	2,9427	2,9461	2,9496	2,953	2,9564
66,1	2,9466	2,9501	2,9536	2,9571	2,9606	2,964	2,9675	2,9709
66,2	2,9611	2,9647	2,9682	2,9717	2,9752	2,9786	2,9821	2,9855
66,3	2,9757	2,9793	2,9828	2,9863	2,9898	2,9933	2,9968	3,0002
66,4	2,9904	2,994	2,9975	3,0011	3,0045	3,0081	3,0115	3,015
66,5	3,0052	3,0088	3,0123	3,0159	3,0194	3,0229	3,0264	3,0298
66,6	3,02	3,0236	3,0272	3,0307	3,0343	3,0378	3,0413	3,0447
66,7	3,0349	3,0385	3,0421	3,0457	3,0492	3,0527	3,0563	3,0597
66,8	3,0499	3,0535	3,0571	3,0607	3,0642	3,0678	3,0713	3,0748
66,9	3,065	3,0686	3,0722	3,0758	3,0794	3,0829	3,0864	3,0899
67	3,0801	3,0838	3,0874	3,091	3,0946	3,0981	3,1017	3,1052
67,1	3,0954	3,099	3,1026	3,1063	3,1099	3,1134	3,117	3,1205
67,2	3,1107	3,1144	3,118	3,1216	3,1252	3,1288	3,1324	3,1359
67,3	3,1261	3,1298	3,1334	3,137	3,1407	3,1443	3,1478	3,1514
67,4	3,1416	3,1453	3,1489	3,1526	3,1562	3,1598	3,1634	3,1669

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
67,5	2,0868	2,1163	2,1436	2,1691	2,1931	2,2157	2,2371	2,2575	2,2769	2,2954	2,3132	2,3303	2,3467	2,3625	2,3778	2,3926	2,4069	2,4208	2,4342
67,6	2,0987	2,1283	2,1557	2,1813	2,2054	2,2281	2,2496	2,27	2,2895	2,3081	2,3259	2,343	2,3595	2,3754	2,3908	2,4056	2,4199	2,4339	2,4474
67,7	2,1107	2,1404	2,1679	2,1936	2,2177	2,2405	2,2621	2,2826	2,3021	2,3208	2,3387	2,3559	2,3725	2,3884	2,4038	2,4187	2,4331	2,4471	2,4606
67,8	2,1228	2,1525	2,1802	2,206	2,2302	2,253	2,2747	2,2953	2,3149	2,3336	2,3516	2,3688	2,3854	2,4014	2,4169	2,4318	2,4463	2,4603	2,4739
67,9	2,1349	2,1648	2,1925	2,2184	2,2427	2,2656	2,2874	2,308	2,3277	2,3465	2,3645	2,3819	2,3985	2,4145	2,4301	2,4451	2,4596	2,4736	2,4873
68	2,1471	2,177	2,2049	2,2309	2,2553	2,2783	2,3001	2,3208	2,3406	2,3595	2,3776	2,3949	2,4116	2,4278	2,4433	2,4583	2,4729	2,487	2,5008
68,1	2,1593	2,1894	2,2173	2,2434	2,2679	2,291	2,3129	2,3337	2,3535	2,3725	2,3906	2,4081	2,4249	2,441	2,4566	2,4717	2,4864	2,5005	2,5143
68,2	2,1716	2,2018	2,2299	2,2561	2,2806	2,3038	2,3258	2,3467	2,3665	2,3856	2,4038	2,4213	2,4381	2,4544	2,47	2,4852	2,4999	2,5141	2,5279
68,3	2,184	2,2143	2,2425	2,2687	2,2934	2,3167	2,3387	2,3597	2,3797	2,3987	2,417	2,4346	2,4515	2,4678	2,4835	2,4987	2,5134	2,5277	2,5416
68,4	2,1965	2,2269	2,2552	2,2815	2,3063	2,3297	2,3518	2,3728	2,3928	2,412	2,4304	2,448	2,4649	2,4813	2,4971	2,5123	2,5271	2,5414	2,5553
68,5	2,209	2,2396	2,2679	2,2944	2,3192	2,3427	2,3649	2,386	2,4061	2,4253	2,4437	2,4614	2,4784	2,4949	2,5107	2,526	2,5408	2,5552	2,5692
68,6	2,2216	2,2523	2,2808	2,3073	2,3323	2,3558	2,3781	2,3993	2,4194	2,4387	2,4572	2,475	2,4921	2,5085	2,5244	2,5398	2,5547	2,5691	2,5831
68,7	2,2343	2,2651	2,2937	2,3203	2,3454	2,369	2,3913	2,4126	2,4328	2,4522	2,4708	2,4886	2,5057	2,5222	2,5382	2,5536	2,5686	2,583	2,5971
68,8	2,2471	2,278	2,3066	2,3334	2,3585	2,3822	2,4047	2,426	2,4463	2,4658	2,4844	2,5023	2,5195	2,536	2,5521	2,5675	2,5825	2,5971	2,6111
68,9	2,2599	2,2909	2,3197	2,3466	2,3718	2,3956	2,4181	2,4395	2,4599	2,4794	2,4981	2,516	2,5333	2,5499	2,566	2,5815	2,5966	2,6112	2,6253
69	2,2728	2,3039	2,3328	2,3598	2,3851	2,4089	2,4316	2,4531	2,4735	2,4931	2,5119	2,5299	2,5472	2,5639	2,58	2,5956	2,6107	2,6253	2,6395
69,1	2,2858	2,317	2,346	2,3731	2,3985	2,4224	2,4451	2,4667	2,4873	2,5069	2,5257	2,5438	2,5612	2,578	2,5941	2,6098	2,6249	2,6396	2,6539
69,2	2,2989	2,3302	2,3593	2,3865	2,412	2,436	2,4588	2,4804	2,5011	2,5208	2,5397	2,5578	2,5753	2,5921	2,6083	2,624	2,6392	2,6539	2,6683
69,3	2,312	2,3435	2,3727	2,3999	2,4255	2,4497	2,4725	2,4942	2,5149	2,5347	2,5537	2,5719	2,5894	2,6063	2,6226	2,6383	2,6536	2,6684	2,6828
69,4	2,3252	2,3568	2,3861	2,4135	2,4391	2,4634	2,4863	2,5081	2,5289	2,5488	2,5678	2,5861	2,6036	2,6206	2,6369	2,6527	2,6681	2,6829	2,6973
69,5	2,3385	2,3702	2,3996	2,4271	2,4529	2,4772	2,5002	2,5221	2,5429	2,5629	2,582	2,6003	2,6179	2,635	2,6514	2,6672	2,6826	2,6975	2,712
69,6	2,3519	2,3837	2,4132	2,4408	2,4667	2,4911	2,5142	2,5361	2,5571	2,5771	2,5962	2,6146	2,6323	2,6494	2,6659	2,6818	2,6972	2,7122	2,7267
69,7	2,3654	2,3973	2,4269	2,4546	2,4805	2,505	2,5282	2,5503	2,5713	2,5914	2,6106	2,629	2,6468	2,6639	2,6805	2,6965	2,7119	2,7269	2,7415
69,8	2,3789	2,4109	2,4407	2,4684	2,4945	2,5191	2,5424	2,5645	2,5856	2,6057	2,625	2,6436	2,6614	2,6786	2,6952	2,7112	2,7267	2,7418	2,7564
69,9	2,3925	2,4247	2,4545	2,4824	2,5085	2,5332	2,5566	2,5788	2,5999	2,6202	2,6395	2,6581	2,676	2,6933	2,7099	2,726	2,7416	2,7568	2,7714
70	2,4062	2,4385	2,4684	2,4964	2,5226	2,5474	2,5709	2,5931	2,6144	2,6347	2,6541	2,6728	2,6908	2,7081	2,7248	2,7409	2,7566	2,7718	2,7865
70,1	2,42	2,4524	2,4824	2,5105	2,5369	2,5617	2,5853	2,6076	2,6289	2,6493	2,6688	2,6876	2,7056	2,723	2,7397	2,756	2,7717	2,7869	2,8016
70,2	2,4338	2,4663	2,4965	2,5247	2,5512	2,5761	2,5997	2,6222	2,6436	2,664	2,6836	2,7024	2,7205	2,7379	2,7548	2,771	2,7868	2,8021	2,8169
70,3	2,4478	2,4804	2,5107	2,539	2,5655	2,5906	2,6143	2,6368	2,6583	2,6788	2,6985	2,7173	2,7355	2,753	2,7699	2,7862	2,802	2,8174	2,8322
70,4	2,4618	2,4946	2,5249	2,5533	2,58	2,6051	2,6289	2,6515	2,6731	2,6937	2,7134	2,7323	2,7506	2,7682	2,7851	2,8015	2,8174	2,8327	2,8477
70,5	2,4759	2,5088	2,5393	2,5678	2,5945	2,6198	2,6437	2,6663	2,688	2,7086	2,7284	2,7474	2,7657	2,7834	2,8004	2,8168	2,8328	2,8482	2,8632
70,6	2,4901	2,5231	2,5537	2,5823	2,6092	2,6345	2,6585	2,6812	2,7029	2,7237	2,7436	2,7626	2,781	2,7987	2,8158	2,8323	2,8483	2,8638	2,8788
70,7	2,5044	2,5375	2,5682	2,597	2,6239	2,6493	2,6734	2,6962	2,718	2,7388	2,7588	2,7779	2,7964	2,8141	2,8313	2,8478	2,8639	2,8794	2,8945
70,8	2,5187	2,552	2,5828	2,6117	2,6387	2,6642	2,6884	2,7113	2,7332	2,7541	2,7741	2,7933	2,8118	2,8296	2,8468	2,8635	2,8796	2,8952	2,9103
70,9	2,5332	2,5666	2,5975	2,6265	2,6536	2,6792	2,7034	2,7265	2,7484	2,7694	2,7895	2,8088	2,8273	2,8452	2,8625	2,8792	2,8954	2,911	2,9262

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
67,5	2,4473	2,46	2,4724	2,4845	2,4963	2,5078	2,519	2,53	2,5407	2,5512	2,5615	2,5716	2,5815	2,5912	2,6007	2,61	2,6192	2,6282	2,6371
67,6	2,4605	2,4733	2,4857	2,4979	2,5097	2,5212	2,5325	2,5435	2,5543	2,5648	2,5751	2,5852	2,5952	2,6049	2,6144	2,6238	2,633	2,6421	2,6509
67,7	2,4738	2,4866	2,4991	2,5113	2,5231	2,5347	2,546	2,5571	2,5679	2,5785	2,5888	2,599	2,6089	2,6187	2,6283	2,6377	2,6469	2,656	2,6649
67,8	2,4872	2,5	2,5125	2,5247	2,5366	2,5483	2,5596	2,5707	2,5816	2,5922	2,6026	2,6128	2,6227	2,6325	2,6421	2,6516	2,6609	2,67	2,6789
67,9	2,5006	2,5135	2,5261	2,5383	2,5502	2,5619	2,5733	2,5844	2,5953	2,606	2,6164	2,6266	2,6366	2,6465	2,6561	2,6656	2,6749	2,684	2,693
68	2,5141	2,527	2,5396	2,5519	2,5639	2,5756	2,5871	2,5982	2,6092	2,6199	2,6303	2,6406	2,6506	2,6605	2,6702	2,6797	2,689	2,6982	2,7072
68,1	2,5276	2,5407	2,5533	2,5656	2,5777	2,5894	2,6009	2,6121	2,6231	2,6338	2,6443	2,6546	2,6647	2,6746	2,6843	2,6938	2,7032	2,7124	2,7214
68,2	2,5413	2,5544	2,567	2,5794	2,5915	2,6033	2,6148	2,6261	2,637	2,6478	2,6584	2,6687	2,6788	2,6887	2,6985	2,7081	2,7175	2,7267	2,7358
68,3	2,555	2,5681	2,5809	2,5933	2,6054	2,6172	2,6288	2,6401	2,6511	2,6619	2,6725	2,6829	2,693	2,703	2,7128	2,7224	2,7318	2,7411	2,7502
68,4	2,5688	2,582	2,5948	2,6072	2,6194	2,6313	2,6428	2,6542	2,6653	2,6761	2,6867	2,6971	2,7073	2,7173	2,7271	2,7368	2,7463	2,7555	2,7647
68,5	2,5827	2,5959	2,6087	2,6213	2,6335	2,6454	2,657	2,6684	2,6795	2,6904	2,701	2,7115	2,7217	2,7317	2,7416	2,7513	2,7608	2,7701	2,7793
68,6	2,5967	2,6099	2,6228	2,6354	2,6476	2,6596	2,6712	2,6826	2,6938	2,7047	2,7154	2,7259	2,7362	2,7462	2,7561	2,7658	2,7754	2,7847	2,7939
68,7	2,6107	2,624	2,6369	2,6495	2,6618	2,6738	2,6855	2,697	2,7082	2,7191	2,7299	2,7404	2,7507	2,7608	2,7707	2,7805	2,79	2,7994	2,8087
68,8	2,6249	2,6382	2,6512	2,6638	2,6761	2,6882	2,6999	2,7114	2,7227	2,7336	2,7444	2,755	2,7653	2,7755	2,7854	2,7952	2,8048	2,8142	2,8235
68,9	2,6391	2,6525	2,6655	2,6782	2,6905	2,7026	2,7144	2,7259	2,7372	2,7483	2,759	2,7696	2,78	2,7902	2,8002	2,81	2,8196	2,8291	2,8384
69	2,6534	2,6668	2,6798	2,6926	2,705	2,7171	2,729	2,7405	2,7518	2,7629	2,7738	2,7844	2,7948	2,805	2,815	2,8249	2,8345	2,844	2,8534
69,1	2,6677	2,6812	2,6943	2,7071	2,7195	2,7317	2,7436	2,7552	2,7666	2,7777	2,7886	2,7992	2,8097	2,8199	2,83	2,8399	2,8495	2,8591	2,8685
69,2	2,6822	2,6957	2,7088	2,7217	2,7342	2,7464	2,7583	2,7699	2,7813	2,7925	2,8034	2,8141	2,8246	2,8349	2,845	2,8549	2,8646	2,8742	2,8836
69,3	2,6967	2,7103	2,7235	2,7363	2,7489	2,7611	2,7731	2,7848	2,7962	2,8074	2,8184	2,8291	2,8397	2,85	2,8601	2,8701	2,8798	2,8894	2,8989
69,4	2,7113	2,7249	2,7382	2,7511	2,7637	2,776	2,788	2,7997	2,8112	2,8224	2,8335	2,8442	2,8548	2,8651	2,8753	2,8853	2,8951	2,9047	2,9142
69,5	2,726	2,7397	2,753	2,7659	2,7786	2,7909	2,803	2,8147	2,8263	2,8376	2,8486	2,8594	2,87	2,8804	2,8906	2,9006	2,9104	2,9201	2,9296
69,6	2,7408	2,7545	2,7678	2,7809	2,7935	2,8059	2,818	2,8298	2,8414	2,8527	2,8638	2,8747	2,8853	2,8957	2,906	2,916	2,9259	2,9356	2,9451
69,7	2,7557	2,7694	2,7828	2,7959	2,8086	2,821	2,8332	2,845	2,8566	2,868	2,8791	2,89	2,9007	2,9111	2,9214	2,9315	2,9414	2,9512	2,9607
69,8	2,7706	2,7844	2,7979	2,811	2,8238	2,8362	2,8484	2,8603	2,8719	2,8833	2,8945	2,9054	2,9162	2,9267	2,9369	2,9471	2,957	2,9668	2,9764
69,9	2,7857	2,7995	2,813	2,8262	2,839	2,8515	2,8637	2,8757	2,8874	2,8988	2,91	2,9209	2,9317	2,9422	2,9526	2,9628	2,9727	2,9825	2,9921
70	2,8008	2,8147	2,8282	2,8415	2,8543	2,8669	2,8791	2,8911	2,9029	2,9143	2,9256	2,9366	2,9473	2,9579	2,9683	2,9785	2,9885	2,9984	3,008
70,1	2,816	2,83	2,8436	2,8568	2,8697	2,8823	2,8946	2,9067	2,9184	2,9299	2,9412	2,9523	2,9631	2,9737	2,9841	2,9944	3,0044	3,0143	3,024
70,2	2,8313	2,8453	2,859	2,8723	2,8852	2,8979	2,9102	2,9223	2,9341	2,9456	2,957	2,9681	2,9789	2,9896	3,0001	3,0103	3,0204	3,0303	3,04
70,3	2,8467	2,8608	2,8745	2,8878	2,9008	2,9135	2,9259	2,938	2,9499	2,9615	2,9728	2,9839	2,9949	3,0056	3,0161	3,0263	3,0364	3,0464	3,0562
70,4	2,8622	2,8763	2,8901	2,9034	2,9165	2,9292	2,9416	2,9538	2,9657	2,9774	2,9887	2,9999	3,0109	3,0216	3,0321	3,0425	3,0526	3,0626	3,0724
70,5	2,8778	2,8919	2,9057	2,9192	2,9322	2,945	2,9575	2,9697	2,9817	2,9933	3,0048	3,016	3,027	3,0377	3,0483	3,0587	3,0689	3,0789	3,0887
70,6	2,8934	2,9077	2,9215	2,935	2,9481	2,9609	2,9735	2,9857	2,9977	3,0094	3,0209	3,0321	3,0432	3,054	3,0646	3,075	3,0852	3,0953	3,1052
70,7	2,9092	2,9235	2,9373	2,9509	2,9641	2,977	2,9895	3,0018	3,0138	3,0256	3,0371	3,0484	3,0595	3,0703	3,081	3,0914	3,1017	3,1118	3,1217
70,8	2,925	2,9393	2,9533	2,9669	2,9801	2,993	3,0057	3,018	3,0301	3,0419	3,0534	3,0648	3,0759	3,0868	3,0974	3,1079	3,1182	3,1283	3,1383
70,9	2,941	2,9554	2,9693	2,983	2,9962	3,0092	3,0219	3,0343	3,0464	3,0582	3,0699	3,0812	3,0923	3,1033	3,114	3,1245	3,1349	3,145	3,155

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
67,5	2,6458	2,6544	2,6628	2,6711	2,6792	2,6873	2,6952	2,703	2,7107	2,7183	2,7258	2,7332	2,7405	2,7477	2,7548	2,7618	2,7688	2,7756	2,7824
67,6	2,6597	2,6683	2,6767	2,6851	2,6933	2,7013	2,7093	2,7171	2,7249	2,7325	2,74	2,7474	2,7547	2,7619	2,7691	2,7761	2,7831	2,79	2,7967
67,7	2,6737	2,6823	2,6908	2,6991	2,7073	2,7155	2,7234	2,7313	2,7391	2,7467	2,7543	2,7617	2,769	2,7763	2,7834	2,7905	2,7975	2,8044	2,8112
67,8	2,6877	2,6964	2,7049	2,7133	2,7215	2,7296	2,7377	2,7456	2,7533	2,761	2,7686	2,776	2,7834	2,7907	2,7979	2,805	2,812	2,8189	2,8257
67,9	2,7018	2,7105	2,7191	2,7275	2,7358	2,7439	2,752	2,7599	2,7677	2,7754	2,783	2,7905	2,7979	2,8052	2,8124	2,8195	2,8265	2,8335	2,8403
68	2,716	2,7248	2,7333	2,7418	2,7501	2,7583	2,7663	2,7743	2,7821	2,7899	2,7975	2,805	2,8124	2,8197	2,8269	2,8341	2,8412	2,8481	2,855
68,1	2,7303	2,7391	2,7477	2,7562	2,7645	2,7727	2,7808	2,7888	2,7966	2,8044	2,812	2,8196	2,827	2,8344	2,8416	2,8488	2,8559	2,8628	2,8697
68,2	2,7447	2,7535	2,7621	2,7706	2,779	2,7872	2,7953	2,8033	2,8112	2,819	2,8267	2,8343	2,8417	2,8491	2,8564	2,8636	2,8707	2,8777	2,8846
68,3	2,7591	2,768	2,7766	2,7851	2,7935	2,8018	2,81	2,818	2,8259	2,8337	2,8414	2,849	2,8565	2,8639	2,8712	2,8784	2,8856	2,8926	2,8995
68,4	2,7737	2,7825	2,7912	2,7997	2,8082	2,8165	2,8247	2,8327	2,8407	2,8485	2,8562	2,8639	2,8714	2,8788	2,8862	2,8934	2,9005	2,9076	2,9146
68,5	2,7883	2,7971	2,8059	2,8145	2,8229	2,8313	2,8395	2,8475	2,8555	2,8634	2,8711	2,8788	2,8863	2,8938	2,9011	2,9084	2,9156	2,9227	2,9296
68,6	2,8029	2,8119	2,8206	2,8292	2,8377	2,8461	2,8543	2,8624	2,8704	2,8783	2,8861	2,8938	2,9014	2,9088	2,9162	2,9235	2,9307	2,9378	2,9448
68,7	2,8177	2,8267	2,8354	2,8441	2,8526	2,861	2,8693	2,8774	2,8855	2,8934	2,9012	2,9089	2,9165	2,924	2,9314	2,9387	2,9459	2,953	2,9601
68,8	2,8326	2,8415	2,8504	2,859	2,8676	2,876	2,8843	2,8925	2,9006	2,9085	2,9163	2,924	2,9317	2,9392	2,9466	2,954	2,9612	2,9684	2,9755
68,9	2,8475	2,8565	2,8654	2,8741	2,8826	2,8911	2,8994	2,9076	2,9157	2,9237	2,9315	2,9393	2,947	2,9545	2,962	2,9693	2,9766	2,9838	2,9909
69	2,8625	2,8716	2,8804	2,8892	2,8978	2,9063	2,9146	2,9229	2,931	2,939	2,9469	2,9547	2,9623	2,9699	2,9774	2,9848	2,9921	2,9993	3,0064
69,1	2,8776	2,8867	2,8956	2,9044	2,913	2,9215	2,9299	2,9382	2,9463	2,9544	2,9623	2,9701	2,9778	2,9854	2,9929	3,0003	3,0076	3,0149	3,022
69,2	2,8928	2,9019	2,9109	2,9197	2,9283	2,9369	2,9453	2,9536	2,9618	2,9698	2,9778	2,9856	2,9933	3,001	3,0085	3,0159	3,0233	3,0305	3,0377
69,3	2,9081	2,9172	2,9262	2,935	2,9438	2,9523	2,9607	2,9691	2,9773	2,9854	2,9933	3,0012	3,0089	3,0166	3,0242	3,0316	3,039	3,0463	3,0535
69,4	2,9235	2,9326	2,9416	2,9505	2,9592	2,9678	2,9763	2,9847	2,9929	3,001	3,009	3,0169	3,0247	3,0324	3,0399	3,0474	3,0548	3,0622	3,0694
69,5	2,939	2,9481	2,9572	2,9661	2,9748	2,9834	2,992	3,0003	3,0086	3,0167	3,0247	3,0327	3,0405	3,0482	3,0558	3,0633	3,0708	3,0781	3,0853
69,6	2,9545	2,9637	2,9728	2,9817	2,9905	2,9992	3,0077	3,0161	3,0243	3,0325	3,0406	3,0485	3,0564	3,0641	3,0718	3,0793	3,0868	3,0941	3,1014
69,7	2,9701	2,9793	2,9885	2,9974	3,0062	3,0149	3,0235	3,0319	3,0402	3,0484	3,0565	3,0645	3,0724	3,0801	3,0878	3,0954	3,1029	3,1103	3,1175
69,8	2,9858	2,9951	3,0043	3,0132	3,0221	3,0308	3,0394	3,0478	3,0562	3,0644	3,0725	3,0806	3,0884	3,0962	3,1039	3,1115	3,119	3,1265	3,1338
69,9	3,0016	3,0109	3,0201	3,0291	3,038	3,0468	3,0554	3,0639	3,0723	3,0805	3,0887	3,0967	3,1046	3,1125	3,1202	3,1278	3,1353	3,1428	3,1501
70	3,0175	3,0269	3,0361	3,0451	3,054	3,0628	3,0715	3,08	3,0884	3,0967	3,1049	3,1129	3,1209	3,1287	3,1365	3,1441	3,1517	3,1591	3,1665
70,1	3,0335	3,0429	3,0521	3,0612	3,0702	3,079	3,0877	3,0962	3,1046	3,113	3,1211	3,1292	3,1372	3,1451	3,1529	3,1606	3,1681	3,1756	3,183
70,2	3,0496	3,059	3,0683	3,0774	3,0864	3,0952	3,1039	3,1125	3,121	3,1293	3,1376	3,1457	3,1537	3,1616	3,1694	3,1771	3,1847	3,1922	3,1996
70,3	3,0658	3,0752	3,0845	3,0937	3,1027	3,1116	3,1203	3,1289	3,1374	3,1458	3,154	3,1622	3,1702	3,1782	3,186	3,1937	3,2014	3,2089	3,2163
70,4	3,082	3,0915	3,1009	3,11	3,1191	3,128	3,1367	3,1454	3,1539	3,1623	3,1706	3,1788	3,1868	3,1948	3,2027	3,2105	3,2181	3,2257	3,2331
70,5	3,0984	3,1079	3,1173	3,1265	3,1356	3,1445	3,1533	3,162	3,1705	3,179	3,1873	3,1955	3,2036	3,2116	3,2195	3,2273	3,235	3,2425	3,2501
70,6	3,1149	3,1244	3,1338	3,1431	3,1522	3,1611	3,17	3,1787	3,1873	3,1957	3,2041	3,2123	3,2204	3,2284	3,2363	3,2442	3,2519	3,2595	3,267
70,7	3,1314	3,141	3,1504	3,1597	3,1689	3,1779	3,1867	3,1955	3,2041	3,2126	3,221	3,2292	3,2374	3,2454	3,2534	3,2612	3,2689	3,2766	3,2841
70,8	3,1481	3,1577	3,1671	3,1765	3,1856	3,1947	3,2036	3,2123	3,221	3,2295	3,2379	3,2462	3,2544	3,2625	3,2704	3,2783	3,2861	3,2938	3,3013
70,9	3,1648	3,1745	3,184	3,1933	3,2025	3,2116	3,2205	3,2293	3,238	3,2465	3,255	3,2633	3,2715	3,2796	3,2876	3,2955	3,3033	3,311	3,3186

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
67,5	2,789	2,7956	2,8022	2,8086	2,815	2,8213	2,8276	2,8338	2,8399	2,8459	2,8519	2,8578	2,8637	2,8695	2,8753	2,881	2,8866	2,8923	2,8978
67,6	2,8034	2,81	2,8166	2,8231	2,8295	2,8358	2,8421	2,8483	2,8544	2,8605	2,8665	2,8725	2,8784	2,8842	2,89	2,8957	2,9014	2,907	2,9126
67,7	2,8179	2,8246	2,8311	2,8376	2,8441	2,8504	2,8567	2,8629	2,8691	2,8752	2,8812	2,8872	2,8931	2,8989	2,9047	2,9105	2,9162	2,9218	2,9274
67,8	2,8325	2,8391	2,8457	2,8522	2,8587	2,8651	2,8714	2,8776	2,8838	2,8899	2,896	2,902	2,9079	2,9138	2,9196	2,9254	2,9311	2,9367	2,9423
67,9	2,8471	2,8538	2,8604	2,867	2,8734	2,8798	2,8862	2,8924	2,8986	2,9048	2,9108	2,9169	2,9228	2,9287	2,9345	2,9403	2,946	2,9517	2,9573
68	2,8618	2,8685	2,8751	2,8817	2,8882	2,8946	2,901	2,9073	2,9135	2,9197	2,9258	2,9318	2,9378	2,9437	2,9495	2,9553	2,9611	2,9668	2,9724
68,1	2,8766	2,8833	2,89	2,8966	2,9031	2,9095	2,9159	2,9222	2,9285	2,9347	2,9408	2,9468	2,9528	2,9588	2,9646	2,9704	2,9762	2,9819	2,9876
68,2	2,8915	2,8982	2,9049	2,9115	2,9181	2,9245	2,9309	2,9373	2,9435	2,9497	2,9559	2,9619	2,9679	2,9739	2,9798	2,9857	2,9914	2,9972	3,0028
68,3	2,9064	2,9132	2,9199	2,9265	2,9331	2,9396	2,946	2,9524	2,9586	2,9649	2,971	2,9771	2,9832	2,9892	2,9951	3,0009	3,0067	3,0125	3,0182
68,4	2,9214	2,9283	2,935	2,9417	2,9482	2,9547	2,9612	2,9676	2,9739	2,9801	2,9863	2,9924	2,9985	3,0045	3,0104	3,0163	3,0221	3,0279	3,0336
68,5	2,9366	2,9434	2,9502	2,9569	2,9634	2,97	2,9765	2,9829	2,9892	2,9954	3,0017	3,0078	3,0139	3,0199	3,0258	3,0317	3,0376	3,0434	3,0491
68,6	2,9518	2,9586	2,9654	2,9721	2,9788	2,9853	2,9918	2,9982	3,0046	3,0109	3,0171	3,0232	3,0293	3,0354	3,0414	3,0473	3,0531	3,0589	3,0647
68,7	2,9671	2,9739	2,9808	2,9875	2,9941	3,0007	3,0072	3,0137	3,02	3,0263	3,0326	3,0388	3,0449	3,0509	3,0569	3,0629	3,0688	3,0746	3,0804
68,8	2,9824	2,9893	2,9962	3,0029	3,0096	3,0162	3,0227	3,0292	3,0356	3,0419	3,0482	3,0544	3,0605	3,0666	3,0726	3,0786	3,0845	3,0904	3,0962
68,9	2,9979	3,0048	3,0117	3,0185	3,0252	3,0318	3,0384	3,0448	3,0513	3,0576	3,0639	3,0701	3,0763	3,0824	3,0884	3,0944	3,1003	3,1062	3,112
69	3,0135	3,0204	3,0273	3,0341	3,0408	3,0475	3,054	3,0605	3,067	3,0734	3,0797	3,0859	3,0921	3,0982	3,1043	3,1103	3,1162	3,1221	3,128
69,1	3,0291	3,0361	3,0429	3,0498	3,0565	3,0632	3,0698	3,0763	3,0828	3,0892	3,0955	3,1018	3,108	3,1141	3,1202	3,1263	3,1322	3,1381	3,144
69,2	3,0448	3,0518	3,0587	3,0656	3,0723	3,079	3,0857	3,0922	3,0987	3,1051	3,1115	3,1178	3,124	3,1302	3,1362	3,1423	3,1483	3,1542	3,1601
69,3	3,0606	3,0676	3,0746	3,0814	3,0882	3,095	3,1016	3,1082	3,1147	3,1211	3,1275	3,1338	3,1401	3,1463	3,1524	3,1585	3,1645	3,1704	3,1763
69,4	3,0765	3,0836	3,0905	3,0974	3,1043	3,111	3,1177	3,1243	3,1308	3,1373	3,1436	3,15	3,1562	3,1624	3,1686	3,1747	3,1807	3,1867	3,1926
69,5	3,0925	3,0996	3,1066	3,1135	3,1203	3,1271	3,1338	3,1404	3,147	3,1534	3,1599	3,1662	3,1725	3,1788	3,1849	3,191	3,1971	3,2031	3,209
69,6	3,1086	3,1157	3,1227	3,1297	3,1365	3,1433	3,15	3,1567	3,1632	3,1697	3,1762	3,1826	3,1889	3,1951	3,2013	3,2074	3,2135	3,2195	3,2255
69,7	3,1247	3,1319	3,1389	3,1459	3,1528	3,1596	3,1663	3,173	3,1796	3,1861	3,1926	3,199	3,2053	3,2116	3,2178	3,224	3,2301	3,2361	3,2421
69,8	3,141	3,1482	3,1552	3,1622	3,1691	3,176	3,1827	3,1894	3,196	3,2026	3,2091	3,2155	3,2219	3,2282	3,2344	3,2406	3,2467	3,2528	3,2588
69,9	3,1574	3,1645	3,1717	3,1787	3,1856	3,1925	3,1993	3,206	3,2126	3,2192	3,2257	3,2321	3,2385	3,2448	3,2511	3,2573	3,2634	3,2695	3,2755
70	3,1738	3,181	3,1882	3,1952	3,2021	3,209	3,2158	3,2226	3,2293	3,2358	3,2424	3,2488	3,2552	3,2616	3,2679	3,2741	3,2802	3,2863	3,2924
70,1	3,1904	3,1976	3,2047	3,2118	3,2188	3,2257	3,2325	3,2393	3,246	3,2526	3,2591	3,2657	3,2721	3,2784	3,2847	3,291	3,2972	3,3033	3,3093
70,2	3,207	3,2142	3,2214	3,2285	3,2355	3,2425	3,2493	3,2561	3,2628	3,2695	3,276	3,2825	3,289	3,2954	3,3017	3,3079	3,3142	3,3203	3,3264
70,3	3,2237	3,231	3,2382	3,2453	3,2524	3,2593	3,2662	3,273	3,2798	3,2864	3,293	3,2995	3,306	3,3124	3,3188	3,325	3,3313	3,3374	3,3436
70,4	3,2405	3,2479	3,2551	3,2622	3,2693	3,2763	3,2832	3,29	3,2968	3,3034	3,3101	3,3167	3,3231	3,3295	3,3359	3,3422	3,3485	3,3546	3,3608
70,5	3,2575	3,2648	3,2721	3,2792	3,2863	3,2933	3,3002	3,3071	3,3139	3,3206	3,3273	3,3338	3,3403	3,3468	3,3532	3,3595	3,3658	3,372	3,3781
70,6	3,2745	3,2818	3,2891	3,2963	3,3034	3,3105	3,3174	3,3243	3,3311	3,3379	3,3445	3,3511	3,3577	3,3641	3,3706	3,3769	3,3832	3,3894	3,3956
70,7	3,2916	3,299	3,3063	3,3135	3,3207	3,3277	3,3347	3,3416	3,3484	3,3552	3,3619	3,3685	3,375	3,3816	3,388	3,3944	3,4007	3,4069	3,4131
70,8	3,3088	3,3163	3,3236	3,3308	3,338	3,3451	3,352	3,359	3,3659	3,3726	3,3794	3,386	3,3926	3,3991	3,4055	3,4119	3,4183	3,4246	3,4308
70,9	3,3262	3,3336	3,3409	3,3482	3,3554	3,3625	3,3695	3,3765	3,3834	3,3902	3,3969	3,4036	3,4102	3,4167	3,4232	3,4296	3,436	3,4423	3,4485

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
67,5	2,9033	2,9087	2,9141	2,9195	2,9248	2,93	2,9353	2,9404	2,9455	2,9506	2,9557	2,9607	2,9657	2,9706	2,9755	2,9803	2,9851	2,9899	2,9946
67,6	2,918	2,9235	2,929	2,9343	2,9396	2,9449	2,9501	2,9553	2,9605	2,9656	2,9707	2,9757	2,9807	2,9856	2,9905	2,9954	3,0002	3,005	3,0097
67,7	2,9329	2,9384	2,9438	2,9492	2,9546	2,9599	2,9651	2,9703	2,9755	2,9806	2,9857	2,9907	2,9957	3,0007	3,0056	3,0105	3,0153	3,0201	3,0249
67,8	2,9479	2,9534	2,9588	2,9642	2,9696	2,9749	2,9802	2,9854	2,9906	2,9957	3,0008	3,0059	3,0109	3,0159	3,0208	3,0257	3,0306	3,0354	3,0402
67,9	2,9629	2,9684	2,9739	2,9793	2,9847	2,99	2,9953	3,0005	3,0058	3,0109	3,016	3,0211	3,0261	3,0311	3,0361	3,041	3,0459	3,0507	3,0555
68	2,978	2,9835	2,989	2,9945	2,9999	3,0052	3,0105	3,0158	3,021	3,0262	3,0313	3,0364	3,0414	3,0465	3,0514	3,0564	3,0613	3,0661	3,0709
68,1	2,9932	2,9988	3,0043	3,0097	3,0151	3,0205	3,0258	3,0311	3,0364	3,0415	3,0467	3,0518	3,0569	3,0619	3,0669	3,0718	3,0767	3,0816	3,0865
68,2	3,0085	3,0141	3,0196	3,025	3,0305	3,0359	3,0412	3,0465	3,0518	3,057	3,0621	3,0673	3,0723	3,0774	3,0824	3,0874	3,0923	3,0972	3,1021
68,3	3,0238	3,0294	3,035	3,0405	3,0459	3,0513	3,0567	3,062	3,0673	3,0725	3,0777	3,0828	3,0879	3,093	3,098	3,103	3,1079	3,1128	3,1177
68,4	3,0393	3,0449	3,0504	3,056	3,0614	3,0669	3,0722	3,0776	3,0829	3,0881	3,0933	3,0985	3,1036	3,1087	3,1137	3,1187	3,1237	3,1286	3,1335
68,5	3,0548	3,0604	3,066	3,0716	3,077	3,0825	3,0879	3,0932	3,0985	3,1038	3,109	3,1142	3,1193	3,1244	3,1295	3,1345	3,1395	3,1444	3,1493
68,6	3,0704	3,0761	3,0817	3,0872	3,0927	3,0982	3,1036	3,109	3,1143	3,1196	3,1248	3,13	3,1352	3,1403	3,1454	3,1504	3,1554	3,1604	3,1653
68,7	3,0861	3,0918	3,0974	3,103	3,1085	3,114	3,1194	3,1248	3,1301	3,1355	3,1407	3,1459	3,1511	3,1562	3,1613	3,1664	3,1714	3,1764	3,1813
68,8	3,1019	3,1076	3,1133	3,1188	3,1244	3,1299	3,1353	3,1408	3,1461	3,1514	3,1567	3,1619	3,1671	3,1723	3,1774	3,1824	3,1875	3,1925	3,1974
68,9	3,1178	3,1235	3,1292	3,1348	3,1403	3,1459	3,1513	3,1567	3,1621	3,1675	3,1728	3,178	3,1832	3,1884	3,1935	3,1986	3,2037	3,2086	3,2136
69	3,1338	3,1395	3,1452	3,1508	3,1564	3,1619	3,1674	3,1728	3,1782	3,1836	3,1889	3,1942	3,1994	3,2046	3,2097	3,2148	3,2199	3,2249	3,2299
69,1	3,1498	3,1555	3,1612	3,1669	3,1725	3,1781	3,1836	3,189	3,1945	3,1998	3,2051	3,2104	3,2157	3,2209	3,226	3,2312	3,2363	3,2413	3,2463
69,2	3,1659	3,1717	3,1774	3,1831	3,1887	3,1943	3,1998	3,2053	3,2107	3,2161	3,2215	3,2268	3,232	3,2373	3,2425	3,2476	3,2527	3,2578	3,2628
69,3	3,1822	3,1879	3,1937	3,1994	3,205	3,2106	3,2162	3,2217	3,2271	3,2325	3,2379	3,2432	3,2485	3,2538	3,259	3,2641	3,2692	3,2743	3,2793
69,4	3,1985	3,2043	3,2101	3,2158	3,2214	3,227	3,2326	3,2381	3,2436	3,249	3,2544	3,2598	3,265	3,2703	3,2755	3,2807	3,2859	3,2909	3,296
69,5	3,2149	3,2207	3,2265	3,2322	3,2379	3,2436	3,2491	3,2547	3,2602	3,2656	3,271	3,2764	3,2817	3,287	3,2922	3,2974	3,3026	3,3077	3,3128
69,6	3,2314	3,2373	3,2431	3,2488	3,2545	3,2602	3,2658	3,2713	3,2769	3,2823	3,2877	3,2931	3,2984	3,3037	3,309	3,3142	3,3194	3,3245	3,3296
69,7	3,248	3,2539	3,2597	3,2655	3,2712	3,2769	3,2825	3,2881	3,2936	3,2991	3,3045	3,3099	3,3153	3,3206	3,3259	3,3311	3,3363	3,3414	3,3465
69,8	3,2647	3,2706	3,2764	3,2822	3,288	3,2937	3,2993	3,3049	3,3104	3,3159	3,3214	3,3268	3,3322	3,3375	3,3428	3,3481	3,3533	3,3585	3,3636
69,9	3,2815	3,2874	3,2933	3,2991	3,3048	3,3105	3,3162	3,3218	3,3274	3,3329	3,3384	3,3438	3,3492	3,3546	3,3599	3,3651	3,3704	3,3756	3,3807
70	3,2984	3,3043	3,3102	3,316	3,3218	3,3275	3,3332	3,3389	3,3444	3,35	3,3555	3,3609	3,3663	3,3717	3,3771	3,3823	3,3876	3,3928	3,398
70,1	3,3154	3,3213	3,3272	3,333	3,3388	3,3446	3,3503	3,356	3,3616	3,3671	3,3727	3,3781	3,3836	3,3889	3,3943	3,3996	3,4048	3,4101	3,4153
70,2	3,3324	3,3384	3,3443	3,3502	3,356	3,3618	3,3675	3,3732	3,3788	3,3844	3,3899	3,3954	3,4009	3,4063	3,4116	3,417	3,4223	3,4275	3,4327
70,3	3,3496	3,3556	3,3615	3,3674	3,3733	3,379	3,3848	3,3905	3,3961	3,4017	3,4073	3,4128	3,4183	3,4237	3,4291	3,4344	3,4397	3,445	3,4502
70,4	3,3669	3,3729	3,3789	3,3848	3,3906	3,3964	3,4022	3,4079	3,4136	3,4192	3,4248	3,4303	3,4358	3,4412	3,4466	3,452	3,4573	3,4626	3,4678
70,5	3,3842	3,3903	3,3963	3,4022	3,4081	3,4139	3,4197	3,4254	3,4311	3,4368	3,4424	3,4479	3,4534	3,4589	3,4643	3,4697	3,475	3,4803	3,4856
70,6	3,4017	3,4077	3,4138	3,4197	3,4256	3,4315	3,4373	3,4431	3,4487	3,4544	3,46	3,4656	3,4711	3,4766	3,482	3,4874	3,4928	3,4981	3,5034
70,7	3,4193	3,4253	3,4314	3,4373	3,4433	3,4492	3,455	3,4608	3,4665	3,4722	3,4778	3,4834	3,4889	3,4944	3,4999	3,5053	3,5107	3,516	3,5213
70,8	3,4369	3,443	3,4491	3,4551	3,461	3,4669	3,4728	3,4786	3,4843	3,49	3,4956	3,5013	3,5068	3,5124	3,5178	3,5233	3,5287	3,534	3,5393
70,9	3,4547	3,4608	3,4669	3,4729	3,4789	3,4848	3,4907	3,4965	3,5022	3,508	3,5136	3,5193	3,5249	3,5304	3,5359	3,5413	3,5467	3,5521	3,5575

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
67,5	2,9994	3,004	3,0087	3,0133	3,0178	3,0224	3,0269	3,0314	3,0358	3,0402	3,0446	3,049	3,0533	3,0576	3,0619	3,0661	3,0704	3,0745	3,0787
67,6	3,0145	3,0191	3,0238	3,0284	3,033	3,0376	3,0421	3,0466	3,0511	3,0555	3,0599	3,0643	3,0686	3,0729	3,0772	3,0815	3,0857	3,0899	3,0941
67,7	3,0297	3,0343	3,039	3,0437	3,0483	3,0528	3,0574	3,0619	3,0664	3,0708	3,0752	3,0796	3,084	3,0883	3,0926	3,0969	3,1011	3,1054	3,1096
67,8	3,0449	3,0497	3,0543	3,059	3,0636	3,0682	3,0728	3,0773	3,0818	3,0862	3,0907	3,0951	3,0995	3,1038	3,1081	3,1124	3,1167	3,1209	3,1251
67,9	3,0603	3,065	3,0697	3,0744	3,079	3,0836	3,0882	3,0927	3,0973	3,1017	3,1062	3,1106	3,115	3,1194	3,1237	3,128	3,1323	3,1365	3,1408
68	3,0757	3,0805	3,0852	3,0899	3,0945	3,0992	3,1038	3,1083	3,1128	3,1173	3,1218	3,1262	3,1306	3,135	3,1394	3,1437	3,148	3,1522	3,1565
68,1	3,0913	3,096	3,1007	3,1055	3,1101	3,1148	3,1194	3,1239	3,1285	3,133	3,1375	3,1419	3,1463	3,1507	3,1551	3,1594	3,1637	3,168	3,1723
68,2	3,1069	3,1116	3,1164	3,1211	3,1258	3,1305	3,1351	3,1396	3,1442	3,1487	3,1532	3,1577	3,1621	3,1665	3,1709	3,1753	3,1796	3,1839	3,1881
68,3	3,1226	3,1274	3,1321	3,1369	3,1416	3,1462	3,1509	3,1555	3,16	3,1646	3,1691	3,1736	3,178	3,1824	3,1868	3,1912	3,1955	3,1998	3,2041
68,4	3,1383	3,1432	3,1479	3,1527	3,1574	3,1621	3,1668	3,1714	3,1759	3,1805	3,185	3,1895	3,194	3,1984	3,2028	3,2072	3,2116	3,2159	3,2202
68,5	3,1542	3,159	3,1639	3,1686	3,1733	3,178	3,1827	3,1874	3,1919	3,1965	3,2011	3,2055	3,2101	3,2145	3,2189	3,2233	3,2277	3,232	3,2363
68,6	3,1702	3,175	3,1798	3,1846	3,1893	3,1941	3,1987	3,2034	3,208	3,2126	3,2172	3,2217	3,2262	3,2307	3,2351	3,2395	3,2439	3,2482	3,2526
68,7	3,1862	3,1911	3,1959	3,2007	3,2055	3,2102	3,2149	3,2196	3,2242	3,2288	3,2334	3,2379	3,2424	3,2469	3,2514	3,2558	3,2602	3,2646	3,2689
68,8	3,2024	3,2072	3,2121	3,2169	3,2217	3,2264	3,2311	3,2358	3,2405	3,2451	3,2497	3,2542	3,2588	3,2633	3,2677	3,2721	3,2766	3,2809	3,2853
68,9	3,2186	3,2235	3,2283	3,2332	3,238	3,2427	3,2475	3,2522	3,2568	3,2615	3,2661	3,2706	3,2752	3,2797	3,2842	3,2886	3,293	3,2975	3,3018
69	3,2349	3,2398	3,2447	3,2495	3,2543	3,2591	3,2639	3,2686	3,2732	3,2779	3,2825	3,2871	3,2917	3,2962	3,3007	3,3052	3,3096	3,314	3,3184
69,1	3,2513	3,2562	3,2611	3,266	3,2708	3,2756	3,2804	3,2851	3,2898	3,2944	3,2991	3,3037	3,3083	3,3128	3,3173	3,3218	3,3263	3,3307	3,3351
69,2	3,2678	3,2727	3,2776	3,2825	3,2874	3,2922	3,297	3,3017	3,3064	3,3111	3,3157	3,3204	3,3249	3,3295	3,334	3,3386	3,343	3,3475	3,3519
69,3	3,2843	3,2893	3,2942	3,2991	3,304	3,3089	3,3136	3,3184	3,3231	3,3278	3,3325	3,3371	3,3418	3,3463	3,3509	3,3554	3,3599	3,3643	3,3688
69,4	3,301	3,306	3,311	3,3159	3,3207	3,3256	3,3304	3,3352	3,3399	3,3447	3,3494	3,354	3,3586	3,3632	3,3678	3,3723	3,3768	3,3813	3,3857
69,5	3,3178	3,3228	3,3278	3,3327	3,3376	3,3425	3,3473	3,3521	3,3569	3,3616	3,3663	3,371	3,3756	3,3802	3,3848	3,3893	3,3938	3,3983	3,4028
69,6	3,3347	3,3397	3,3447	3,3496	3,3545	3,3594	3,3642	3,3691	3,3739	3,3786	3,3833	3,388	3,3927	3,3973	3,4019	3,4064	3,411	3,4155	3,42
69,7	3,3516	3,3567	3,3617	3,3666	3,3715	3,3765	3,3813	3,3861	3,391	3,3957	3,4004	3,4051	3,4098	3,4144	3,4191	3,4236	3,4282	3,4327	3,4372
69,8	3,3687	3,3737	3,3788	3,3837	3,3887	3,3936	3,3985	3,4033	3,4081	3,4129	3,4177	3,4224	3,4271	3,4317	3,4363	3,441	3,4455	3,4501	3,4546
69,9	3,3858	3,3909	3,3959	3,4009	3,4059	3,4108	3,4157	3,4206	3,4254	3,4302	3,435	3,4397	3,4444	3,4491	3,4537	3,4584	3,4629	3,4675	3,472
70	3,4031	3,4082	3,4132	3,4182	3,4232	3,4282	3,4331	3,4379	3,4428	3,4476	3,4524	3,4571	3,4619	3,4666	3,4712	3,4758	3,4804	3,485	3,4895
70,1	3,4204	3,4255	3,4306	3,4356	3,4406	3,4456	3,4505	3,4554	3,4603	3,4651	3,4699	3,4747	3,4794	3,4841	3,4888	3,4934	3,498	3,5026	3,5072
70,2	3,4379	3,443	3,4481	3,4531	3,4581	3,4631	3,4681	3,473	3,4779	3,4827	3,4875	3,4923	3,4971	3,5018	3,5065	3,5111	3,5158	3,5204	3,5249
70,3	3,4554	3,4605	3,4656	3,4707	3,4758	3,4808	3,4857	3,4907	3,4956	3,5004	3,5052	3,51	3,5148	3,5196	3,5243	3,5289	3,5336	3,5382	3,5428
70,4	3,473	3,4782	3,4833	3,4884	3,4935	3,4985	3,5035	3,5084	3,5133	3,5182	3,523	3,5279	3,5327	3,5374	3,5421	3,5468	3,5515	3,5561	3,5607
70,5	3,4908	3,496	3,5011	3,5062	3,5113	3,5163	3,5213	3,5263	3,5312	3,5361	3,541	3,5458	3,5506	3,5554	3,5601	3,5648	3,5695	3,5742	3,5788
70,6	3,5086	3,5138	3,519	3,5241	3,5292	3,5342	3,5393	3,5443	3,5492	3,5541	3,559	3,5639	3,5687	3,5734	3,5782	3,5829	3,5876	3,5923	3,5969
70,7	3,5266	3,5318	3,537	3,5421	3,5472	3,5523	3,5573	3,5623	3,5673	3,5722	3,5771	3,582	3,5868	3,5916	3,5964	3,6011	3,6058	3,6105	3,6152
70,8	3,5446	3,5498	3,555	3,5602	3,5653	3,5704	3,5755	3,5805	3,5855	3,5904	3,5953	3,6002	3,6051	3,6099	3,6147	3,6194	3,6242	3,6289	3,6335
70,9	3,5627	3,568	3,5732	3,5784	3,5835	3,5886	3,5937	3,5988	3,6038	3,6087	3,6137	3,6186	3,6234	3,6283	3,6331	3,6379	3,6426	3,6473	3,652

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
67,5	3,0829	3,087	3,0911	3,0951	3,0992	3,1032	3,1072	3,1112	3,1151	3,1191	3,1229	3,1268	3,1307	3,1345	3,1384	3,1421	3,1459	3,1497	3,1534
67,6	3,0983	3,1024	3,1065	3,1106	3,1146	3,1187	3,1227	3,1267	3,1306	3,1346	3,1385	3,1424	3,1462	3,1501	3,1539	3,1578	3,1615	3,1653	3,1691
67,7	3,1138	3,1179	3,122	3,1261	3,1302	3,1342	3,1382	3,1422	3,1462	3,1502	3,1541	3,158	3,1619	3,1658	3,1696	3,1734	3,1772	3,181	3,1848
67,8	3,1293	3,1335	3,1376	3,1417	3,1458	3,1499	3,1539	3,1579	3,1619	3,1658	3,1698	3,1737	3,1776	3,1815	3,1854	3,1892	3,193	3,1968	3,2006
67,9	3,1449	3,1491	3,1533	3,1574	3,1615	3,1656	3,1696	3,1736	3,1776	3,1816	3,1856	3,1895	3,1934	3,1973	3,2012	3,205	3,2089	3,2127	3,2165
68	3,1607	3,1649	3,169	3,1732	3,1773	3,1814	3,1854	3,1895	3,1935	3,1975	3,2014	3,2054	3,2093	3,2132	3,2171	3,221	3,2248	3,2286	3,2324
68,1	3,1765	3,1807	3,1849	3,189	3,1932	3,1972	3,2013	3,2054	3,2094	3,2134	3,2174	3,2213	3,2253	3,2292	3,2331	3,237	3,2408	3,2447	3,2485
68,2	3,1924	3,1966	3,2008	3,2049	3,2091	3,2132	3,2173	3,2214	3,2254	3,2294	3,2334	3,2374	3,2414	3,2453	3,2492	3,2531	3,257	3,2608	3,2646
68,3	3,2084	3,2126	3,2168	3,221	3,2251	3,2293	3,2334	3,2375	3,2415	3,2455	3,2496	3,2536	3,2575	3,2615	3,2654	3,2693	3,2732	3,277	3,2809
68,4	3,2244	3,2287	3,2329	3,2371	3,2413	3,2454	3,2495	3,2536	3,2577	3,2618	3,2658	3,2698	3,2738	3,2777	3,2817	3,2856	3,2895	3,2934	3,2972
68,5	3,2406	3,2449	3,2491	3,2533	3,2575	3,2617	3,2658	3,2699	3,274	3,278	3,2821	3,2861	3,2901	3,2941	3,298	3,3019	3,3059	3,3097	3,3136
68,6	3,2569	3,2612	3,2654	3,2696	3,2738	3,278	3,2821	3,2863	3,2903	3,2944	3,2985	3,3025	3,3065	3,3105	3,3145	3,3184	3,3223	3,3262	3,3301
68,7	3,2732	3,2775	3,2818	3,286	3,2902	3,2944	3,2986	3,3027	3,3068	3,3109	3,315	3,319	3,323	3,327	3,331	3,335	3,3389	3,3428	3,3467
68,8	3,2896	3,2939	3,2982	3,3025	3,3067	3,3109	3,3151	3,3192	3,3234	3,3275	3,3315	3,3356	3,3396	3,3436	3,3476	3,3516	3,3555	3,3595	3,3634
68,9	3,3062	3,3105	3,3148	3,319	3,3233	3,3275	3,3317	3,3359	3,34	3,3441	3,3482	3,3523	3,3563	3,3604	3,3643	3,3684	3,3723	3,3762	3,3802
69	3,3228	3,3271	3,3314	3,3357	3,34	3,3442	3,3484	3,3526	3,3567	3,3608	3,365	3,369	3,3731	3,3772	3,3812	3,3852	3,3891	3,3931	3,397
69,1	3,3395	3,3438	3,3481	3,3524	3,3567	3,3609	3,3652	3,3694	3,3735	3,3777	3,3818	3,3859	3,39	3,394	3,3981	3,4021	3,4061	3,41	3,414
69,2	3,3563	3,3607	3,365	3,3693	3,3736	3,3778	3,3821	3,3863	3,3905	3,3946	3,3988	3,4029	3,407	3,411	3,4151	3,4191	3,4231	3,4271	3,431
69,3	3,3732	3,3775	3,3819	3,3862	3,3905	3,3948	3,3991	3,4033	3,4075	3,4116	3,4158	3,4199	3,424	3,4281	3,4322	3,4362	3,4402	3,4442	3,4482
69,4	3,3901	3,3945	3,3989	3,4032	3,4076	3,4119	3,4161	3,4204	3,4246	3,4288	3,4329	3,4371	3,4412	3,4453	3,4494	3,4534	3,4574	3,4614	3,4654
69,5	3,4072	3,4116	3,416	3,4204	3,4247	3,429	3,4333	3,4375	3,4418	3,446	3,4501	3,4543	3,4584	3,4625	3,4666	3,4707	3,4748	3,4788	3,4827
69,6	3,4244	3,4288	3,4332	3,4376	3,4419	3,4463	3,4506	3,4548	3,459	3,4633	3,4675	3,4716	3,4758	3,4799	3,484	3,4881	3,4922	3,4962	3,5002
69,7	3,4417	3,4461	3,4505	3,4549	3,4593	3,4636	3,4679	3,4722	3,4765	3,4807	3,4849	3,4891	3,4932	3,4974	3,5015	3,5056	3,5097	3,5137	3,5177
69,8	3,459	3,4635	3,4679	3,4723	3,4767	3,481	3,4854	3,4897	3,4939	3,4982	3,5024	3,5066	3,5108	3,5149	3,5191	3,5232	3,5272	3,5313	3,5354
69,9	3,4765	3,481	3,4854	3,4898	3,4942	3,4986	3,5029	3,5072	3,5115	3,5158	3,52	3,5242	3,5284	3,5326	3,5367	3,5409	3,545	3,549	3,5531
70	3,494	3,4986	3,503	3,5074	3,5118	3,5162	3,5206	3,5249	3,5292	3,5335	3,5377	3,542	3,5461	3,5504	3,5545	3,5586	3,5628	3,5668	3,5709
70,1	3,5117	3,5162	3,5207	3,5252	3,5296	3,5339	3,5383	3,5427	3,547	3,5513	3,5555	3,5598	3,564	3,5682	3,5724	3,5765	3,5807	3,5847	3,5888
70,2	3,5295	3,534	3,5385	3,5429	3,5474	3,5518	3,5562	3,5605	3,5649	3,5692	3,5735	3,5777	3,5819	3,5861	3,5904	3,5945	3,5986	3,6028	3,6069
70,3	3,5473	3,5519	3,5564	3,5608	3,5653	3,5697	3,5741	3,5785	3,5828	3,5872	3,5915	3,5957	3,6	3,6042	3,6084	3,6126	3,6167	3,6209	3,625
70,4	3,5653	3,5698	3,5744	3,5788	3,5833	3,5878	3,5922	3,5966	3,6009	3,6053	3,6096	3,6139	3,6181	3,6224	3,6266	3,6308	3,6349	3,6391	3,6432
70,5	3,5834	3,5879	3,5925	3,597	3,6015	3,6059	3,6104	3,6148	3,6191	3,6235	3,6278	3,6321	3,6364	3,6406	3,6449	3,6491	3,6532	3,6574	3,6616
70,6	3,6015	3,6061	3,6107	3,6152	3,6197	3,6242	3,6286	3,633	3,6374	3,6418	3,6461	3,6504	3,6547	3,659	3,6633	3,6675	3,6717	3,6759	3,68
70,7	3,6198	3,6244	3,629	3,6335	3,638	3,6425	3,647	3,6514	3,6558	3,6602	3,6645	3,6689	3,6732	3,6775	3,6817	3,686	3,6902	3,6944	3,6986
70,8	3,6382	3,6428	3,6474	3,6519	3,6564	3,6609	3,6654	3,6699	3,6743	3,6787	3,6831	3,6874	3,6918	3,6961	3,7003	3,7046	3,7088	3,713	3,7172
70,9	3,6566	3,6613	3,6659	3,6705	3,675	3,6795	3,684	3,6885	3,6929	3,6973	3,7017	3,7061	3,7104	3,7147	3,719	3,7233	3,7276	3,7318	3,736

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
67,5	3,1571	3,1608	3,1645	3,1682	3,1718	3,1754	3,179	3,1826
67,6	3,1728	3,1765	3,1802	3,1838	3,1875	3,1911	3,1947	3,1983
67,7	3,1885	3,1922	3,1959	3,1996	3,2033	3,2069	3,2105	3,2141
67,8	3,2043	3,2081	3,2118	3,2155	3,2191	3,2228	3,2264	3,2301
67,9	3,2202	3,224	3,2277	3,2314	3,2351	3,2388	3,2424	3,246
68	3,2362	3,24	3,2437	3,2474	3,2511	3,2548	3,2585	3,2621
68,1	3,2523	3,2561	3,2598	3,2635	3,2673	3,271	3,2746	3,2783
68,2	3,2684	3,2722	3,276	3,2797	3,2834	3,2872	3,2909	3,2945
68,3	3,2847	3,2885	3,2923	3,296	3,2998	3,3035	3,3072	3,3109
68,4	3,301	3,3048	3,3086	3,3124	3,3161	3,3199	3,3236	3,3273
68,5	3,3174	3,3213	3,3251	3,3289	3,3326	3,3364	3,3401	3,3438
68,6	3,334	3,3378	3,3416	3,3454	3,3492	3,353	3,3567	3,3604
68,7	3,3506	3,3544	3,3583	3,3621	3,3659	3,3696	3,3734	3,3771
68,8	3,3672	3,3711	3,375	3,3788	3,3826	3,3864	3,3901	3,3939
68,9	3,384	3,3879	3,3918	3,3956	3,3994	3,4032	3,407	3,4108
69	3,4009	3,4048	3,4087	3,4125	3,4164	3,4202	3,424	3,4277
69,1	3,4179	3,4218	3,4257	3,4296	3,4334	3,4372	3,441	3,4448
69,2	3,435	3,4389	3,4428	3,4467	3,4505	3,4543	3,4582	3,462
69,3	3,4521	3,4561	3,46	3,4639	3,4677	3,4716	3,4754	3,4792
69,4	3,4694	3,4733	3,4773	3,4811	3,485	3,4889	3,4927	3,4966
69,5	3,4868	3,4907	3,4946	3,4985	3,5024	3,5063	3,5102	3,514
69,6	3,5042	3,5082	3,5121	3,516	3,5199	3,5239	3,5277	3,5315
69,7	3,5217	3,5257	3,5297	3,5336	3,5375	3,5414	3,5453	3,5492
69,8	3,5394	3,5434	3,5474	3,5513	3,5553	3,5592	3,5631	3,5669
69,9	3,5571	3,5611	3,5651	3,5691	3,573	3,577	3,5809	3,5848
70	3,5749	3,579	3,583	3,587	3,5909	3,5949	3,5988	3,6027
70,1	3,5929	3,5969	3,6009	3,605	3,6089	3,6129	3,6168	3,6208
70,2	3,6109	3,615	3,619	3,623	3,627	3,631	3,635	3,6389
70,3	3,6291	3,6331	3,6372	3,6412	3,6452	3,6492	3,6532	3,6571
70,4	3,6473	3,6514	3,6555	3,6595	3,6635	3,6675	3,6715	3,6754
70,5	3,6657	3,6698	3,6739	3,6779	3,6819	3,6859	3,69	3,6939
70,6	3,6841	3,6882	3,6924	3,6964	3,7005	3,7045	3,7085	3,7125
70,7	3,7027	3,7068	3,7109	3,715	3,7191	3,7231	3,7271	3,7311
70,8	3,7214	3,7255	3,7296	3,7337	3,7378	3,7418	3,7459	3,7499
70,9	3,7401	3,7443	3,7484	3,7525	3,7566	3,7607	3,7647	3,7688

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
71	2,5477	2,5812	2,6123	2,6413	2,6686	2,6943	2,7186	2,7417	2,7637	2,7848	2,805	2,8243	2,843	2,8609	2,8783	2,895	2,9112	2,9269	2,9422
71,1	2,5624	2,596	2,6272	2,6563	2,6837	2,7094	2,7339	2,7571	2,7792	2,8003	2,8205	2,84	2,8587	2,8767	2,8941	2,9109	2,9272	2,943	2,9583
71,2	2,5771	2,6108	2,6421	2,6714	2,6988	2,7247	2,7492	2,7725	2,7947	2,8159	2,8362	2,8557	2,8745	2,8926	2,91	2,9269	2,9432	2,9591	2,9744
71,3	2,5919	2,6258	2,6572	2,6866	2,7141	2,7401	2,7647	2,7881	2,8103	2,8316	2,852	2,8715	2,8904	2,9085	2,9261	2,943	2,9594	2,9753	2,9907
71,4	2,6068	2,6408	2,6723	2,7018	2,7295	2,7555	2,7802	2,8037	2,826	2,8474	2,8679	2,8875	2,9064	2,9246	2,9422	2,9592	2,9757	2,9916	3,0071
71,5	2,6218	2,6559	2,6876	2,7171	2,7449	2,7711	2,7958	2,8194	2,8418	2,8633	2,8838	2,9035	2,9225	2,9408	2,9584	2,9755	2,992	3,008	3,0235
71,6	2,6369	2,6711	2,7029	2,7326	2,7604	2,7867	2,8116	2,8352	2,8577	2,8792	2,8999	2,9197	2,9387	2,957	2,9747	2,9919	3,0085	3,0245	3,0401
71,7	2,652	2,6864	2,7183	2,7481	2,7761	2,8024	2,8274	2,8511	2,8737	2,8953	2,916	2,9359	2,955	2,9734	2,9912	3,0084	3,025	3,0411	3,0568
71,8	2,6673	2,7018	2,7338	2,7637	2,7918	2,8183	2,8433	2,8671	2,8898	2,9115	2,9322	2,9522	2,9714	2,9899	3,0077	3,025	3,0416	3,0578	3,0736
71,9	2,6826	2,7173	2,7494	2,7794	2,8076	2,8342	2,8593	2,8832	2,906	2,9277	2,9486	2,9686	2,9879	3,0064	3,0243	3,0416	3,0584	3,0746	3,0904
72	2,6981	2,7329	2,7652	2,7953	2,8235	2,8502	2,8754	2,8994	2,9223	2,9441	2,965	2,9851	3,0044	3,0231	3,041	3,0584	3,0752	3,0916	3,1074
72,1	2,7136	2,7485	2,7809	2,8112	2,8396	2,8663	2,8917	2,9157	2,9387	2,9606	2,9816	3,0017	3,0211	3,0398	3,0579	3,0753	3,0922	3,1086	3,1244
72,2	2,7293	2,7643	2,7968	2,8272	2,8557	2,8825	2,9079	2,9321	2,9551	2,9771	2,9982	3,0184	3,0379	3,0567	3,0748	3,0923	3,1092	3,1257	3,1416
72,3	2,745	2,7802	2,8128	2,8433	2,8719	2,8988	2,9244	2,9486	2,9717	2,9938	3,015	3,0353	3,0548	3,0736	3,0918	3,1094	3,1264	3,1429	3,1589
72,4	2,7608	2,7962	2,8289	2,8595	2,8882	2,9153	2,9409	2,9652	2,9884	3,0106	3,0318	3,0522	3,0718	3,0907	3,109	3,1266	3,1437	3,1602	3,1762
72,5	2,7768	2,8122	2,8451	2,8758	2,9046	2,9318	2,9575	2,9819	3,0052	3,0274	3,0488	3,0692	3,0889	3,1079	3,1262	3,1439	3,161	3,1776	3,1937
72,6	2,7928	2,8284	2,8614	2,8922	2,9211	2,9484	2,9742	2,9987	3,0221	3,0444	3,0658	3,0864	3,1061	3,1251	3,1435	3,1613	3,1785	3,1951	3,2113
72,7	2,809	2,8447	2,8778	2,9087	2,9377	2,9651	2,991	3,0156	3,0391	3,0615	3,083	3,1036	3,1234	3,1425	3,161	3,1788	3,196	3,2128	3,229
72,8	2,8252	2,8611	2,8943	2,9253	2,9545	2,9819	3,0079	3,0326	3,0562	3,0787	3,1002	3,1209	3,1408	3,16	3,1785	3,1964	3,2137	3,2305	3,2468
72,9	2,8415	2,8775	2,9109	2,942	2,9713	2,9989	3,025	3,0498	3,0734	3,096	3,1176	3,1384	3,1583	3,1776	3,1962	3,2142	3,2315	3,2484	3,2647
73	2,858	2,8941	2,9276	2,9589	2,9882	3,0159	3,0421	3,067	3,0907	3,1134	3,1351	3,1559	3,176	3,1953	3,2139	3,232	3,2494	3,2664	3,2828
73,1	2,8745	2,9108	2,9444	2,9758	3,0053	3,033	3,0593	3,0843	3,1081	3,1309	3,1527	3,1736	3,1937	3,2131	3,2318	3,2499	3,2674	3,2844	3,3009
73,2	2,8911	2,9276	2,9613	2,9928	3,0224	3,0503	3,0767	3,1018	3,1257	3,1485	3,1704	3,1913	3,2115	3,231	3,2498	3,268	3,2856	3,3026	3,3191
73,3	2,9079	2,9445	2,9783	3,01	3,0396	3,0676	3,0941	3,1193	3,1433	3,1662	3,1882	3,2092	3,2295	3,249	3,2679	3,2861	3,3038	3,3209	3,3375
73,4	2,9248	2,9614	2,9955	3,0272	3,057	3,0851	3,1117	3,137	3,161	3,1841	3,2061	3,2272	3,2476	3,2672	3,2861	3,3044	3,3221	3,3393	3,3559
73,5	2,9417	2,9785	3,0127	3,0446	3,0745	3,1027	3,1294	3,1547	3,1789	3,202	3,2241	3,2453	3,2658	3,2854	3,3044	3,3228	3,3406	3,3578	3,3746
73,6	2,9588	2,9957	3,03	3,062	3,092	3,1204	3,1471	3,1726	3,1969	3,22	3,2422	3,2635	3,2841	3,3038	3,3229	3,3413	3,3592	3,3765	3,3932
73,7	2,976	3,0131	3,0475	3,0796	3,1097	3,1381	3,165	3,1906	3,2149	3,2382	3,2605	3,2819	3,3024	3,3223	3,3414	3,3599	3,3778	3,3952	3,4121
73,8	2,9932	3,0305	3,065	3,0973	3,1275	3,156	3,183	3,2087	3,2331	3,2565	3,2788	3,3003	3,321	3,3409	3,3601	3,3787	3,3966	3,4141	3,431
73,9	3,0106	3,048	3,0827	3,1151	3,1454	3,174	3,2012	3,2269	3,2514	3,2749	3,2973	3,3189	3,3396	3,3596	3,3789	3,3975	3,4156	3,4331	3,45
74	3,0282	3,0657	3,1005	3,133	3,1635	3,1922	3,2194	3,2452	3,2699	3,2934	3,3159	3,3376	3,3584	3,3784	3,3978	3,4165	3,4346	3,4522	3,4692
74,1	3,0458	3,0834	3,1184	3,151	3,1816	3,2104	3,2377	3,2637	3,2884	3,312	3,3346	3,3564	3,3772	3,3974	3,4168	3,4356	3,4537	3,4714	3,4885
74,2	3,0635	3,1013	3,1364	3,1691	3,1998	3,2288	3,2562	3,2822	3,3071	3,3308	3,3535	3,3753	3,3962	3,4164	3,4359	3,4548	3,4731	3,4907	3,5079
74,3	3,0814	3,1193	3,1545	3,1874	3,2182	3,2472	3,2748	3,3009	3,3258	3,3496	3,3724	3,3943	3,4153	3,4356	3,4552	3,4741	3,4924	3,5102	3,5274
74,4	3,0993	3,1374	3,1727	3,2057	3,2367	3,2658	3,2935	3,3197	3,3447	3,3686	3,3915	3,4135	3,4346	3,4549	3,4746	3,4936	3,512	3,5298	3,5471

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
71	2,957	2,9715	2,9855	2,9992	3,0125	3,0255	3,0382	3,0507	3,0628	3,0747	3,0863	3,0978	3,1089	3,1199	3,1307	3,1412	3,1516	3,1618	3,1718
71,1	2,9732	2,9876	3,0017	3,0154	3,0288	3,0419	3,0547	3,0671	3,0793	3,0912	3,1029	3,1144	3,1256	3,1366	3,1474	3,158	3,1684	3,1786	3,1887
71,2	2,9894	3,0039	3,0181	3,0318	3,0453	3,0584	3,0712	3,0837	3,0959	3,1079	3,1197	3,1312	3,1424	3,1535	3,1643	3,1749	3,1854	3,1956	3,2057
71,3	3,0057	3,0203	3,0345	3,0483	3,0618	3,075	3,0878	3,1004	3,1127	3,1247	3,1364	3,148	3,1593	3,1703	3,1812	3,1919	3,2024	3,2127	3,2228
71,4	3,0221	3,0368	3,051	3,0649	3,0784	3,0916	3,1045	3,1171	3,1294	3,1415	3,1533	3,1649	3,1762	3,1874	3,1983	3,209	3,2195	3,2299	3,24
71,5	3,0387	3,0534	3,0676	3,0816	3,0952	3,1084	3,1213	3,134	3,1464	3,1585	3,1703	3,182	3,1933	3,2045	3,2155	3,2262	3,2368	3,2471	3,2573
71,6	3,0553	3,07	3,0843	3,0984	3,112	3,1253	3,1383	3,151	3,1634	3,1755	3,1874	3,1991	3,2105	3,2217	3,2327	3,2435	3,2541	3,2645	3,2748
71,7	3,072	3,0868	3,1012	3,1152	3,1289	3,1422	3,1553	3,168	3,1805	3,1927	3,2046	3,2163	3,2278	3,239	3,2501	3,2609	3,2715	3,282	3,2923
71,8	3,0888	3,1036	3,1181	3,1322	3,1459	3,1593	3,1724	3,1852	3,1977	3,2099	3,2219	3,2336	3,2452	3,2565	3,2675	3,2784	3,2891	3,2996	3,3099
71,9	3,1057	3,1206	3,1351	3,1492	3,163	3,1765	3,1896	3,2025	3,215	3,2273	3,2393	3,2511	3,2627	3,274	3,2851	3,296	3,3067	3,3173	3,3276
72	3,1228	3,1377	3,1523	3,1664	3,1803	3,1938	3,2069	3,2198	3,2324	3,2448	3,2568	3,2687	3,2802	3,2916	3,3028	3,3137	3,3245	3,335	3,3454
72,1	3,1399	3,1549	3,1695	3,1837	3,1976	3,2112	3,2244	3,2373	3,25	3,2623	3,2745	3,2863	3,2979	3,3093	3,3206	3,3315	3,3423	3,3529	3,3633
72,2	3,1571	3,1722	3,1868	3,2011	3,2151	3,2286	3,2419	3,2549	3,2676	3,28	3,2922	3,3041	3,3157	3,3272	3,3384	3,3495	3,3603	3,3709	3,3814
72,3	3,1744	3,1895	3,2043	3,2186	3,2326	3,2462	3,2595	3,2726	3,2853	3,2978	3,31	3,3219	3,3337	3,3451	3,3564	3,3675	3,3784	3,389	3,3995
72,4	3,1918	3,207	3,2218	3,2362	3,2502	3,2639	3,2773	3,2904	3,3032	3,3157	3,3279	3,3399	3,3517	3,3632	3,3745	3,3856	3,3965	3,4072	3,4178
72,5	3,2094	3,2246	3,2395	3,2539	3,268	3,2817	3,2951	3,3083	3,3211	3,3336	3,346	3,358	3,3698	3,3814	3,3927	3,4039	3,4148	3,4256	3,4361
72,6	3,2271	3,2423	3,2572	3,2717	3,2858	3,2996	3,3131	3,3263	3,3392	3,3518	3,3641	3,3762	3,388	3,3996	3,4111	3,4222	3,4332	3,444	3,4546
72,7	3,2448	3,2601	3,2751	3,2896	3,3038	3,3177	3,3312	3,3444	3,3573	3,3699	3,3823	3,3945	3,4064	3,418	3,4295	3,4407	3,4517	3,4626	3,4732
72,8	3,2627	3,278	3,293	3,3076	3,3219	3,3358	3,3493	3,3626	3,3756	3,3883	3,4007	3,4129	3,4248	3,4365	3,448	3,4593	3,4704	3,4812	3,4919
72,9	3,2806	3,2961	3,3111	3,3258	3,3401	3,354	3,3677	3,381	3,394	3,4067	3,4192	3,4314	3,4434	3,4551	3,4667	3,478	3,4891	3,5	3,5107
73	3,2987	3,3142	3,3293	3,344	3,3584	3,3724	3,386	3,3994	3,4125	3,4253	3,4378	3,45	3,4621	3,4738	3,4854	3,4968	3,5079	3,5189	3,5296
73,1	3,3169	3,3325	3,3476	3,3624	3,3768	3,3908	3,4046	3,418	3,4311	3,4439	3,4565	3,4688	3,4808	3,4927	3,5043	3,5157	3,5269	3,5379	3,5487
73,2	3,3352	3,3508	3,366	3,3808	3,3953	3,4094	3,4232	3,4367	3,4498	3,4627	3,4753	3,4876	3,4998	3,5116	3,5233	3,5347	3,5459	3,557	3,5678
73,3	3,3536	3,3693	3,3846	3,3994	3,4139	3,4281	3,4419	3,4555	3,4687	3,4816	3,4942	3,5066	3,5188	3,5307	3,5424	3,5539	3,5651	3,5762	3,5871
73,4	3,3722	3,3879	3,4032	3,4181	3,4327	3,4469	3,4608	3,4743	3,4876	3,5006	3,5133	3,5257	3,5379	3,5499	3,5616	3,5731	3,5845	3,5956	3,6065
73,5	3,3908	3,4066	3,422	3,437	3,4516	3,4658	3,4798	3,4933	3,5067	3,5197	3,5324	3,5449	3,5572	3,5692	3,581	3,5925	3,6039	3,615	3,626
73,6	3,4096	3,4254	3,4408	3,4559	3,4706	3,4849	3,4989	3,5125	3,5258	3,5389	3,5517	3,5643	3,5765	3,5886	3,6004	3,612	3,6234	3,6346	3,6456
73,7	3,4284	3,4444	3,4598	3,4749	3,4896	3,504	3,518	3,5318	3,5452	3,5583	3,5711	3,5837	3,5961	3,6081	3,62	3,6317	3,6431	3,6543	3,6654
73,8	3,4474	3,4634	3,4789	3,4941	3,5089	3,5233	3,5374	3,5511	3,5646	3,5778	3,5907	3,6033	3,6156	3,6278	3,6397	3,6514	3,6629	3,6741	3,6853
73,9	3,4665	3,4826	3,4982	3,5134	3,5282	3,5427	3,5568	3,5706	3,5841	3,5973	3,6103	3,6229	3,6354	3,6476	3,6596	3,6713	3,6828	3,6941	3,7053
74	3,4858	3,5018	3,5175	3,5328	3,5477	3,5622	3,5764	3,5902	3,6038	3,617	3,63	3,6428	3,6553	3,6675	3,6795	3,6913	3,7028	3,7142	3,7254
74,1	3,5051	3,5213	3,537	3,5523	3,5672	3,5818	3,5961	3,61	3,6236	3,6369	3,6499	3,6627	3,6752	3,6875	3,6996	3,7114	3,723	3,7344	3,7456
74,2	3,5246	3,5408	3,5566	3,572	3,5869	3,6016	3,6159	3,6298	3,6435	3,6569	3,6699	3,6827	3,6953	3,7077	3,7197	3,7316	3,7433	3,7547	3,766
74,3	3,5442	3,5604	3,5763	3,5917	3,6068	3,6215	3,6358	3,6498	3,6635	3,677	3,6901	3,7029	3,7155	3,7279	3,74	3,752	3,7637	3,7752	3,7865
74,4	3,5639	3,5802	3,5961	3,6116	3,6267	3,6414	3,6559	3,6699	3,6837	3,6971	3,7103	3,7233	3,7359	3,7483	3,7605	3,7724	3,7842	3,7957	3,8071

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
71	3,1817	3,1913	3,2009	3,2103	3,2195	3,2286	3,2376	3,2464	3,2551	3,2637	3,2721	3,2805	3,2887	3,2968	3,3049	3,3128	3,3207	3,3284	3,336
71,1	3,1986	3,2083	3,2179	3,2273	3,2366	3,2457	3,2547	3,2636	3,2723	3,2809	3,2894	3,2978	3,306	3,3142	3,3223	3,3302	3,3381	3,3459	3,3535
71,2	3,2156	3,2254	3,235	3,2444	3,2537	3,2629	3,2719	3,2808	3,2896	3,2982	3,3068	3,3152	3,3235	3,3317	3,3398	3,3477	3,3556	3,3634	3,3711
71,3	3,2328	3,2426	3,2522	3,2617	3,271	3,2802	3,2893	3,2982	3,307	3,3157	3,3242	3,3327	3,341	3,3492	3,3573	3,3653	3,3733	3,3811	3,3888
71,4	3,25	3,2598	3,2695	3,279	3,2884	3,2976	3,3067	3,3157	3,3245	3,3332	3,3418	3,3503	3,3586	3,3669	3,375	3,3831	3,391	3,3989	3,4066
71,5	3,2673	3,2772	3,2869	3,2965	3,3059	3,3152	3,3243	3,3332	3,3421	3,3508	3,3595	3,368	3,3764	3,3846	3,3928	3,4009	3,4088	3,4167	3,4245
71,6	3,2848	3,2947	3,3044	3,314	3,3235	3,3328	3,3419	3,3509	3,3598	3,3686	3,3772	3,3858	3,3942	3,4025	3,4107	3,4188	3,4268	3,4347	3,4425
71,7	3,3024	3,3123	3,3221	3,3317	3,3412	3,3505	3,3597	3,3687	3,3776	3,3865	3,3951	3,4037	3,4121	3,4205	3,4287	3,4368	3,4449	3,4528	3,4606
71,8	3,32	3,33	3,3398	3,3494	3,3589	3,3683	3,3775	3,3866	3,3956	3,4044	3,4131	3,4217	3,4302	3,4386	3,4468	3,4549	3,463	3,471	3,4788
71,9	3,3378	3,3478	3,3576	3,3673	3,3768	3,3862	3,3955	3,4046	3,4136	3,4225	3,4312	3,4398	3,4483	3,4567	3,465	3,4732	3,4813	3,4893	3,4972
72	3,3556	3,3657	3,3756	3,3853	3,3948	3,4043	3,4136	3,4227	3,4317	3,4406	3,4494	3,4581	3,4666	3,475	3,4833	3,4916	3,4997	3,5077	3,5156
72,1	3,3736	3,3837	3,3936	3,4034	3,4129	3,4224	3,4317	3,4409	3,45	3,4589	3,4677	3,4764	3,4849	3,4934	3,5018	3,51	3,5182	3,5262	3,5342
72,2	3,3917	3,4018	3,4117	3,4215	3,4312	3,4407	3,45	3,4593	3,4683	3,4773	3,4861	3,4948	3,5035	3,5119	3,5203	3,5286	3,5367	3,5448	3,5528
72,3	3,4099	3,42	3,43	3,4398	3,4495	3,459	3,4684	3,4777	3,4868	3,4958	3,5046	3,5134	3,522	3,5305	3,539	3,5473	3,5554	3,5636	3,5716
72,4	3,4281	3,4383	3,4484	3,4582	3,4679	3,4775	3,4869	3,4962	3,5054	3,5144	3,5233	3,532	3,5407	3,5493	3,5577	3,5661	3,5743	3,5824	3,5904
72,5	3,4465	3,4568	3,4668	3,4767	3,4865	3,4961	3,5055	3,5149	3,524	3,5331	3,542	3,5509	3,5595	3,5681	3,5766	3,585	3,5932	3,6014	3,6094
72,6	3,4651	3,4753	3,4854	3,4953	3,5051	3,5148	3,5243	3,5336	3,5428	3,5519	3,5609	3,5697	3,5785	3,5871	3,5956	3,604	3,6122	3,6205	3,6285
72,7	3,4837	3,494	3,5041	3,5141	3,5239	3,5336	3,5431	3,5525	3,5618	3,5709	3,5799	3,5887	3,5975	3,6061	3,6147	3,6231	3,6314	3,6396	3,6477
72,8	3,5024	3,5127	3,5229	3,5329	3,5428	3,5525	3,5621	3,5715	3,5808	3,5899	3,599	3,6079	3,6167	3,6253	3,6339	3,6423	3,6507	3,6589	3,6671
72,9	3,5212	3,5316	3,5419	3,5519	3,5618	3,5715	3,5811	3,5906	3,5999	3,6091	3,6182	3,6271	3,6359	3,6446	3,6532	3,6617	3,6701	3,6783	3,6865
73	3,5402	3,5506	3,5609	3,571	3,5809	3,5907	3,6003	3,6098	3,6191	3,6284	3,6375	3,6465	3,6553	3,664	3,6727	3,6812	3,6896	3,6979	3,7061
73,1	3,5593	3,5698	3,58	3,5902	3,6001	3,6099	3,6196	3,6291	3,6385	3,6477	3,6569	3,6659	3,6748	3,6836	3,6922	3,7008	3,7092	3,7175	3,7258
73,2	3,5785	3,589	3,5993	3,6095	3,6195	3,6293	3,639	3,6486	3,658	3,6673	3,6764	3,6855	3,6944	3,7032	3,7119	3,7205	3,729	3,7373	3,7456
73,3	3,5978	3,6084	3,6187	3,6289	3,6389	3,6488	3,6585	3,6681	3,6776	3,6869	3,6961	3,7052	3,7142	3,723	3,7317	3,7403	3,7488	3,7572	3,7655
73,4	3,6173	3,6278	3,6382	3,6484	3,6585	3,6684	3,6782	3,6878	3,6973	3,7067	3,7159	3,725	3,734	3,7429	3,7516	3,7603	3,7688	3,7772	3,7856
73,5	3,6368	3,6474	3,6578	3,6681	3,6782	3,6882	3,6979	3,7076	3,7172	3,7265	3,7358	3,745	3,754	3,7629	3,7716	3,7803	3,7889	3,7974	3,8057
73,6	3,6564	3,6671	3,6776	3,6879	3,698	3,708	3,7178	3,7276	3,7371	3,7465	3,7559	3,765	3,7741	3,783	3,7918	3,8005	3,8091	3,8176	3,826
73,7	3,6762	3,6869	3,6974	3,7078	3,718	3,728	3,7379	3,7476	3,7572	3,7667	3,776	3,7852	3,7943	3,8032	3,8121	3,8208	3,8294	3,838	3,8464
73,8	3,6962	3,7069	3,7174	3,7278	3,738	3,7481	3,758	3,7678	3,7774	3,7869	3,7963	3,8055	3,8146	3,8236	3,8325	3,8413	3,8499	3,8585	3,8669
73,9	3,7162	3,7269	3,7375	3,7479	3,7582	3,7683	3,7783	3,7881	3,7977	3,8073	3,8167	3,8259	3,8351	3,8441	3,8531	3,8618	3,8705	3,8791	3,8876
74	3,7363	3,7471	3,7577	3,7682	3,7785	3,7886	3,7986	3,8085	3,8182	3,8278	3,8372	3,8465	3,8557	3,8647	3,8737	3,8825	3,8913	3,8999	3,9084
74,1	3,7566	3,7675	3,7781	3,7886	3,7989	3,8091	3,8192	3,829	3,8388	3,8484	3,8578	3,8672	3,8764	3,8855	3,8945	3,9034	3,9121	3,9207	3,9293
74,2	3,777	3,7879	3,7986	3,8092	3,8195	3,8297	3,8398	3,8497	3,8595	3,8691	3,8786	3,888	3,8973	3,9064	3,9154	3,9243	3,9331	3,9417	3,9503
74,3	3,7975	3,8085	3,8192	3,8298	3,8402	3,8504	3,8606	3,8705	3,8803	3,89	3,8995	3,909	3,9182	3,9274	3,9365	3,9454	3,9542	3,9629	3,9715
74,4	3,8182	3,8292	3,84	3,8506	3,861	3,8713	3,8815	3,8915	3,9013	3,911	3,9206	3,93	3,9394	3,9485	3,9576	3,9666	3,9754	3,9842	3,9928

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
71	3,3436	3,351	3,3584	3,3657	3,3729	3,3801	3,3871	3,3941	3,401	3,4078	3,4146	3,4213	3,4279	3,4345	3,441	3,4474	3,4538	3,4601	3,4664
71,1	3,3611	3,3686	3,376	3,3833	3,3905	3,3977	3,4048	3,4118	3,4187	3,4256	3,4324	3,4391	3,4457	3,4523	3,4588	3,4653	3,4717	3,478	3,4843
71,2	3,3787	3,3862	3,3936	3,401	3,4082	3,4154	3,4225	3,4296	3,4365	3,4434	3,4502	3,457	3,4636	3,4703	3,4768	3,4833	3,4897	3,4961	3,5024
71,3	3,3964	3,404	3,4114	3,4188	3,4261	3,4333	3,4404	3,4475	3,4544	3,4613	3,4682	3,475	3,4817	3,4883	3,4949	3,5014	3,5078	3,5142	3,5205
71,4	3,4143	3,4218	3,4293	3,4367	3,444	3,4513	3,4584	3,4655	3,4725	3,4794	3,4863	3,4931	3,4998	3,5065	3,513	3,5196	3,5261	3,5325	3,5388
71,5	3,4322	3,4398	3,4473	3,4547	3,462	3,4693	3,4765	3,4836	3,4906	3,4976	3,5045	3,5113	3,518	3,5247	3,5314	3,5379	3,5444	3,5508	3,5572
71,6	3,4502	3,4578	3,4654	3,4728	3,4802	3,4875	3,4947	3,5018	3,5089	3,5159	3,5228	3,5296	3,5364	3,5431	3,5497	3,5563	3,5628	3,5693	3,5757
71,7	3,4683	3,476	3,4836	3,4911	3,4984	3,5058	3,513	3,5201	3,5272	3,5342	3,5412	3,548	3,5548	3,5616	3,5682	3,5748	3,5814	3,5878	3,5943
71,8	3,4866	3,4943	3,5019	3,5094	3,5168	3,5241	3,5314	3,5386	3,5457	3,5527	3,5597	3,5666	3,5734	3,5801	3,5868	3,5935	3,6	3,6065	3,613
71,9	3,5049	3,5127	3,5203	3,5278	3,5352	3,5426	3,5499	3,5571	3,5642	3,5713	3,5783	3,5852	3,592	3,5988	3,6055	3,6122	3,6188	3,6253	3,6317
72	3,5234	3,5311	3,5388	3,5464	3,5538	3,5612	3,5685	3,5758	3,5829	3,59	3,597	3,604	3,6108	3,6176	3,6244	3,6311	3,6376	3,6442	3,6507
72,1	3,542	3,5497	3,5574	3,565	3,5725	3,5799	3,5872	3,5945	3,6017	3,6088	3,6158	3,6228	3,6297	3,6366	3,6433	3,65	3,6566	3,6632	3,6697
72,2	3,5607	3,5685	3,5762	3,5838	3,5913	3,5988	3,6061	3,6134	3,6206	3,6277	3,6348	3,6418	3,6487	3,6555	3,6623	3,6691	3,6757	3,6823	3,6889
72,3	3,5795	3,5873	3,595	3,6027	3,6102	3,6177	3,6251	3,6324	3,6396	3,6468	3,6539	3,6609	3,6678	3,6747	3,6815	3,6882	3,6949	3,7015	3,7081
72,4	3,5984	3,6062	3,614	3,6216	3,6292	3,6367	3,6442	3,6515	3,6587	3,6659	3,673	3,6801	3,687	3,6939	3,7008	3,7075	3,7142	3,7209	3,7275
72,5	3,6174	3,6253	3,633	3,6407	3,6484	3,6559	3,6633	3,6707	3,678	3,6852	3,6923	3,6994	3,7064	3,7133	3,7202	3,7269	3,7337	3,7404	3,747
72,6	3,6365	3,6444	3,6522	3,66	3,6676	3,6751	3,6826	3,69	3,6973	3,7046	3,7117	3,7188	3,7258	3,7328	3,7396	3,7465	3,7532	3,7599	3,7665
72,7	3,6558	3,6637	3,6715	3,6793	3,6869	3,6945	3,702	3,7094	3,7168	3,724	3,7312	3,7383	3,7454	3,7524	3,7593	3,7661	3,7729	3,7796	3,7862
72,8	3,6751	3,6831	3,6909	3,6987	3,7064	3,714	3,7215	3,729	3,7364	3,7437	3,7509	3,758	3,7651	3,7721	3,779	3,7859	3,7927	3,7994	3,8061
72,9	3,6946	3,7026	3,7105	3,7183	3,726	3,7336	3,7412	3,7487	3,7561	3,7634	3,7706	3,7778	3,7849	3,7919	3,7989	3,8058	3,8126	3,8194	3,826
73	3,7142	3,7222	3,7301	3,738	3,7457	3,7534	3,761	3,7685	3,7759	3,7832	3,7905	3,7977	3,8048	3,8119	3,8189	3,8258	3,8326	3,8394	3,8461
73,1	3,7339	3,742	3,7499	3,7578	3,7655	3,7733	3,7808	3,7884	3,7958	3,8032	3,8105	3,8177	3,8248	3,8319	3,8389	3,8459	3,8528	3,8596	3,8663
73,2	3,7538	3,7618	3,7698	3,7777	3,7855	3,7932	3,8009	3,8084	3,8159	3,8233	3,8306	3,8378	3,845	3,8521	3,8591	3,8661	3,873	3,8799	3,8866
73,3	3,7737	3,7818	3,7898	3,7977	3,8056	3,8133	3,821	3,8286	3,836	3,8435	3,8508	3,8581	3,8653	3,8724	3,8795	3,8864	3,8934	3,9003	3,9071
73,4	3,7937	3,8019	3,8099	3,8179	3,8257	3,8335	3,8412	3,8488	3,8563	3,8638	3,8712	3,8785	3,8857	3,8929	3,9	3,907	3,9139	3,9208	3,9276
73,5	3,8139	3,8221	3,8302	3,8382	3,8461	3,8539	3,8616	3,8692	3,8768	3,8842	3,8916	3,899	3,9062	3,9134	3,9205	3,9275	3,9345	3,9415	3,9483
73,6	3,8343	3,8425	3,8506	3,8586	3,8665	3,8743	3,8821	3,8897	3,8973	3,9048	3,9123	3,9196	3,9269	3,9341	3,9412	3,9483	3,9553	3,9622	3,9691
73,7	3,8547	3,863	3,8711	3,8791	3,8871	3,8949	3,9027	3,9104	3,918	3,9255	3,933	3,9403	3,9477	3,9549	3,962	3,9692	3,9762	3,9831	3,99
73,8	3,8753	3,8835	3,8917	3,8998	3,9077	3,9156	3,9234	3,9312	3,9388	3,9463	3,9538	3,9612	3,9686	3,9758	3,983	3,9901	3,9972	4,0042	4,0111
73,9	3,896	3,9043	3,9124	3,9205	3,9286	3,9365	3,9443	3,952	3,9597	3,9673	3,9748	3,9822	3,9896	3,9969	4,0041	4,0113	4,0183	4,0253	4,0323
74	3,9168	3,9251	3,9333	3,9414	3,9495	3,9574	3,9653	3,9731	3,9808	3,9884	3,9959	4,0034	4,0107	4,0181	4,0253	4,0325	4,0396	4,0466	4,0536
74,1	3,9377	3,9461	3,9543	3,9625	3,9705	3,9785	3,9864	3,9942	4,0019	4,0096	4,0172	4,0246	4,032	4,0394	4,0467	4,0539	4,061	4,068	4,075
74,2	3,9588	3,9672	3,9755	3,9836	3,9917	3,9998	4,0077	4,0155	4,0232	4,0309	4,0385	4,046	4,0535	4,0609	4,0681	4,0753	4,0825	4,0896	4,0966
74,3	3,98	3,9884	3,9967	4,0049	4,0131	4,0211	4,029	4,0369	4,0447	4,0524	4,06	4,0676	4,075	4,0824	4,0897	4,097	4,1042	4,1113	4,1184
74,4	4,0014	4,0098	4,0181	4,0264	4,0345	4,0426	4,0506	4,0584	4,0663	4,074	4,0816	4,0892	4,0967	4,1041	4,1115	4,1188	4,1259	4,1331	4,1402

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
71	3,4726	3,4787	3,4848	3,4909	3,4969	3,5028	3,5087	3,5145	3,5203	3,526	3,5317	3,5374	3,543	3,5485	3,554	3,5595	3,5649	3,5703	3,5757
71,1	3,4905	3,4967	3,5029	3,5089	3,5149	3,5209	3,5268	3,5326	3,5384	3,5442	3,5499	3,5556	3,5612	3,5668	3,5723	3,5778	3,5832	3,5887	3,594
71,2	3,5086	3,5148	3,521	3,527	3,5331	3,539	3,545	3,5509	3,5567	3,5624	3,5682	3,5739	3,5795	3,5851	3,5907	3,5962	3,6017	3,6071	3,6125
71,3	3,5268	3,533	3,5392	3,5453	3,5513	3,5574	3,5633	3,5692	3,575	3,5809	3,5866	3,5923	3,598	3,6036	3,6092	3,6147	3,6202	3,6256	3,631
71,4	3,5451	3,5513	3,5575	3,5636	3,5697	3,5757	3,5817	3,5876	3,5935	3,5993	3,6051	3,6108	3,6165	3,6222	3,6277	3,6333	3,6388	3,6443	3,6497
71,5	3,5635	3,5698	3,576	3,5821	3,5882	3,5943	3,6002	3,6062	3,6121	3,6179	3,6237	3,6295	3,6352	3,6408	3,6464	3,652	3,6575	3,663	3,6684
71,6	3,582	3,5883	3,5945	3,6007	3,6068	3,6129	3,6189	3,6248	3,6307	3,6366	3,6424	3,6482	3,6539	3,6596	3,6652	3,6708	3,6764	3,6819	3,6874
71,7	3,6006	3,6069	3,6132	3,6194	3,6255	3,6316	3,6376	3,6436	3,6495	3,6554	3,6612	3,667	3,6728	3,6785	3,6841	3,6897	3,6953	3,7008	3,7063
71,8	3,6193	3,6257	3,6319	3,6381	3,6443	3,6504	3,6565	3,6625	3,6684	3,6743	3,6802	3,686	3,6918	3,6975	3,7031	3,7088	3,7144	3,7199	3,7254
71,9	3,6382	3,6445	3,6508	3,657	3,6632	3,6694	3,6754	3,6815	3,6874	3,6934	3,6992	3,7051	3,7108	3,7166	3,7223	3,7279	3,7335	3,7391	3,7446
72	3,6571	3,6635	3,6698	3,676	3,6822	3,6884	3,6945	3,7005	3,7066	3,7125	3,7184	3,7243	3,73	3,7358	3,7415	3,7472	3,7528	3,7584	3,7639
72,1	3,6762	3,6826	3,6889	3,6952	3,7014	3,7076	3,7137	3,7197	3,7258	3,7317	3,7377	3,7435	3,7494	3,7551	3,7609	3,7666	3,7722	3,7778	3,7834
72,2	3,6953	3,7018	3,7081	3,7144	3,7206	3,7268	3,733	3,7391	3,7451	3,7511	3,7571	3,7629	3,7688	3,7746	3,7803	3,786	3,7917	3,7973	3,8029
72,3	3,7146	3,721	3,7274	3,7337	3,74	3,7462	3,7524	3,7585	3,7646	3,7706	3,7765	3,7824	3,7883	3,7942	3,7999	3,8056	3,8113	3,817	3,8226
72,4	3,734	3,7404	3,7469	3,7532	3,7595	3,7657	3,7719	3,7781	3,7841	3,7902	3,7961	3,8021	3,808	3,8138	3,8196	3,8254	3,8311	3,8367	3,8424
72,5	3,7535	3,76	3,7664	3,7728	3,7791	3,7853	3,7916	3,7977	3,8038	3,8099	3,8159	3,8218	3,8278	3,8336	3,8394	3,8452	3,8509	3,8566	3,8623
72,6	3,7731	3,7796	3,7861	3,7925	3,7988	3,8051	3,8113	3,8175	3,8236	3,8297	3,8357	3,8417	3,8477	3,8535	3,8594	3,8652	3,8709	3,8766	3,8823
72,7	3,7929	3,7994	3,8059	3,8123	3,8186	3,8249	3,8312	3,8374	3,8436	3,8497	3,8557	3,8617	3,8677	3,8736	3,8794	3,8852	3,891	3,8967	3,9024
72,8	3,8127	3,8193	3,8257	3,8322	3,8386	3,8449	3,8512	3,8574	3,8636	3,8697	3,8758	3,8818	3,8878	3,8937	3,8996	3,9054	3,9112	3,9169	3,9227
72,9	3,8327	3,8393	3,8458	3,8522	3,8587	3,865	3,8713	3,8775	3,8837	3,8899	3,896	3,902	3,908	3,914	3,9199	3,9257	3,9315	3,9373	3,943
73	3,8528	3,8594	3,8659	3,8724	3,8788	3,8852	3,8915	3,8978	3,904	3,9102	3,9163	3,9223	3,9284	3,9344	3,9403	3,9461	3,952	3,9578	3,9635
73,1	3,873	3,8796	3,8862	3,8927	3,8992	3,9056	3,9119	3,9182	3,9244	3,9306	3,9367	3,9428	3,9489	3,9549	3,9608	3,9667	3,9725	3,9784	3,9841
73,2	3,8933	3,9	3,9066	3,9131	3,9196	3,926	3,9324	3,9387	3,9449	3,9512	3,9573	3,9634	3,9695	3,9755	3,9815	3,9874	3,9932	3,9991	4,0049
73,3	3,9138	3,9204	3,9271	3,9336	3,9401	3,9466	3,953	3,9593	3,9656	3,9718	3,978	3,9841	3,9902	3,9962	4,0023	4,0082	4,0141	4,02	4,0257
73,4	3,9344	3,9411	3,9477	3,9543	3,9608	3,9673	3,9737	3,98	3,9863	3,9926	3,9988	4,005	4,0111	4,0172	4,0232	4,0291	4,035	4,0409	4,0467
73,5	3,9551	3,9618	3,9685	3,9751	3,9816	3,9881	3,9946	4,0009	4,0073	4,0135	4,0198	4,0259	4,0321	4,0381	4,0442	4,0502	4,0561	4,062	4,0679
73,6	3,9759	3,9826	3,9893	3,996	4,0026	4,0091	4,0155	4,0219	4,0283	4,0346	4,0408	4,047	4,0532	4,0593	4,0653	4,0713	4,0773	4,0832	4,0891
73,7	3,9969	4,0037	4,0104	4,017	4,0236	4,0301	4,0366	4,043	4,0494	4,0557	4,062	4,0682	4,0744	4,0806	4,0866	4,0926	4,0986	4,1045	4,1105
73,8	4,0179	4,0247	4,0315	4,0382	4,0448	4,0513	4,0578	4,0643	4,0707	4,077	4,0833	4,0896	4,0958	4,1019	4,108	4,1141	4,1201	4,126	4,132
73,9	4,0392	4,046	4,0528	4,0594	4,0661	4,0727	4,0792	4,0857	4,0921	4,0985	4,1048	4,1111	4,1173	4,1234	4,1296	4,1356	4,1417	4,1477	4,1536
74	4,0605	4,0674	4,0742	4,0809	4,0876	4,0942	4,1007	4,1072	4,1136	4,12	4,1264	4,1327	4,1389	4,1451	4,1513	4,1573	4,1634	4,1694	4,1753
74,1	4,082	4,0889	4,0957	4,1024	4,1091	4,1157	4,1223	4,1289	4,1353	4,1417	4,1481	4,1544	4,1607	4,1669	4,173	4,1792	4,1852	4,1913	4,1972
74,2	4,1036	4,1105	4,1173	4,1241	4,1308	4,1375	4,1441	4,1506	4,1571	4,1635	4,17	4,1763	4,1825	4,1888	4,195	4,2011	4,2072	4,2133	4,2193
74,3	4,1253	4,1322	4,1391	4,1459	4,1527	4,1593	4,166	4,1726	4,1791	4,1855	4,1919	4,1983	4,2046	4,2109	4,2171	4,2232	4,2294	4,2354	4,2414
74,4	4,1472	4,1541	4,161	4,1678	4,1746	4,1813	4,188	4,1946	4,2011	4,2076	4,214	4,2204	4,2268	4,233	4,2393	4,2455	4,2516	4,2577	4,2637

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
71	3,581	3,5863	3,5915	3,5967	3,6019	3,607	3,6121	3,6172	3,6221	3,6271	3,6321	3,637	3,6419	3,6468	3,6516	3,6564	3,6611	3,6659	3,6706
71,1	3,5994	3,6047	3,6099	3,6151	3,6203	3,6255	3,6306	3,6356	3,6407	3,6457	3,6506	3,6556	3,6605	3,6653	3,6702	3,675	3,6798	3,6845	3,6893
71,2	3,6178	3,6231	3,6284	3,6336	3,6388	3,644	3,6491	3,6542	3,6593	3,6643	3,6693	3,6742	3,6791	3,6841	3,6889	3,6937	3,6985	3,7033	3,708
71,3	3,6364	3,6417	3,647	3,6523	3,6575	3,6626	3,6678	3,6729	3,678	3,683	3,688	3,693	3,6979	3,7028	3,7077	3,7126	3,7174	3,7222	3,7269
71,4	3,6551	3,6604	3,6658	3,671	3,6763	3,6815	3,6866	3,6917	3,6968	3,7019	3,7069	3,7119	3,7168	3,7218	3,7266	3,7315	3,7364	3,7411	3,7459
71,5	3,6739	3,6793	3,6846	3,6898	3,6951	3,7003	3,7055	3,7106	3,7157	3,7208	3,7259	3,7309	3,7358	3,7408	3,7457	3,7506	3,7554	3,7602	3,765
71,6	3,6928	3,6981	3,7035	3,7088	3,7141	3,7193	3,7245	3,7297	3,7348	3,7399	3,7449	3,75	3,7549	3,7599	3,7648	3,7697	3,7746	3,7794	3,7842
71,7	3,7118	3,7172	3,7225	3,7279	3,7332	3,7384	3,7436	3,7488	3,7539	3,759	3,7641	3,7692	3,7742	3,7792	3,7841	3,789	3,7939	3,7988	3,8035
71,8	3,7309	3,7363	3,7417	3,747	3,7524	3,7576	3,7628	3,7681	3,7732	3,7783	3,7834	3,7885	3,7935	3,7985	3,8035	3,8084	3,8133	3,8182	3,823
71,9	3,7501	3,7555	3,761	3,7663	3,7717	3,777	3,7822	3,7874	3,7926	3,7977	3,8028	3,8079	3,813	3,818	3,8229	3,8279	3,8328	3,8377	3,8426
72	3,7695	3,7749	3,7803	3,7857	3,7911	3,7964	3,8016	3,8069	3,8121	3,8172	3,8224	3,8275	3,8326	3,8375	3,8426	3,8475	3,8524	3,8573	3,8622
72,1	3,7889	3,7944	3,7998	3,8052	3,8106	3,8159	3,8212	3,8265	3,8317	3,8369	3,842	3,8471	3,8522	3,8572	3,8623	3,8673	3,8722	3,8771	3,882
72,2	3,8085	3,814	3,8194	3,8248	3,8302	3,8356	3,8409	3,8462	3,8514	3,8566	3,8618	3,8669	3,872	3,8771	3,8821	3,8871	3,8921	3,897	3,9019
72,3	3,8282	3,8337	3,8391	3,8446	3,85	3,8554	3,8607	3,866	3,8712	3,8764	3,8817	3,8868	3,8919	3,897	3,902	3,9071	3,912	3,917	3,9219
72,4	3,8479	3,8535	3,859	3,8645	3,8699	3,8752	3,8806	3,8859	3,8912	3,8964	3,9016	3,9068	3,9119	3,917	3,9221	3,9271	3,9322	3,9371	3,9421
72,5	3,8679	3,8734	3,879	3,8844	3,8899	3,8953	3,9006	3,906	3,9113	3,9165	3,9218	3,9269	3,9321	3,9372	3,9423	3,9473	3,9523	3,9574	3,9623
72,6	3,8879	3,8935	3,899	3,9045	3,91	3,9154	3,9208	3,9261	3,9315	3,9367	3,942	3,9472	3,9523	3,9575	3,9626	3,9676	3,9727	3,9777	3,9827
72,7	3,9081	3,9137	3,9192	3,9247	3,9302	3,9357	3,9411	3,9464	3,9518	3,9571	3,9623	3,9675	3,9727	3,9779	3,983	3,9881	3,9932	3,9982	4,0032
72,8	3,9283	3,9339	3,9395	3,9451	3,9505	3,956	3,9614	3,9669	3,9722	3,9775	3,9828	3,988	3,9932	3,9984	4,0035	4,0087	4,0137	4,0188	4,0238
72,9	3,9487	3,9543	3,96	3,9655	3,971	3,9765	3,982	3,9874	3,9928	3,9981	4,0034	4,0086	4,0139	4,0191	4,0242	4,0293	4,0344	4,0395	4,0445
73	3,9692	3,9749	3,9805	3,9861	3,9916	3,9971	4,0026	4,008	4,0134	4,0188	4,0241	4,0293	4,0346	4,0398	4,045	4,0501	4,0552	4,0604	4,0654
73,1	3,9899	3,9955	4,0012	4,0068	4,0124	4,0179	4,0233	4,0288	4,0342	4,0396	4,0449	4,0502	4,0555	4,0607	4,0659	4,0711	4,0762	4,0813	4,0864
73,2	4,0106	4,0163	4,022	4,0276	4,0332	4,0387	4,0442	4,0497	4,0551	4,0605	4,0659	4,0712	4,0765	4,0817	4,0869	4,0922	4,0973	4,1024	4,1075
73,3	4,0315	4,0372	4,0429	4,0486	4,0542	4,0597	4,0653	4,0707	4,0762	4,0816	4,087	4,0923	4,0976	4,1029	4,1081	4,1133	4,1185	4,1236	4,1287
73,4	4,0525	4,0583	4,064	4,0696	4,0752	4,0808	4,0864	4,0919	4,0973	4,1028	4,1082	4,1135	4,1188	4,1242	4,1294	4,1346	4,1398	4,145	4,1501
73,5	4,0736	4,0794	4,0851	4,0908	4,0965	4,1021	4,1076	4,1132	4,1187	4,1241	4,1295	4,1349	4,1403	4,1456	4,1508	4,156	4,1612	4,1664	4,1715
73,6	4,0949	4,1007	4,1064	4,1121	4,1178	4,1234	4,129	4,1346	4,1401	4,1456	4,151	4,1564	4,1617	4,1671	4,1724	4,1776	4,1828	4,188	4,1932
73,7	4,1163	4,1221	4,1279	4,1336	4,1393	4,1449	4,1505	4,1561	4,1617	4,1671	4,1726	4,178	4,1834	4,1887	4,194	4,1993	4,2045	4,2097	4,215
73,8	4,1378	4,1437	4,1494	4,1552	4,1609	4,1666	4,1722	4,1778	4,1833	4,1888	4,1943	4,1997	4,2051	4,2105	4,2158	4,2211	4,2264	4,2316	4,2368
73,9	4,1595	4,1653	4,1712	4,1769	4,1826	4,1883	4,1939	4,1996	4,2051	4,2107	4,2161	4,2216	4,227	4,2324	4,2378	4,2431	4,2484	4,2536	4,2588
74	4,1813	4,1871	4,193	4,1988	4,2045	4,2102	4,2159	4,2215	4,2271	4,2327	4,2382	4,2436	4,2491	4,2545	4,2598	4,2652	4,2705	4,2758	4,281
74,1	4,2032	4,2091	4,2149	4,2207	4,2265	4,2322	4,2379	4,2436	4,2492	4,2548	4,2603	4,2658	4,2712	4,2766	4,282	4,2874	4,2927	4,298	4,3033
74,2	4,2252	4,2312	4,237	4,2428	4,2487	4,2544	4,2601	4,2658	4,2714	4,277	4,2825	4,2881	4,2935	4,299	4,3044	4,3098	4,3151	4,3204	4,3257
74,3	4,2474	4,2534	4,2593	4,2651	4,2709	4,2767	4,2824	4,2881	4,2937	4,2994	4,3049	4,3105	4,316	4,3214	4,3268	4,3323	4,3376	4,343	4,3482
74,4	4,2697	4,2757	4,2816	4,2875	4,2933	4,2991	4,3048	4,3106	4,3162	4,3219	4,3274	4,333	4,3385	4,344	4,3495	4,3549	4,3603	4,3656	4,3709

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
71	3,6752	3,6799	3,6845	3,6891	3,6936	3,6982	3,7027	3,7072	3,7116	3,7161	3,7204	3,7248	3,7292	3,7335	3,7378	3,7421	3,7464	3,7506	3,7548
71,1	3,6939	3,6986	3,7032	3,7078	3,7124	3,717	3,7215	3,726	3,7305	3,7349	3,7393	3,7437	3,7481	3,7524	3,7567	3,761	3,7653	3,7695	3,7738
71,2	3,7127	3,7174	3,722	3,7267	3,7313	3,7358	3,7404	3,7449	3,7494	3,7538	3,7583	3,7627	3,7671	3,7714	3,7757	3,7801	3,7844	3,7886	3,7929
71,3	3,7316	3,7363	3,741	3,7456	3,7502	3,7548	3,7594	3,7639	3,7684	3,7729	3,7773	3,7818	3,7861	3,7905	3,7949	3,7992	3,8035	3,8078	3,812
71,4	3,7507	3,7553	3,76	3,7647	3,7693	3,7739	3,7785	3,783	3,7875	3,792	3,7965	3,8009	3,8054	3,8098	3,8141	3,8184	3,8228	3,8271	3,8313
71,5	3,7698	3,7745	3,7792	3,7838	3,7885	3,7931	3,7977	3,8022	3,8068	3,8113	3,8158	3,8202	3,8247	3,8291	3,8335	3,8378	3,8422	3,8465	3,8508
71,6	3,789	3,7937	3,7985	3,8031	3,8078	3,8125	3,817	3,8216	3,8262	3,8307	3,8352	3,8397	3,8441	3,8485	3,8529	3,8573	3,8616	3,866	3,8703
71,7	3,8083	3,8131	3,8178	3,8225	3,8272	3,8319	3,8365	3,8411	3,8456	3,8502	3,8547	3,8592	3,8637	3,8681	3,8725	3,8769	3,8813	3,8856	3,8899
71,8	3,8278	3,8326	3,8374	3,842	3,8467	3,8514	3,856	3,8606	3,8653	3,8698	3,8743	3,8788	3,8833	3,8878	3,8922	3,8966	3,901	3,9053	3,9097
71,9	3,8474	3,8522	3,8569	3,8617	3,8664	3,8711	3,8757	3,8803	3,8849	3,8895	3,894	3,8986	3,9031	3,9075	3,912	3,9164	3,9208	3,9252	3,9295
72	3,8671	3,8719	3,8767	3,8814	3,8861	3,8908	3,8955	3,9002	3,9048	3,9093	3,9139	3,9185	3,923	3,9274	3,9319	3,9363	3,9408	3,9451	3,9495
72,1	3,8869	3,8917	3,8965	3,9012	3,906	3,9107	3,9154	3,92	3,9247	3,9293	3,9339	3,9384	3,943	3,9475	3,9519	3,9564	3,9608	3,9652	3,9696
72,2	3,9068	3,9116	3,9165	3,9212	3,926	3,9307	3,9354	3,9401	3,9448	3,9494	3,954	3,9585	3,9631	3,9676	3,9721	3,9766	3,981	3,9854	3,9898
72,3	3,9268	3,9317	3,9365	3,9413	3,9461	3,9508	3,9556	3,9603	3,9649	3,9695	3,9742	3,9788	3,9833	3,9878	3,9923	3,9968	4,0013	4,0057	4,0102
72,4	3,947	3,9518	3,9567	3,9615	3,9663	3,9711	3,9758	3,9805	3,9852	3,9899	3,9945	3,9991	4,0037	4,0082	4,0127	4,0173	4,0217	4,0262	4,0306
72,5	3,9672	3,9721	3,977	3,9818	3,9867	3,9914	3,9962	4,0009	4,0056	4,0103	4,0149	4,0195	4,0241	4,0287	4,0332	4,0377	4,0422	4,0467	4,0512
72,6	3,9876	3,9926	3,9974	4,0023	4,0071	4,0119	4,0167	4,0214	4,0262	4,0308	4,0355	4,0401	4,0447	4,0493	4,0539	4,0584	4,0629	4,0674	4,0719
72,7	4,0081	4,0131	4,018	4,0229	4,0277	4,0325	4,0373	4,0421	4,0468	4,0515	4,0562	4,0608	4,0654	4,07	4,0746	4,0792	4,0837	4,0882	4,0927
72,8	4,0288	4,0337	4,0386	4,0435	4,0484	4,0532	4,058	4,0628	4,0676	4,0723	4,077	4,0816	4,0863	4,0909	4,0955	4,1001	4,1046	4,1091	4,1136
72,9	4,0495	4,0545	4,0594	4,0644	4,0692	4,0741	4,0789	4,0837	4,0884	4,0932	4,0979	4,1026	4,1072	4,1119	4,1165	4,1211	4,1256	4,1302	4,1347
73	4,0704	4,0754	4,0803	4,0853	4,0902	4,095	4,0999	4,1047	4,1095	4,1142	4,119	4,1236	4,1283	4,133	4,1376	4,1422	4,1468	4,1513	4,1559
73,1	4,0914	4,0964	4,1014	4,1063	4,1112	4,1161	4,121	4,1258	4,1306	4,1354	4,1401	4,1449	4,1495	4,1542	4,1588	4,1634	4,1681	4,1726	4,1771
73,2	4,1125	4,1175	4,1225	4,1275	4,1324	4,1373	4,1422	4,1471	4,1519	4,1567	4,1615	4,1662	4,1709	4,1756	4,1802	4,1849	4,1895	4,1941	4,1986
73,3	4,1338	4,1388	4,1438	4,1488	4,1538	4,1587	4,1636	4,1685	4,1733	4,1781	4,1829	4,1876	4,1924	4,1971	4,2017	4,2063	4,211	4,2156	4,2201
73,4	4,1552	4,1602	4,1652	4,1703	4,1752	4,1802	4,1851	4,1899	4,1948	4,1996	4,2044	4,2092	4,2139	4,2186	4,2234	4,228	4,2326	4,2373	4,2418
73,5	4,1767	4,1817	4,1868	4,1918	4,1968	4,2017	4,2067	4,2116	4,2165	4,2213	4,2261	4,2309	4,2356	4,2404	4,2451	4,2498	4,2545	4,2591	4,2637
73,6	4,1983	4,2034	4,2085	4,2135	4,2185	4,2235	4,2284	4,2334	4,2382	4,2431	4,2479	4,2527	4,2575	4,2623	4,267	4,2717	4,2763	4,281	4,2857
73,7	4,2201	4,2252	4,2303	4,2353	4,2403	4,2453	4,2503	4,2552	4,2601	4,265	4,2699	4,2747	4,2795	4,2843	4,289	4,2937	4,2984	4,3031	4,3077
73,8	4,242	4,2471	4,2522	4,2573	4,2623	4,2674	4,2723	4,2773	4,2822	4,2871	4,292	4,2968	4,3016	4,3064	4,3111	4,3159	4,3206	4,3253	4,33
73,9	4,264	4,2692	4,2743	4,2794	4,2844	4,2895	4,2945	4,2995	4,3044	4,3093	4,3142	4,319	4,3239	4,3287	4,3335	4,3382	4,3429	4,3476	4,3523
74	4,2862	4,2914	4,2965	4,3016	4,3067	4,3117	4,3168	4,3217	4,3267	4,3316	4,3365	4,3414	4,3463	4,3511	4,3558	4,3606	4,3654	4,3701	4,3748
74,1	4,3085	4,3137	4,3188	4,3239	4,329	4,3341	4,3392	4,3441	4,3492	4,3541	4,359	4,3639	4,3688	4,3736	4,3784	4,3832	4,388	4,3927	4,3974
74,2	4,3309	4,3361	4,3413	4,3465	4,3516	4,3567	4,3617	4,3667	4,3717	4,3767	4,3816	4,3866	4,3914	4,3963	4,4011	4,4059	4,4107	4,4154	4,4202
74,3	4,3535	4,3587	4,3639	4,3691	4,3742	4,3793	4,3844	4,3894	4,3945	4,3994	4,4044	4,4093	4,4142	4,4191	4,424	4,4287	4,4336	4,4383	4,4431
74,4	4,3762	4,3814	4,3867	4,3918	4,397	4,4022	4,4072	4,4123	4,4173	4,4223	4,4273	4,4323	4,4372	4,4421	4,4469	4,4517	4,4566	4,4614	4,4661

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15	15,1
71	3,759	3,7632	3,7673	3,7715	3,7756	3,7796	3,7837	3,7877	3,7918
71,1	3,778	3,7822	3,7863	3,7905	3,7946	3,7987	3,8028	3,8068	3,8109
71,2	3,7971	3,8013	3,8055	3,8096	3,8137	3,8179	3,8219	3,826	3,8301
71,3	3,8163	3,8205	3,8247	3,8289	3,833	3,8371	3,8412	3,8453	3,8494
71,4	3,8356	3,8398	3,844	3,8482	3,8524	3,8565	3,8606	3,8647	3,8688
71,5	3,855	3,8593	3,8635	3,8677	3,8719	3,876	3,8802	3,8843	3,8884
71,6	3,8746	3,8788	3,8831	3,8873	3,8915	3,8956	3,8998	3,9039	3,908
71,7	3,8942	3,8985	3,9027	3,907	3,9112	3,9153	3,9195	3,9237	3,9278
71,8	3,914	3,9183	3,9225	3,9268	3,931	3,9352	3,9394	3,9435	3,9477
71,9	3,9339	3,9382	3,9424	3,9467	3,9509	3,9552	3,9593	3,9635	3,9677
72	3,9538	3,9582	3,9625	3,9667	3,971	3,9752	3,9794	3,9836	3,9878
72,1	3,974	3,9783	3,9826	3,9869	3,9912	3,9954	3,9996	4,0038	4,008
72,2	3,9942	3,9985	4,0029	4,0072	4,0114	4,0157	4,02	4,0242	4,0283
72,3	4,0145	4,0189	4,0232	4,0276	4,0318	4,0361	4,0404	4,0446	4,0488
72,4	4,035	4,0394	4,0438	4,048	4,0524	4,0567	4,0609	4,0652	4,0694
72,5	4,0556	4,06	4,0643	4,0687	4,073	4,0773	4,0816	4,0859	4,0901
72,6	4,0763	4,0807	4,0851	4,0894	4,0938	4,0981	4,1024	4,1067	4,111
72,7	4,0971	4,1015	4,1059	4,1103	4,1147	4,119	4,1233	4,1276	4,1319
72,8	4,1181	4,1225	4,1269	4,1313	4,1357	4,1401	4,1444	4,1487	4,153
72,9	4,1392	4,1436	4,1481	4,1525	4,1568	4,1612	4,1655	4,1699	4,1742
73	4,1604	4,1648	4,1693	4,1737	4,1781	4,1825	4,1868	4,1912	4,1955
73,1	4,1817	4,1862	4,1906	4,1951	4,1995	4,2039	4,2083	4,2126	4,217
73,2	4,2031	4,2076	4,2121	4,2166	4,221	4,2254	4,2298	4,2342	4,2386
73,3	4,2247	4,2292	4,2338	4,2382	4,2427	4,2471	4,2515	4,2559	4,2603
73,4	4,2464	4,251	4,2555	4,26	4,2645	4,2689	4,2733	4,2777	4,2821
73,5	4,2682	4,2728	4,2773	4,2819	4,2863	4,2908	4,2953	4,2997	4,3041
73,6	4,2902	4,2948	4,2993	4,3039	4,3084	4,3128	4,3173	4,3217	4,3262
73,7	4,3123	4,3169	4,3215	4,326	4,3306	4,335	4,3395	4,344	4,3484
73,8	4,3346	4,3392	4,3438	4,3483	4,3528	4,3574	4,3618	4,3663	4,3708
73,9	4,357	4,3616	4,3662	4,3707	4,3753	4,3798	4,3843	4,3888	4,3933
74	4,3795	4,3841	4,3887	4,3933	4,3979	4,4024	4,4069	4,4115	4,4159
74,1	4,4021	4,4067	4,4114	4,416	4,4206	4,4251	4,4297	4,4342	4,4387
74,2	4,4249	4,4296	4,4342	4,4388	4,4434	4,448	4,4525	4,4571	4,4616
74,3	4,4478	4,4525	4,4572	4,4618	4,4664	4,471	4,4756	4,4801	4,4847
74,4	4,4708	4,4755	4,4802	4,4849	4,4895	4,4942	4,4987	4,5033	4,5078

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
74,5	3,1174	3,1556	3,1911	3,2242	3,2553	3,2846	3,3123	3,3386	3,3637	3,3877	3,4107	3,4327	3,4539	3,4744	3,4941	3,5132	3,5316	3,5495	3,5669
74,6	3,1356	3,174	3,2096	3,2428	3,274	3,3034	3,3312	3,3577	3,3829	3,4069	3,43	3,4521	3,4734	3,4939	3,5137	3,5328	3,5514	3,5693	3,5867
74,7	3,1539	3,1924	3,2282	3,2615	3,2928	3,3224	3,3503	3,3768	3,4021	3,4263	3,4494	3,4716	3,493	3,5136	3,5335	3,5527	3,5713	3,5893	3,6068
74,8	3,1723	3,211	3,2469	3,2804	3,3118	3,3414	3,3695	3,3961	3,4215	3,4457	3,469	3,4913	3,5127	3,5334	3,5533	3,5726	3,5913	3,6094	3,6269
74,9	3,1909	3,2297	3,2657	3,2993	3,3309	3,3606	3,3888	3,4155	3,441	3,4653	3,4886	3,5111	3,5326	3,5533	3,5733	3,5927	3,6114	3,6296	3,6472
75	3,2095	3,2485	3,2847	3,3184	3,3501	3,3799	3,4082	3,435	3,4606	3,4851	3,5085	3,5309	3,5526	3,5734	3,5935	3,6129	3,6317	3,6499	3,6676
75,1	3,2283	3,2674	3,3038	3,3376	3,3694	3,3994	3,4278	3,4547	3,4804	3,5049	3,5284	3,5509	3,5727	3,5936	3,6137	3,6332	3,6521	3,6704	3,6882
75,2	3,2472	3,2865	3,323	3,357	3,3889	3,4189	3,4474	3,4745	3,5003	3,5249	3,5485	3,5711	3,5929	3,6139	3,6341	3,6537	3,6727	3,691	3,7088
75,3	3,2663	3,3057	3,3423	3,3764	3,4085	3,4386	3,4672	3,4944	3,5203	3,545	3,5687	3,5914	3,6132	3,6343	3,6547	3,6743	3,6933	3,7118	3,7297
75,4	3,2854	3,325	3,3617	3,396	3,4282	3,4585	3,4872	3,5144	3,5404	3,5652	3,589	3,6118	3,6337	3,6549	3,6753	3,695	3,7141	3,7326	3,7505
75,5	3,3047	3,3444	3,3813	3,4157	3,448	3,4784	3,5072	3,5346	3,5607	3,5856	3,6094	3,6323	3,6544	3,6756	3,6961	3,7159	3,7351	3,7536	3,7716
75,6	3,3241	3,364	3,401	3,4355	3,4679	3,4985	3,5274	3,5549	3,5811	3,6061	3,63	3,653	3,6751	3,6964	3,717	3,7369	3,7561	3,7747	3,7929
75,7	3,3436	3,3837	3,4209	3,4555	3,4881	3,5187	3,5478	3,5753	3,6016	3,6267	3,6507	3,6738	3,696	3,7174	3,738	3,758	3,7773	3,796	3,8142
75,8	3,3633	3,4035	3,4408	3,4756	3,5083	3,5391	3,5682	3,5959	3,6223	3,6475	3,6716	3,6948	3,717	3,7385	3,7592	3,7792	3,7986	3,8174	3,8357
75,9	3,3831	3,4235	3,4609	3,4959	3,5286	3,5596	3,5888	3,6166	3,6431	3,6684	3,6926	3,7158	3,7382	3,7597	3,7805	3,8007	3,8201	3,839	3,8573
76	3,403	3,4436	3,4811	3,5162	3,5492	3,5802	3,6095	3,6374	3,664	3,6894	3,7137	3,737	3,7595	3,7811	3,802	3,8222	3,8418	3,8607	3,879
76,1	3,4231	3,4638	3,5015	3,5367	3,5698	3,6009	3,6304	3,6584	3,6851	3,7106	3,735	3,7584	3,781	3,8027	3,8236	3,8439	3,8635	3,8825	3,9009
76,2	3,4433	3,4841	3,522	3,5574	3,5905	3,6218	3,6514	3,6795	3,7063	3,7319	3,7564	3,7799	3,8025	3,8243	3,8454	3,8657	3,8854	3,9045	3,923
76,3	3,4636	3,5046	3,5427	3,5781	3,6114	3,6428	3,6725	3,7007	3,7276	3,7533	3,7779	3,8015	3,8243	3,8462	3,8673	3,8877	3,9074	3,9266	3,9452
76,4	3,4841	3,5253	3,5634	3,599	3,6325	3,664	3,6938	3,7221	3,7491	3,7749	3,7996	3,8233	3,8461	3,8681	3,8893	3,9098	3,9296	3,9489	3,9675
76,5	3,5047	3,546	3,5843	3,6201	3,6537	3,6853	3,7152	3,7437	3,7707	3,7967	3,8215	3,8452	3,8681	3,8902	3,9114	3,9321	3,9519	3,9712	3,99
76,6	3,5254	3,5669	3,6054	3,6413	3,675	3,7068	3,7368	3,7653	3,7925	3,8185	3,8434	3,8673	3,8903	3,9124	3,9338	3,9544	3,9744	3,9938	4,0126
76,7	3,5463	3,5879	3,6266	3,6626	3,6964	3,7283	3,7585	3,7871	3,8145	3,8406	3,8656	3,8895	3,9126	3,9348	3,9563	3,977	3,9971	4,0165	4,0354
76,8	3,5673	3,6091	3,6479	3,6841	3,7181	3,7501	3,7803	3,8091	3,8365	3,8627	3,8878	3,9119	3,935	3,9573	3,9789	3,9997	4,0199	4,0394	4,0583
76,9	3,5884	3,6304	3,6694	3,7057	3,7398	3,7719	3,8024	3,8312	3,8587	3,885	3,9102	3,9344	3,9576	3,98	4,0017	4,0226	4,0428	4,0624	4,0814
77	3,6098	3,6519	3,691	3,7275	3,7617	3,7939	3,8245	3,8535	3,8811	3,9075	3,9328	3,9571	3,9804	4,0029	4,0246	4,0456	4,0658	4,0855	4,1046
77,1	3,6312	3,6735	3,7127	3,7494	3,7837	3,8161	3,8468	3,8759	3,9036	3,9301	3,9555	3,9799	4,0033	4,0258	4,0477	4,0687	4,0891	4,1088	4,128
77,2	3,6528	3,6953	3,7347	3,7714	3,8059	3,8384	3,8692	3,8985	3,9263	3,9529	3,9784	4,0028	4,0263	4,049	4,0709	4,092	4,1125	4,1323	4,1516
77,3	3,6745	3,7172	3,7567	3,7936	3,8283	3,8609	3,8918	3,9212	3,9491	3,9758	4,0014	4,0259	4,0496	4,0723	4,0942	4,1155	4,136	4,1559	4,1752
77,4	3,6964	3,7392	3,7789	3,816	3,8507	3,8835	3,9145	3,944	3,9721	3,9989	4,0245	4,0492	4,0729	4,0957	4,1178	4,1391	4,1597	4,1797	4,1991
77,5	3,7184	3,7614	3,8013	3,8385	3,8734	3,9063	3,9374	3,967	3,9952	4,0221	4,0479	4,0726	4,0964	4,1193	4,1415	4,1629	4,1836	4,2037	4,2231
77,6	3,7406	3,7838	3,8238	3,8611	3,8962	3,9292	3,9605	3,9902	4,0185	4,0455	4,0714	4,0962	4,1201	4,1431	4,1653	4,1868	4,2076	4,2277	4,2473
77,7	3,7629	3,8063	3,8465	3,884	3,9192	3,9523	3,9837	4,0135	4,0419	4,069	4,095	4,12	4,144	4,1671	4,1894	4,2109	4,2318	4,252	4,2716
77,8	3,7854	3,8289	3,8693	3,907	3,9423	3,9755	4,0071	4,037	4,0655	4,0927	4,1188	4,1439	4,1679	4,1911	4,2135	4,2352	4,2561	4,2764	4,2961
77,9	3,8081	3,8518	3,8923	3,9301	3,9655	3,999	4,0306	4,0606	4,0893	4,1166	4,1428	4,1679	4,1921	4,2154	4,2379	4,2596	4,2806	4,301	4,3208

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
74,5	3,5837	3,6001	3,6161	3,6316	3,6468	3,6616	3,6761	3,6902	3,704	3,7175	3,7307	3,7437	3,7564	3,7689	3,7811	3,7931	3,8049	3,8164	3,8278
74,6	3,6037	3,6202	3,6362	3,6518	3,667	3,6818	3,6964	3,7105	3,7244	3,738	3,7512	3,7643	3,777	3,7895	3,8018	3,8138	3,8257	3,8373	3,8487
74,7	3,6238	3,6403	3,6564	3,672	3,6873	3,7023	3,7168	3,731	3,7449	3,7585	3,7719	3,7849	3,7977	3,8103	3,8226	3,8347	3,8466	3,8582	3,8697
74,8	3,644	3,6606	3,6767	3,6925	3,7078	3,7227	3,7374	3,7517	3,7656	3,7793	3,7927	3,8058	3,8186	3,8312	3,8436	3,8557	3,8676	3,8793	3,8908
74,9	3,6643	3,681	3,6972	3,713	3,7283	3,7434	3,758	3,7724	3,7864	3,8001	3,8136	3,8267	3,8396	3,8523	3,8647	3,8769	3,8888	3,9006	3,9121
75	3,6848	3,7015	3,7178	3,7336	3,7491	3,7642	3,7789	3,7933	3,8074	3,8211	3,8346	3,8478	3,8608	3,8734	3,8859	3,8981	3,9101	3,9219	3,9335
75,1	3,7054	3,7222	3,7385	3,7544	3,7699	3,7851	3,7998	3,8143	3,8284	3,8422	3,8558	3,869	3,882	3,8947	3,9073	3,9195	3,9316	3,9434	3,9551
75,2	3,7261	3,743	3,7594	3,7753	3,7909	3,8061	3,8209	3,8354	3,8496	3,8635	3,8771	3,8904	3,9034	3,9162	3,9288	3,9411	3,9532	3,9651	3,9767
75,3	3,747	3,7639	3,7803	3,7964	3,812	3,8273	3,8422	3,8567	3,871	3,8849	3,8985	3,9119	3,925	3,9378	3,9504	3,9628	3,9749	3,9868	3,9986
75,4	3,768	3,785	3,8015	3,8176	3,8333	3,8486	3,8635	3,8781	3,8924	3,9064	3,9201	3,9335	3,9466	3,9595	3,9722	3,9846	3,9967	4,0087	4,0205
75,5	3,7892	3,8062	3,8227	3,8389	3,8547	3,87	3,885	3,8997	3,914	3,9281	3,9418	3,9552	3,9685	3,9814	3,9941	4,0065	4,0188	4,0308	4,0426
75,6	3,8104	3,8275	3,8442	3,8604	3,8762	3,8916	3,9067	3,9214	3,9358	3,9499	3,9636	3,9771	3,9904	4,0034	4,0161	4,0286	4,0409	4,053	4,0648
75,7	3,8318	3,849	3,8657	3,882	3,8978	3,9133	3,9284	3,9432	3,9577	3,9718	3,9856	3,9992	4,0125	4,0255	4,0383	4,0509	4,0632	4,0753	4,0872
75,8	3,8534	3,8706	3,8874	3,9037	3,9196	3,9352	3,9503	3,9652	3,9797	3,9939	4,0078	4,0214	4,0347	4,0478	4,0607	4,0732	4,0856	4,0978	4,1097
75,9	3,8751	3,8923	3,9092	3,9256	3,9416	3,9572	3,9724	3,9873	4,0019	4,0161	4,0301	4,0437	4,0571	4,0702	4,0831	4,0958	4,1082	4,1204	4,1324
76	3,8969	3,9142	3,9312	3,9476	3,9636	3,9793	3,9946	4,0096	4,0241	4,0384	4,0525	4,0662	4,0796	4,0928	4,1057	4,1184	4,1309	4,1431	4,1552
76,1	3,9188	3,9363	3,9533	3,9698	3,9859	4,0016	4,017	4,0319	4,0466	4,061	4,075	4,0888	4,1023	4,1155	4,1285	4,1413	4,1537	4,1661	4,1781
76,2	3,941	3,9585	3,9755	3,9921	4,0083	4,024	4,0394	4,0545	4,0692	4,0836	4,0978	4,1116	4,1251	4,1384	4,1514	4,1642	4,1768	4,1891	4,2012
76,3	3,9632	3,9808	3,9979	4,0145	4,0308	4,0466	4,0621	4,0772	4,092	4,1064	4,1206	4,1345	4,1481	4,1614	4,1745	4,1873	4,1999	4,2123	4,2245
76,4	3,9857	4,0033	4,0204	4,0371	4,0534	4,0693	4,0849	4,1	4,1149	4,1294	4,1436	4,1575	4,1712	4,1846	4,1977	4,2106	4,2232	4,2357	4,2479
76,5	4,0082	4,0259	4,0431	4,0599	4,0762	4,0922	4,1078	4,123	4,1379	4,1525	4,1667	4,1807	4,1944	4,2079	4,2211	4,234	4,2467	4,2592	4,2714
76,6	4,0309	4,0487	4,0659	4,0828	4,0992	4,1152	4,1308	4,1462	4,1611	4,1757	4,1901	4,2041	4,2178	4,2313	4,2446	4,2576	4,2703	4,2828	4,2951
76,7	4,0537	4,0716	4,0889	4,1058	4,1223	4,1384	4,1541	4,1694	4,1844	4,1991	4,2135	4,2276	4,2414	4,2549	4,2682	4,2813	4,2941	4,3066	4,319
76,8	4,0767	4,0946	4,112	4,129	4,1455	4,1617	4,1775	4,1929	4,2079	4,2227	4,2371	4,2513	4,2651	4,2787	4,2921	4,3052	4,318	4,3306	4,3431
76,9	4,0999	4,1178	4,1353	4,1524	4,169	4,1852	4,201	4,2165	4,2316	4,2464	4,2609	4,2751	4,289	4,3027	4,3161	4,3292	4,3421	4,3547	4,3672
77	4,1232	4,1412	4,1588	4,1759	4,1925	4,2088	4,2247	4,2402	4,2554	4,2703	4,2848	4,2991	4,3131	4,3267	4,3402	4,3534	4,3663	4,379	4,3916
77,1	4,1466	4,1647	4,1824	4,1995	4,2163	4,2326	4,2486	4,2641	4,2794	4,2943	4,3089	4,3232	4,3372	4,351	4,3645	4,3777	4,3907	4,4035	4,416
77,2	4,1702	4,1884	4,2061	4,2233	4,2402	4,2565	4,2726	4,2882	4,3035	4,3185	4,3332	4,3475	4,3616	4,3754	4,3889	4,4022	4,4153	4,4281	4,4407
77,3	4,194	4,2123	4,23	4,2473	4,2642	4,2807	4,2967	4,3124	4,3278	4,3429	4,3575	4,372	4,3861	4,3999	4,4135	4,4269	4,44	4,4529	4,4655
77,4	4,2179	4,2363	4,2541	4,2715	4,2884	4,3049	4,321	4,3368	4,3522	4,3673	4,3821	4,3966	4,4108	4,4247	4,4383	4,4517	4,4649	4,4778	4,4905
77,5	4,242	4,2604	4,2783	4,2958	4,3127	4,3293	4,3455	4,3614	4,3769	4,392	4,4068	4,4214	4,4356	4,4496	4,4633	4,4767	4,4899	4,5029	4,5157
77,6	4,2663	4,2848	4,3027	4,3202	4,3373	4,3539	4,3702	4,3861	4,4016	4,4168	4,4317	4,4463	4,4606	4,4747	4,4884	4,5019	4,5151	4,5282	4,541
77,7	4,2907	4,3092	4,3272	4,3448	4,362	4,3787	4,395	4,411	4,4266	4,4418	4,4568	4,4714	4,4858	4,4999	4,5137	4,5272	4,5405	4,5536	4,5665
77,8	4,3153	4,3339	4,352	4,3696	4,3868	4,4036	4,42	4,436	4,4517	4,467	4,482	4,4967	4,5111	4,5252	4,5391	4,5527	4,5661	4,5792	4,5921
77,9	4,34	4,3587	4,3769	4,3946	4,4119	4,4287	4,4452	4,4613	4,477	4,4923	4,5074	4,5222	4,5366	4,5508	4,5648	4,5784	4,5918	4,605	4,6179

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
74,5	3,839	3,85	3,8608	3,8715	3,882	3,8923	3,9025	3,9125	3,9224	3,9321	3,9417	3,9512	3,9606	3,9698	3,9789	3,9879	3,9968	4,0056	4,0142
74,6	3,8599	3,871	3,8818	3,8925	3,903	3,9134	3,9236	3,9337	3,9436	3,9534	3,963	3,9726	3,9819	3,9912	4,0004	4,0094	4,0183	4,0271	4,0358
74,7	3,881	3,892	3,903	3,9137	3,9243	3,9347	3,9449	3,955	3,965	3,9748	3,9845	3,994	4,0034	4,0128	4,0219	4,031	4,0399	4,0488	4,0575
74,8	3,9022	3,9133	3,9242	3,935	3,9456	3,956	3,9663	3,9765	3,9865	3,9963	4,006	4,0156	4,0251	4,0344	4,0436	4,0527	4,0617	4,0706	4,0794
74,9	3,9235	3,9346	3,9456	3,9564	3,9671	3,9775	3,9879	3,9981	4,0081	4,018	4,0277	4,0374	4,0469	4,0562	4,0655	4,0746	4,0836	4,0925	4,1014
75	3,9449	3,9561	3,9671	3,978	3,9887	3,9992	4,0096	4,0198	4,0298	4,0398	4,0496	4,0592	4,0688	4,0782	4,0874	4,0966	4,1057	4,1146	4,1235
75,1	3,9665	3,9777	3,9888	3,9997	4,0104	4,021	4,0314	4,0417	4,0517	4,0617	4,0716	4,0812	4,0908	4,1002	4,1096	4,1188	4,1278	4,1368	4,1457
75,2	3,9882	3,9995	4,0106	4,0215	4,0323	4,0429	4,0533	4,0636	4,0738	4,0838	4,0937	4,1034	4,113	4,1225	4,1318	4,141	4,1502	4,1592	4,1681
75,3	4,0101	4,0214	4,0326	4,0435	4,0543	4,065	4,0755	4,0858	4,096	4,106	4,1159	4,1257	4,1353	4,1448	4,1542	4,1635	4,1726	4,1817	4,1906
75,4	4,032	4,0434	4,0546	4,0656	4,0765	4,0872	4,0977	4,1081	4,1183	4,1284	4,1383	4,1481	4,1578	4,1673	4,1768	4,1861	4,1952	4,2043	4,2133
75,5	4,0542	4,0656	4,0769	4,0879	4,0988	4,1095	4,1201	4,1305	4,1407	4,1509	4,1609	4,1707	4,1804	4,19	4,1995	4,2088	4,218	4,2271	4,2361
75,6	4,0765	4,0879	4,0992	4,1103	4,1213	4,132	4,1426	4,1531	4,1634	4,1735	4,1835	4,1934	4,2032	4,2127	4,2223	4,2316	4,2409	4,25	4,2591
75,7	4,0989	4,1104	4,1217	4,1328	4,1438	4,1546	4,1653	4,1758	4,1861	4,1963	4,2063	4,2163	4,226	4,2357	4,2452	4,2547	4,2639	4,2731	4,2822
75,8	4,1215	4,133	4,1444	4,1555	4,1666	4,1774	4,1881	4,1986	4,209	4,2192	4,2293	4,2393	4,2491	4,2588	4,2683	4,2778	4,2871	4,2963	4,3054
75,9	4,1441	4,1558	4,1672	4,1784	4,1895	4,2003	4,2111	4,2216	4,2321	4,2423	4,2524	4,2624	4,2723	4,282	4,2916	4,3011	4,3104	4,3197	4,3288
76	4,167	4,1787	4,1901	4,2014	4,2125	4,2234	4,2341	4,2448	4,2552	4,2656	4,2757	4,2857	4,2956	4,3054	4,315	4,3246	4,334	4,3432	4,3524
76,1	4,19	4,2017	4,2132	4,2245	4,2356	4,2466	4,2574	4,2681	4,2786	4,2889	4,2991	4,3092	4,3191	4,3289	4,3386	4,3482	4,3576	4,3669	4,3761
76,2	4,2132	4,2249	4,2364	4,2478	4,2589	4,27	4,2808	4,2915	4,302	4,3124	4,3227	4,3328	4,3427	4,3526	4,3623	4,3719	4,3813	4,3907	4,3999
76,3	4,2365	4,2482	4,2598	4,2712	4,2824	4,2935	4,3044	4,3151	4,3257	4,3361	4,3464	4,3565	4,3665	4,3764	4,3861	4,3958	4,4053	4,4147	4,4239
76,4	4,2599	4,2717	4,2833	4,2948	4,306	4,3172	4,3281	4,3388	4,3495	4,3599	4,3703	4,3804	4,3905	4,4004	4,4102	4,4198	4,4294	4,4388	4,4481
76,5	4,2835	4,2954	4,3071	4,3185	4,3298	4,341	4,352	4,3628	4,3734	4,3839	4,3943	4,4045	4,4146	4,4245	4,4343	4,444	4,4536	4,4631	4,4724
76,6	4,3073	4,3191	4,3309	4,3424	4,3537	4,365	4,3759	4,3868	4,3975	4,4081	4,4184	4,4287	4,4388	4,4488	4,4587	4,4684	4,478	4,4875	4,4969
76,7	4,3312	4,3431	4,3549	4,3665	4,3778	4,3891	4,4001	4,411	4,4218	4,4323	4,4428	4,4531	4,4633	4,4733	4,4832	4,4929	4,5026	4,5121	4,5216
76,8	4,3552	4,3672	4,379	4,3906	4,4021	4,4134	4,4245	4,4354	4,4462	4,4568	4,4673	4,4776	4,4878	4,4979	4,5078	4,5176	4,5273	4,5369	4,5463
76,9	4,3795	4,3915	4,4034	4,415	4,4265	4,4378	4,449	4,4599	4,4707	4,4814	4,4919	4,5023	4,5126	4,5227	4,5326	4,5425	4,5522	4,5618	4,5713
77	4,4038	4,4159	4,4278	4,4395	4,451	4,4624	4,4736	4,4846	4,4955	4,5062	4,5167	4,5271	4,5374	4,5476	4,5576	4,5675	4,5772	4,5869	4,5964
77,1	4,4284	4,4405	4,4524	4,4642	4,4758	4,4872	4,4984	4,5095	4,5204	4,5311	4,5417	4,5522	4,5625	4,5727	4,5827	4,5927	4,6025	4,6122	4,6217
77,2	4,4531	4,4653	4,4772	4,4891	4,5007	4,5121	4,5234	4,5345	4,5454	4,5562	4,5669	4,5774	4,5877	4,5979	4,608	4,618	4,6278	4,6375	4,6472
77,3	4,478	4,4902	4,5022	4,5141	4,5257	4,5372	4,5485	4,5596	4,5707	4,5815	4,5922	4,6027	4,6131	4,6234	4,6335	4,6435	4,6534	4,6632	4,6728
77,4	4,503	4,5153	4,5273	4,5393	4,5509	4,5625	4,5738	4,585	4,5961	4,6069	4,6176	4,6282	4,6387	4,649	4,6591	4,6692	4,6791	4,6889	4,6985
77,5	4,5282	4,5405	4,5527	4,5646	4,5763	4,5879	4,5993	4,6105	4,6216	4,6325	4,6433	4,6539	4,6644	4,6747	4,685	4,695	4,705	4,7148	4,7245
77,6	4,5535	4,5659	4,5781	4,5901	4,6019	4,6135	4,625	4,6362	4,6473	4,6583	4,6691	4,6798	4,6903	4,7007	4,7109	4,721	4,731	4,7409	4,7507
77,7	4,5791	4,5915	4,6037	4,6158	4,6276	4,6392	4,6508	4,6621	4,6732	4,6842	4,6951	4,7058	4,7163	4,7267	4,7371	4,7472	4,7572	4,7672	4,777
77,8	4,6048	4,6172	4,6295	4,6416	4,6535	4,6652	4,6767	4,6881	4,6993	4,7104	4,7212	4,732	4,7426	4,7531	4,7634	4,7736	4,7836	4,7936	4,8034
77,9	4,6307	4,6432	4,6555	4,6676	4,6796	4,6913	4,7029	4,7143	4,7256	4,7367	4,7476	4,7584	4,769	4,7795	4,7899	4,8001	4,8102	4,8202	4,83

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
74,5	4,0228	4,0313	4,0397	4,0479	4,0561	4,0642	4,0722	4,0801	4,088	4,0957	4,1034	4,111	4,1185	4,126	4,1333	4,1407	4,1479	4,1551	4,1622
74,6	4,0444	4,0529	4,0613	4,0696	4,0779	4,086	4,094	4,1019	4,1098	4,1176	4,1253	4,133	4,1405	4,148	4,1553	4,1627	4,1699	4,1771	4,1843
74,7	4,0661	4,0747	4,0831	4,0914	4,0997	4,1079	4,1159	4,1239	4,1318	4,1396	4,1474	4,155	4,1626	4,1701	4,1775	4,1849	4,1921	4,1994	4,2065
74,8	4,088	4,0966	4,1051	4,1134	4,1217	4,1299	4,138	4,146	4,1539	4,1617	4,1695	4,1772	4,1848	4,1923	4,1998	4,2072	4,2145	4,2217	4,2289
74,9	4,11	4,1186	4,1271	4,1355	4,1438	4,152	4,1602	4,1682	4,1762	4,184	4,1918	4,1995	4,2072	4,2147	4,2222	4,2296	4,237	4,2442	4,2515
75	4,1322	4,1408	4,1493	4,1578	4,1661	4,1743	4,1825	4,1906	4,1986	4,2064	4,2143	4,222	4,2297	4,2373	4,2448	4,2522	4,2596	4,2669	4,2741
75,1	4,1545	4,1631	4,1717	4,1801	4,1885	4,1968	4,205	4,2131	4,2211	4,229	4,2368	4,2446	4,2523	4,2599	4,2675	4,2749	4,2824	4,2897	4,2969
75,2	4,1769	4,1856	4,1941	4,2027	4,2111	4,2194	4,2276	4,2357	4,2437	4,2517	4,2596	4,2674	4,2751	4,2827	4,2903	4,2978	4,3052	4,3126	4,3199
75,3	4,1994	4,2082	4,2168	4,2253	4,2338	4,2421	4,2503	4,2585	4,2666	4,2745	4,2825	4,2903	4,298	4,3057	4,3133	4,3209	4,3283	4,3357	4,343
75,4	4,2222	4,2309	4,2396	4,2481	4,2566	4,265	4,2732	4,2814	4,2895	4,2975	4,3055	4,3133	4,3211	4,3288	4,3364	4,344	4,3515	4,3589	4,3662
75,5	4,245	4,2538	4,2625	4,2711	4,2796	4,288	4,2963	4,3045	4,3126	4,3207	4,3286	4,3365	4,3444	4,3521	4,3597	4,3673	4,3748	4,3823	4,3896
75,6	4,268	4,2768	4,2855	4,2942	4,3027	4,3111	4,3195	4,3277	4,3359	4,3439	4,352	4,3599	4,3677	4,3755	4,3831	4,3908	4,3983	4,4058	4,4132
75,7	4,2911	4,3	4,3087	4,3174	4,326	4,3344	4,3428	4,3511	4,3593	4,3674	4,3754	4,3834	4,3912	4,399	4,4067	4,4144	4,4219	4,4294	4,4369
75,8	4,3144	4,3233	4,3321	4,3408	4,3494	4,3579	4,3663	4,3746	4,3828	4,3909	4,399	4,407	4,4149	4,4227	4,4305	4,4381	4,4457	4,4533	4,4607
75,9	4,3379	4,3468	4,3556	4,3643	4,3729	4,3815	4,3899	4,3983	4,4065	4,4147	4,4228	4,4308	4,4387	4,4465	4,4543	4,462	4,4696	4,4772	4,4847
76	4,3614	4,3704	4,3793	4,388	4,3967	4,4052	4,4137	4,4221	4,4304	4,4386	4,4467	4,4547	4,4627	4,4705	4,4783	4,4861	4,4937	4,5013	4,5088
76,1	4,3852	4,3942	4,4031	4,4118	4,4205	4,4291	4,4376	4,4461	4,4544	4,4626	4,4707	4,4788	4,4868	4,4947	4,5025	4,5103	4,518	4,5256	4,5331
76,2	4,4091	4,4181	4,427	4,4358	4,4446	4,4532	4,4617	4,4702	4,4785	4,4868	4,4949	4,5031	4,5111	4,519	4,5269	4,5346	4,5424	4,55	4,5576
76,3	4,4331	4,4422	4,4511	4,46	4,4687	4,4774	4,486	4,4944	4,5028	4,5111	4,5193	4,5274	4,5355	4,5435	4,5514	4,5592	4,5669	4,5746	4,5822
76,4	4,4573	4,4664	4,4754	4,4843	4,4931	4,5018	4,5103	4,5188	4,5273	4,5356	4,5438	4,552	4,5601	4,5681	4,576	4,5839	4,5916	4,5993	4,6069
76,5	4,4817	4,4908	4,4998	4,5087	4,5176	4,5263	4,5349	4,5435	4,5519	4,5603	4,5685	4,5767	4,5848	4,5928	4,6008	4,6087	4,6165	4,6242	4,6319
76,6	4,5062	4,5153	4,5244	4,5333	4,5422	4,551	4,5597	4,5682	4,5767	4,5851	4,5934	4,6016	4,6097	4,6178	4,6258	4,6337	4,6415	4,6493	4,657
76,7	4,5308	4,54	4,5491	4,5581	4,567	4,5758	4,5845	4,5931	4,6016	4,61	4,6184	4,6266	4,6348	4,6429	4,6509	4,6589	4,6667	4,6745	4,6822
76,8	4,5557	4,5649	4,5741	4,5831	4,592	4,6008	4,6096	4,6182	4,6267	4,6352	4,6436	4,6518	4,66	4,6681	4,6762	4,6842	4,692	4,6999	4,7076
76,9	4,5807	4,5899	4,5991	4,6082	4,6171	4,626	4,6348	4,6434	4,652	4,6605	4,6689	4,6772	4,6854	4,6936	4,7016	4,7096	4,7175	4,7254	4,7332
77	4,6058	4,6151	4,6243	4,6334	4,6424	4,6513	4,6601	4,6688	4,6774	4,6859	4,6944	4,7027	4,711	4,7192	4,7273	4,7353	4,7432	4,7511	4,7589
77,1	4,6312	4,6405	4,6497	4,6589	4,6679	4,6768	4,6856	4,6944	4,703	4,7115	4,72	4,7284	4,7367	4,7449	4,7531	4,7611	4,7691	4,777	4,7848
77,2	4,6567	4,666	4,6753	4,6844	4,6935	4,7025	4,7113	4,7201	4,7288	4,7374	4,7459	4,7543	4,7626	4,7708	4,779	4,7871	4,7951	4,803	4,8109
77,3	4,6823	4,6917	4,701	4,7102	4,7193	4,7283	4,7372	4,746	4,7547	4,7633	4,7719	4,7803	4,7887	4,797	4,8051	4,8132	4,8213	4,8293	4,8371
77,4	4,7081	4,7175	4,7269	4,7361	4,7453	4,7543	4,7632	4,7721	4,7808	4,7895	4,798	4,8065	4,8149	4,8232	4,8315	4,8396	4,8477	4,8557	4,8636
77,5	4,7341	4,7436	4,753	4,7622	4,7714	4,7804	4,7895	4,7983	4,8071	4,8158	4,8244	4,8329	4,8413	4,8496	4,8579	4,8661	4,8742	4,8822	4,8902
77,6	4,7602	4,7698	4,7792	4,7885	4,7977	4,8068	4,8158	4,8247	4,8335	4,8423	4,8509	4,8594	4,8679	4,8763	4,8845	4,8928	4,9009	4,909	4,9169
77,7	4,7866	4,7962	4,8056	4,8149	4,8242	4,8334	4,8424	4,8513	4,8602	4,8689	4,8775	4,8861	4,8946	4,903	4,9114	4,9196	4,9278	4,9359	4,9439
77,8	4,8131	4,8227	4,8322	4,8416	4,8509	4,86	4,8691	4,8781	4,887	4,8958	4,9044	4,913	4,9216	4,93	4,9384	4,9467	4,9549	4,963	4,971
77,9	4,8398	4,8494	4,8589	4,8684	4,8777	4,8869	4,896	4,905	4,9139	4,9227	4,9315	4,9401	4,9487	4,9572	4,9656	4,9739	4,9821	4,9902	4,9983

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
74,5	4,1692	4,1762	4,1831	4,1899	4,1967	4,2035	4,2102	4,2168	4,2233	4,2298	4,2363	4,2427	4,2491	4,2554	4,2616	4,2678	4,274	4,2801	4,2862
74,6	4,1913	4,1983	4,2053	4,2122	4,219	4,2257	4,2324	4,2391	4,2457	4,2522	4,2587	4,2651	4,2715	4,2778	4,2841	4,2903	4,2965	4,3027	4,3088
74,7	4,2136	4,2206	4,2276	4,2345	4,2414	4,2481	4,2549	4,2615	4,2682	4,2747	4,2812	4,2877	4,2941	4,3004	4,3067	4,313	4,3192	4,3254	4,3314
74,8	4,236	4,2431	4,2501	4,257	4,2639	4,2707	4,2774	4,2841	4,2908	4,2973	4,3039	4,3104	4,3168	4,3232	4,3295	4,3358	4,342	4,3482	4,3543
74,9	4,2586	4,2657	4,2727	4,2796	4,2866	4,2934	4,3001	4,3069	4,3135	4,3201	4,3267	4,3332	4,3397	4,346	4,3524	4,3587	4,3649	4,3711	4,3773
75	4,2813	4,2884	4,2954	4,3024	4,3093	4,3162	4,323	4,3298	4,3364	4,3431	4,3497	4,3562	4,3627	4,3691	4,3754	4,3818	4,388	4,3943	4,4005
75,1	4,3041	4,3113	4,3184	4,3254	4,3323	4,3392	4,346	4,3528	4,3595	4,3661	4,3727	4,3793	4,3858	4,3922	4,3986	4,405	4,4113	4,4175	4,4237
75,2	4,3271	4,3343	4,3414	4,3484	4,3554	4,3623	4,3691	4,3759	4,3827	4,3893	4,396	4,4026	4,4091	4,4156	4,422	4,4283	4,4347	4,4409	4,4472
75,3	4,3503	4,3575	4,3645	4,3716	4,3786	4,3855	4,3924	4,3992	4,406	4,4127	4,4194	4,426	4,4325	4,439	4,4455	4,4518	4,4582	4,4645	4,4708
75,4	4,3735	4,3807	4,3879	4,395	4,402	4,4089	4,4159	4,4227	4,4295	4,4362	4,4429	4,4495	4,4561	4,4626	4,4691	4,4755	4,4819	4,4882	4,4944
75,5	4,3969	4,4042	4,4113	4,4184	4,4255	4,4325	4,4394	4,4463	4,4531	4,4599	4,4666	4,4732	4,4798	4,4864	4,4929	4,4993	4,5057	4,512	4,5183
75,6	4,4205	4,4278	4,435	4,4421	4,4492	4,4562	4,4632	4,4701	4,4769	4,4836	4,4904	4,4971	4,5037	4,5102	4,5168	4,5232	4,5296	4,536	4,5424
75,7	4,4442	4,4515	4,4587	4,4659	4,473	4,48	4,487	4,494	4,5008	4,5076	4,5144	4,5211	4,5277	4,5343	4,5408	4,5473	4,5538	4,5602	4,5665
75,8	4,4681	4,4754	4,4827	4,4898	4,497	4,504	4,5111	4,518	4,5249	4,5317	4,5385	4,5452	4,5519	4,5585	4,5651	4,5716	4,5781	4,5845	4,5909
75,9	4,4921	4,4994	4,5067	4,5139	4,5211	4,5282	4,5352	4,5422	4,5491	4,556	4,5628	4,5695	4,5762	4,5829	4,5895	4,596	4,6025	4,6089	4,6154
76	4,5163	4,5236	4,531	4,5382	4,5454	4,5525	4,5596	4,5666	4,5735	4,5804	4,5872	4,594	4,6007	4,6074	4,614	4,6206	4,6271	4,6336	4,64
76,1	4,5406	4,548	4,5553	4,5626	4,5698	4,5769	4,584	4,5911	4,598	4,605	4,6118	4,6186	4,6254	4,632	4,6387	4,6453	4,6518	4,6583	4,6648
76,2	4,565	4,5725	4,5799	4,5872	4,5944	4,6016	4,6087	4,6158	4,6227	4,6297	4,6366	4,6434	4,6502	4,6569	4,6636	4,6702	4,6767	4,6832	4,6897
76,3	4,5897	4,5972	4,6046	4,6119	4,6191	4,6264	4,6335	4,6406	4,6476	4,6545	4,6615	4,6683	4,6751	4,6818	4,6885	4,6952	4,7018	4,7083	4,7148
76,4	4,6145	4,622	4,6294	4,6368	4,644	4,6513	4,6585	4,6656	4,6726	4,6796	4,6865	4,6934	4,7002	4,707	4,7137	4,7204	4,727	4,7336	4,7401
76,5	4,6395	4,647	4,6544	4,6618	4,6691	4,6764	4,6836	4,6907	4,6978	4,7048	4,7117	4,7187	4,7255	4,7323	4,7391	4,7457	4,7524	4,7589	4,7655
76,6	4,6646	4,6721	4,6796	4,687	4,6943	4,7016	4,7089	4,716	4,7231	4,7302	4,7371	4,7441	4,751	4,7577	4,7645	4,7713	4,7779	4,7845	4,7911
76,7	4,6898	4,6974	4,7049	4,7123	4,7198	4,727	4,7343	4,7415	4,7486	4,7557	4,7627	4,7696	4,7766	4,7834	4,7902	4,7969	4,8037	4,8103	4,8169
76,8	4,7153	4,7229	4,7304	4,7379	4,7453	4,7526	4,7599	4,7671	4,7743	4,7814	4,7884	4,7954	4,8023	4,8092	4,816	4,8228	4,8295	4,8362	4,8428
76,9	4,7409	4,7485	4,7561	4,7636	4,771	4,7784	4,7857	4,7929	4,8001	4,8072	4,8143	4,8213	4,8283	4,8352	4,842	4,8488	4,8555	4,8622	4,8689
77	4,7667	4,7743	4,7819	4,7894	4,7969	4,8043	4,8116	4,8189	4,8261	4,8332	4,8404	4,8474	4,8544	4,8613	4,8682	4,875	4,8818	4,8885	4,8951
77,1	4,7926	4,8003	4,8079	4,8155	4,8229	4,8304	4,8377	4,8451	4,8522	4,8595	4,8666	4,8736	4,8807	4,8876	4,8945	4,9013	4,9081	4,9149	4,9216
77,2	4,8187	4,8264	4,8341	4,8416	4,8492	4,8566	4,864	4,8713	4,8786	4,8858	4,893	4,9001	4,9071	4,9141	4,921	4,9279	4,9347	4,9414	4,9482
77,3	4,845	4,8527	4,8604	4,868	4,8755	4,8831	4,8905	4,8978	4,9051	4,9124	4,9196	4,9266	4,9337	4,9407	4,9477	4,9546	4,9614	4,9682	4,9749
77,4	4,8714	4,8792	4,8869	4,8946	4,9022	4,9097	4,9171	4,9245	4,9318	4,9391	4,9463	4,9534	4,9605	4,9675	4,9745	4,9815	4,9883	4,9951	5,0019
77,5	4,898	4,9059	4,9136	4,9213	4,9289	4,9364	4,9439	4,9513	4,9587	4,966	4,9732	4,9804	4,9875	4,9945	5,0016	5,0085	5,0154	5,0222	5,0291
77,6	4,9249	4,9327	4,9404	4,9482	4,9558	4,9634	4,9709	4,9783	4,9857	4,993	5,0003	5,0075	5,0146	5,0217	5,0287	5,0357	5,0427	5,0495	5,0563
77,7	4,9518	4,9597	4,9675	4,9752	4,9829	4,9905	4,998	5,0055	5,0129	5,0203	5,0275	5,0348	5,0419	5,0491	5,0561	5,0631	5,0701	5,077	5,0838
77,8	4,979	4,9869	4,9947	5,0025	5,0102	5,0178	5,0254	5,0329	5,0403	5,0477	5,055	5,0623	5,0695	5,0766	5,0837	5,0907	5,0977	5,1046	5,1115
77,9	5,0063	5,0143	5,0221	5,0299	5,0376	5,0453	5,0529	5,0604	5,0679	5,0753	5,0826	5,0899	5,0971	5,1043	5,1114	5,1185	5,1255	5,1325	5,1393

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
74,5	4,2922	4,2982	4,3041	4,31	4,3159	4,3217	4,3274	4,3332	4,3389	4,3445	4,3501	4,3557	4,3612	4,3668	4,3723	4,3776	4,3831	4,3884	4,3938
74,6	4,3148	4,3208	4,3268	4,3327	4,3386	4,3444	4,3502	4,3559	4,3616	4,3673	4,373	4,3785	4,3841	4,3896	4,3951	4,4006	4,406	4,4114	4,4167
74,7	4,3376	4,3435	4,3495	4,3555	4,3614	4,3672	4,373	4,3788	4,3846	4,3902	4,3959	4,4015	4,4071	4,4127	4,4181	4,4236	4,4291	4,4345	4,4398
74,8	4,3604	4,3665	4,3725	4,3784	4,3843	4,3902	4,3961	4,4018	4,4076	4,4133	4,419	4,4246	4,4302	4,4358	4,4413	4,4468	4,4523	4,4577	4,4631
74,9	4,3834	4,3895	4,3955	4,4015	4,4075	4,4134	4,4192	4,425	4,4308	4,4366	4,4422	4,4479	4,4535	4,4591	4,4647	4,4702	4,4756	4,4811	4,4865
75	4,4066	4,4127	4,4187	4,4248	4,4307	4,4366	4,4425	4,4483	4,4541	4,4599	4,4656	4,4713	4,4769	4,4826	4,4881	4,4937	4,4992	4,5046	4,5101
75,1	4,4299	4,436	4,4421	4,4481	4,4541	4,46	4,466	4,4718	4,4776	4,4834	4,4892	4,4948	4,5005	4,5061	4,5117	4,5173	4,5228	4,5283	4,5337
75,2	4,4533	4,4595	4,4656	4,4716	4,4776	4,4836	4,4895	4,4954	4,5012	4,507	4,5128	4,5185	4,5242	4,5299	4,5355	4,5411	4,5466	4,5521	4,5576
75,3	4,477	4,4831	4,4892	4,4953	4,5013	4,5073	4,5133	4,5191	4,525	4,5308	4,5366	4,5424	4,5481	4,5538	4,5594	4,565	4,5705	4,5761	4,5816
75,4	4,5007	4,5069	4,513	4,5191	4,5252	4,5312	4,5372	4,543	4,549	4,5548	4,5606	4,5663	4,5721	4,5778	4,5834	4,589	4,5947	4,6002	4,6057
75,5	4,5246	4,5308	4,5369	4,5431	4,5492	4,5552	4,5612	4,5671	4,573	4,5789	4,5847	4,5905	4,5962	4,602	4,6076	4,6133	4,6189	4,6244	4,63
75,6	4,5486	4,5548	4,561	4,5672	4,5733	4,5793	4,5853	4,5913	4,5973	4,6032	4,609	4,6148	4,6205	4,6263	4,632	4,6377	4,6433	4,6489	4,6544
75,7	4,5728	4,5791	4,5853	4,5915	4,5976	4,6037	4,6097	4,6157	4,6216	4,6276	4,6334	4,6392	4,645	4,6508	4,6565	4,6622	4,6679	4,6734	4,679
75,8	4,5972	4,6035	4,6097	4,6159	4,622	4,6281	4,6342	4,6402	4,6461	4,6521	4,658	4,6638	4,6697	4,6754	4,6812	4,6869	4,6925	4,6982	4,7038
75,9	4,6217	4,628	4,6343	4,6404	4,6466	4,6527	4,6588	4,6648	4,6709	4,6768	4,6827	4,6886	4,6944	4,7002	4,706	4,7117	4,7174	4,7231	4,7287
76	4,6464	4,6527	4,6589	4,6652	4,6713	4,6775	4,6836	4,6897	4,6957	4,7017	4,7076	4,7135	4,7194	4,7252	4,7309	4,7367	4,7424	4,7481	4,7537
76,1	4,6711	4,6775	4,6838	4,6901	4,6963	4,7024	4,7086	4,7146	4,7207	4,7267	4,7327	4,7385	4,7444	4,7503	4,7561	4,7619	4,7676	4,7733	4,779
76,2	4,6961	4,7025	4,7088	4,7151	4,7214	4,7275	4,7337	4,7398	4,7459	4,7519	4,7579	4,7638	4,7697	4,7756	4,7814	4,7872	4,7929	4,7987	4,8043
76,3	4,7213	4,7277	4,734	4,7403	4,7465	4,7528	4,7589	4,7651	4,7712	4,7772	4,7832	4,7892	4,7951	4,801	4,8068	4,8127	4,8185	4,8242	4,8299
76,4	4,7466	4,7529	4,7593	4,7657	4,772	4,7782	4,7844	4,7905	4,7967	4,8027	4,8087	4,8147	4,8207	4,8266	4,8325	4,8383	4,8441	4,8498	4,8556
76,5	4,772	4,7785	4,7848	4,7912	4,7975	4,8038	4,81	4,8162	4,8223	4,8284	4,8345	4,8405	4,8464	4,8524	4,8583	4,8641	4,8699	4,8757	4,8815
76,6	4,7976	4,8041	4,8105	4,8169	4,8232	4,8295	4,8358	4,842	4,8481	4,8542	4,8603	4,8663	4,8723	4,8783	4,8842	4,8901	4,8959	4,9017	4,9075
76,7	4,8234	4,8299	4,8363	4,8427	4,8491	4,8554	4,8617	4,8679	4,8741	4,8802	4,8863	4,8924	4,8984	4,9044	4,9103	4,9162	4,9221	4,9279	4,9337
76,8	4,8494	4,8559	4,8624	4,8688	4,8751	4,8815	4,8878	4,894	4,9002	4,9064	4,9125	4,9186	4,9246	4,9306	4,9366	4,9425	4,9484	4,9543	4,9601
76,9	4,8755	4,882	4,8885	4,895	4,9014	4,9077	4,9141	4,9203	4,9265	4,9327	4,9389	4,945	4,951	4,957	4,963	4,969	4,9749	4,9807	4,9866
77	4,9018	4,9083	4,9149	4,9213	4,9277	4,9342	4,9405	4,9468	4,953	4,9592	4,9654	4,9715	4,9776	4,9837	4,9897	4,9956	5,0016	5,0075	5,0133
77,1	4,9282	4,9348	4,9414	4,9479	4,9543	4,9607	4,9671	4,9734	4,9797	4,9859	4,9921	4,9982	5,0043	5,0104	5,0165	5,0224	5,0284	5,0343	5,0402
77,2	4,9549	4,9615	4,968	4,9746	4,9811	4,9875	4,9938	5,0002	5,0065	5,0128	5,019	5,0251	5,0313	5,0374	5,0434	5,0494	5,0554	5,0614	5,0673
77,3	4,9816	4,9883	4,9949	5,0014	5,008	5,0144	5,0208	5,0272	5,0335	5,0398	5,0461	5,0522	5,0584	5,0645	5,0706	5,0766	5,0826	5,0886	5,0945
77,4	5,0086	5,0153	5,0219	5,0285	5,035	5,0415	5,0479	5,0543	5,0607	5,067	5,0733	5,0795	5,0856	5,0918	5,0979	5,104	5,11	5,116	5,1219
77,5	5,0358	5,0425	5,0491	5,0557	5,0623	5,0688	5,0753	5,0817	5,088	5,0944	5,1007	5,1069	5,1131	5,1193	5,1254	5,1315	5,1375	5,1436	5,1495
77,6	5,0631	5,0698	5,0765	5,0831	5,0897	5,0962	5,1027	5,1092	5,1156	5,1219	5,1283	5,1345	5,1407	5,1469	5,1531	5,1592	5,1653	5,1713	5,1773
77,7	5,0906	5,0974	5,1041	5,1108	5,1173	5,1239	5,1304	5,1369	5,1433	5,1497	5,156	5,1623	5,1685	5,1748	5,181	5,1871	5,1932	5,1992	5,2052
77,8	5,1183	5,1251	5,1318	5,1385	5,1451	5,1517	5,1582	5,1648	5,1712	5,1776	5,184	5,1903	5,1966	5,2028	5,209	5,2151	5,2213	5,2274	5,2334
77,9	5,1462	5,153	5,1598	5,1665	5,1731	5,1797	5,1863	5,1928	5,1993	5,2057	5,2121	5,2185	5,2248	5,231	5,2372	5,2434	5,2496	5,2556	5,2617

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
74,5	4,3991	4,4043	4,4096	4,4148	4,4199	4,4251	4,4302	4,4353	4,4403	4,4454	4,4504	4,4553	4,4603	4,4652	4,47	4,4749	4,4797	4,4845	4,4893
74,6	4,422	4,4273	4,4326	4,4378	4,443	4,4482	4,4533	4,4584	4,4635	4,4685	4,4735	4,4785	4,4834	4,4884	4,4933	4,4982	4,503	4,5078	4,5126
74,7	4,4452	4,4505	4,4558	4,461	4,4662	4,4714	4,4766	4,4817	4,4867	4,4918	4,4969	4,5019	4,5068	4,5118	4,5167	4,5216	4,5264	4,5313	4,5361
74,8	4,4685	4,4738	4,4791	4,4843	4,4896	4,4948	4,4999	4,5051	4,5102	4,5153	4,5203	4,5253	4,5303	4,5353	4,5402	4,5451	4,55	4,5548	4,5597
74,9	4,4919	4,4972	4,5025	4,5078	4,5131	4,5183	4,5234	4,5286	4,5338	4,5389	4,5439	4,549	4,554	4,559	4,5639	4,5688	4,5737	4,5786	4,5835
75	4,5155	4,5208	4,5262	4,5314	4,5367	4,542	4,5472	4,5523	4,5575	4,5626	4,5677	4,5727	4,5777	4,5828	4,5877	4,5927	4,5976	4,6025	4,6074
75,1	4,5391	4,5445	4,5499	4,5552	4,5605	4,5657	4,571	4,5762	4,5814	4,5865	4,5916	4,5966	4,6017	4,6067	4,6117	4,6167	4,6216	4,6265	4,6314
75,2	4,563	4,5684	4,5738	4,5791	4,5844	4,5897	4,5949	4,6002	4,6053	4,6105	4,6156	4,6207	4,6258	4,6308	4,6358	4,6408	4,6458	4,6507	4,6556
75,3	4,587	4,5924	4,5979	4,6032	4,6085	4,6138	4,6191	4,6243	4,6295	4,6347	4,6398	4,6449	4,65	4,6551	4,6601	4,6651	4,6701	4,675	4,68
75,4	4,6112	4,6166	4,622	4,6274	4,6328	4,6381	4,6434	4,6486	4,6538	4,659	4,6642	4,6693	4,6744	4,6795	4,6845	4,6896	4,6946	4,6996	4,7045
75,5	4,6355	4,641	4,6464	4,6518	4,6572	4,6625	4,6678	4,673	4,6783	4,6835	4,6887	4,6938	4,699	4,7041	4,7091	4,7142	4,7192	4,7242	4,7291
75,6	4,6599	4,6655	4,6709	4,6763	4,6817	4,687	4,6924	4,6977	4,7029	4,7081	4,7134	4,7185	4,7237	4,7288	4,7339	4,7389	4,7439	4,749	4,754
75,7	4,6845	4,6901	4,6956	4,701	4,7064	4,7117	4,7171	4,7224	4,7277	4,7329	4,7382	4,7434	4,7485	4,7536	4,7588	4,7638	4,7689	4,7739	4,7789
75,8	4,7093	4,7148	4,7203	4,7258	4,7313	4,7366	4,742	4,7473	4,7527	4,7579	4,7632	4,7684	4,7735	4,7787	4,7838	4,7889	4,794	4,799	4,804
75,9	4,7342	4,7398	4,7453	4,7508	4,7562	4,7617	4,7671	4,7724	4,7777	4,783	4,7883	4,7935	4,7987	4,8039	4,809	4,8141	4,8192	4,8243	4,8293
76	4,7593	4,7649	4,7705	4,776	4,7814	4,7868	4,7922	4,7976	4,803	4,8083	4,8135	4,8188	4,824	4,8292	4,8344	4,8395	4,8446	4,8497	4,8547
76,1	4,7846	4,7902	4,7957	4,8012	4,8067	4,8122	4,8176	4,823	4,8284	4,8337	4,839	4,8443	4,8495	4,8547	4,8599	4,8651	4,8702	4,8753	4,8804
76,2	4,81	4,8156	4,8212	4,8267	4,8322	4,8377	4,8431	4,8486	4,854	4,8593	4,8646	4,8699	4,8751	4,8804	4,8856	4,8907	4,8959	4,901	4,9061
76,3	4,8355	4,8412	4,8468	4,8523	4,8579	4,8634	4,8688	4,8743	4,8797	4,8851	4,8904	4,8957	4,901	4,9062	4,9115	4,9166	4,9218	4,9269	4,932
76,4	4,8613	4,8669	4,8725	4,8781	4,8837	4,8892	4,8947	4,9001	4,9056	4,9109	4,9163	4,9217	4,927	4,9322	4,9374	4,9427	4,9478	4,953	4,9581
76,5	4,8871	4,8929	4,8985	4,9041	4,9097	4,9152	4,9207	4,9262	4,9316	4,937	4,9424	4,9477	4,9531	4,9584	4,9636	4,9689	4,9741	4,9792	4,9844
76,6	4,9132	4,9189	4,9246	4,9302	4,9358	4,9413	4,9469	4,9524	4,9579	4,9633	4,9687	4,9741	4,9794	4,9847	4,99	4,9952	5,0005	5,0056	5,0108
76,7	4,9394	4,9451	4,9509	4,9565	4,9621	4,9677	4,9732	4,9787	4,9843	4,9897	4,9951	5,0005	5,0059	5,0112	5,0165	5,0218	5,027	5,0322	5,0374
76,8	4,9658	4,9716	4,9773	4,983	4,9886	4,9942	4,9998	5,0053	5,0108	5,0163	5,0217	5,0271	5,0325	5,0379	5,0432	5,0485	5,0538	5,059	5,0642
76,9	4,9924	4,9982	5,0039	5,0096	5,0152	5,0208	5,0264	5,032	5,0376	5,0431	5,0485	5,0539	5,0593	5,0647	5,07	5,0754	5,0807	5,0859	5,0912
77	5,0191	5,0249	5,0307	5,0364	5,0421	5,0477	5,0533	5,0589	5,0644	5,07	5,0755	5,0809	5,0863	5,0917	5,0971	5,1024	5,1077	5,113	5,1183
77,1	5,0461	5,0518	5,0576	5,0633	5,069	5,0747	5,0804	5,086	5,0915	5,0971	5,1026	5,1081	5,1135	5,1189	5,1243	5,1297	5,135	5,1403	5,1456
77,2	5,0731	5,079	5,0848	5,0905	5,0963	5,1019	5,1076	5,1132	5,1188	5,1244	5,1299	5,1354	5,1408	5,1463	5,1517	5,1571	5,1624	5,1677	5,173
77,3	5,1004	5,1062	5,1121	5,1178	5,1236	5,1293	5,135	5,1406	5,1462	5,1518	5,1574	5,1629	5,1684	5,1738	5,1793	5,1846	5,19	5,1953	5,2007
77,4	5,1278	5,1337	5,1395	5,1453	5,1511	5,1568	5,1626	5,1682	5,1738	5,1795	5,185	5,1906	5,1961	5,2015	5,207	5,2124	5,2178	5,2232	5,2285
77,5	5,1554	5,1614	5,1672	5,1731	5,1788	5,1846	5,1903	5,196	5,2017	5,2073	5,2129	5,2184	5,224	5,2295	5,2349	5,2403	5,2457	5,2511	5,2565
77,6	5,1832	5,1892	5,1951	5,2009	5,2067	5,2125	5,2183	5,224	5,2296	5,2353	5,2409	5,2465	5,252	5,2575	5,263	5,2685	5,2739	5,2793	5,2847
77,7	5,2112	5,2172	5,2231	5,2289	5,2348	5,2406	5,2463	5,2521	5,2578	5,2634	5,2691	5,2747	5,2802	5,2858	5,2913	5,2968	5,3022	5,3077	5,3131
77,8	5,2394	5,2453	5,2513	5,2572	5,263	5,2689	5,2747	5,2804	5,2861	5,2918	5,2975	5,3031	5,3087	5,3142	5,3198	5,3253	5,3307	5,3362	5,3416
77,9	5,2677	5,2737	5,2797	5,2856	5,2915	5,2973	5,3032	5,3089	5,3147	5,3204	5,3261	5,3317	5,3373	5,3429	5,3484	5,354	5,3595	5,3649	5,3704

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
74,5	4,494	4,4988	4,5035	4,5082	4,5128	4,5174	4,522	4,5266
74,6	4,5174	4,5221	4,5269	4,5316	4,5362	4,5409	4,5455	4,5501
74,7	4,5409	4,5456	4,5504	4,5551	4,5598	4,5645	4,5691	4,5737
74,8	4,5645	4,5693	4,574	4,5788	4,5834	4,5881	4,5928	4,5974
74,9	4,5883	4,5931	4,5979	4,6026	4,6073	4,612	4,6167	4,6213
75	4,6122	4,617	4,6218	4,6266	4,6313	4,636	4,6407	4,6454
75,1	4,6363	4,6411	4,6459	4,6507	4,6554	4,6602	4,6649	4,6696
75,2	4,6605	4,6653	4,6702	4,675	4,6797	4,6845	4,6892	4,6939
75,3	4,6848	4,6897	4,6946	4,6994	4,7042	4,7089	4,7137	4,7184
75,4	4,7094	4,7143	4,7191	4,724	4,7288	4,7336	4,7383	4,7431
75,5	4,7341	4,739	4,7438	4,7487	4,7535	4,7583	4,7631	4,7679
75,6	4,7589	4,7638	4,7687	4,7736	4,7784	4,7833	4,7881	4,7928
75,7	4,7839	4,7888	4,7937	4,7986	4,8035	4,8084	4,8132	4,8179
75,8	4,809	4,814	4,8189	4,8238	4,8287	4,8336	4,8384	4,8432
75,9	4,8343	4,8393	4,8442	4,8492	4,8541	4,859	4,8638	4,8686
76	4,8598	4,8648	4,8698	4,8747	4,8796	4,8845	4,8894	4,8942
76,1	4,8854	4,8904	4,8954	4,9004	4,9053	4,9103	4,9151	4,92
76,2	4,9112	4,9162	4,9213	4,9262	4,9312	4,9361	4,941	4,9459
76,3	4,9371	4,9422	4,9472	4,9522	4,9572	4,9622	4,9671	4,972
76,4	4,9632	4,9683	4,9733	4,9784	4,9834	4,9884	4,9933	4,9982
76,5	4,9895	4,9946	4,9997	5,0047	5,0097	5,0148	5,0197	5,0246
76,6	5,016	5,0211	5,0262	5,0312	5,0363	5,0413	5,0463	5,0512
76,7	5,0426	5,0477	5,0529	5,0579	5,0629	5,068	5,073	5,078
76,8	5,0694	5,0745	5,0796	5,0848	5,0898	5,0949	5,0999	5,1049
76,9	5,0963	5,1015	5,1067	5,1118	5,1169	5,1219	5,1269	5,132
77	5,1235	5,1287	5,1339	5,139	5,1441	5,1492	5,1542	5,1592
77,1	5,1508	5,156	5,1612	5,1663	5,1715	5,1766	5,1817	5,1867
77,2	5,1783	5,1835	5,1887	5,1939	5,199	5,2042	5,2093	5,2143
77,3	5,206	5,2112	5,2164	5,2216	5,2268	5,2319	5,237	5,2421
77,4	5,2338	5,2391	5,2443	5,2495	5,2547	5,2599	5,265	5,2701
77,5	5,2618	5,2671	5,2724	5,2776	5,2828	5,288	5,2932	5,2983
77,6	5,29	5,2954	5,3006	5,3059	5,3111	5,3163	5,3215	5,3266
77,7	5,3184	5,3237	5,3291	5,3343	5,3396	5,3448	5,35	5,3552
77,8	5,347	5,3524	5,3577	5,3629	5,3682	5,3735	5,3787	5,3839
77,9	5,3758	5,3811	5,3865	5,3918	5,3971	5,4023	5,4076	5,4128

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
78	3,8309	3,8748	3,9154	3,9534	3,989	4,0225	4,0543	4,0844	4,1132	4,1407	4,1669	4,1922	4,2164	4,2398	4,2624	4,2842	4,3053	4,3258	4,3456
78,1	3,8538	3,8979	3,9387	3,9768	4,0126	4,0462	4,0781	4,1084	4,1373	4,1648	4,1912	4,2166	4,2409	4,2644	4,2871	4,3089	4,3302	4,3507	4,3706
78,2	3,8769	3,9212	3,9622	4,0004	4,0363	4,0701	4,1022	4,1325	4,1615	4,1892	4,2157	4,2411	4,2656	4,2891	4,3119	4,3339	4,3551	4,3758	4,3958
78,3	3,9002	3,9446	3,9858	4,0242	4,0602	4,0942	4,1263	4,1568	4,1859	4,2137	4,2403	4,2658	4,2904	4,3141	4,3369	4,359	4,3803	4,401	4,4211
78,4	3,9236	3,9682	4,0096	4,0481	4,0843	4,1184	4,1506	4,1813	4,2105	4,2384	4,2651	4,2907	4,3154	4,3392	4,3621	4,3843	4,4057	4,4265	4,4467
78,5	3,9472	3,992	4,0335	4,0722	4,1085	4,1428	4,1752	4,2059	4,2353	4,2632	4,2901	4,3158	4,3406	4,3644	4,3875	4,4097	4,4312	4,4521	4,4723
78,6	3,971	4,016	4,0576	4,0965	4,133	4,1673	4,1999	4,2308	4,2602	4,2883	4,3152	4,3411	4,3659	4,3899	4,413	4,4353	4,4569	4,4779	4,4982
78,7	3,995	4,0401	4,0819	4,1209	4,1575	4,192	4,2247	4,2557	4,2853	4,3135	4,3405	4,3665	4,3914	4,4155	4,4387	4,4611	4,4828	4,5038	4,5242
78,8	4,019	4,0643	4,1063	4,1456	4,1823	4,2169	4,2497	4,2809	4,3105	4,3389	4,366	4,3921	4,4172	4,4413	4,4645	4,4871	4,5089	4,53	4,5505
78,9	4,0433	4,0888	4,131	4,1703	4,2072	4,242	4,2749	4,3062	4,336	4,3644	4,3917	4,4178	4,443	4,4672	4,4906	4,5132	4,5351	4,5563	4,5769
79	4,0678	4,1134	4,1557	4,1953	4,2323	4,2672	4,3003	4,3317	4,3616	4,3902	4,4176	4,4438	4,4691	4,4934	4,5169	4,5396	4,5616	4,5828	4,6035
79,1	4,0924	4,1382	4,1807	4,2204	4,2576	4,2927	4,3259	4,3574	4,3874	4,4161	4,4436	4,47	4,4953	4,5197	4,5433	4,5661	4,5881	4,6095	4,6302
79,2	4,1171	4,1632	4,2059	4,2457	4,2831	4,3183	4,3516	4,3832	4,4134	4,4422	4,4698	4,4962	4,5217	4,5462	4,5699	4,5928	4,6149	4,6364	4,6572
79,3	4,1421	4,1883	4,2312	4,2712	4,3087	4,344	4,3775	4,4093	4,4396	4,4685	4,4962	4,5227	4,5483	4,5729	4,5967	4,6197	4,6419	4,6635	4,6843
79,4	4,1672	4,2136	4,2567	4,2968	4,3345	4,37	4,4036	4,4355	4,4659	4,495	4,5228	4,5494	4,5751	4,5998	4,6237	4,6467	4,6691	4,6907	4,7117
79,5	4,1926	4,2392	4,2824	4,3227	4,3605	4,3962	4,4299	4,4619	4,4924	4,5216	4,5495	4,5763	4,602	4,6269	4,6509	4,674	4,6964	4,7181	4,7392
79,6	4,218	4,2649	4,3083	4,3487	4,3867	4,4225	4,4563	4,4885	4,5192	4,5484	4,5765	4,6034	4,6292	4,6542	4,6782	4,7014	4,724	4,7458	4,767
79,7	4,2437	4,2907	4,3343	4,3749	4,4131	4,449	4,483	4,5153	4,5461	4,5754	4,6036	4,6306	4,6566	4,6816	4,7058	4,7291	4,7517	4,7736	4,7948
79,8	4,2696	4,3168	4,3605	4,4014	4,4396	4,4757	4,5099	4,5423	4,5732	4,6027	4,6309	4,658	4,6841	4,7092	4,7335	4,757	4,7796	4,8016	4,823
79,9	4,2957	4,343	4,387	4,4279	4,4664	4,5026	4,5369	4,5695	4,6005	4,6301	4,6585	4,6857	4,7119	4,7371	4,7615	4,785	4,8078	4,8298	4,8513
80	4,3219	4,3694	4,4136	4,4547	4,4933	4,5297	4,5641	4,5968	4,628	4,6577	4,6862	4,7135	4,7398	4,7652	4,7896	4,8132	4,8361	4,8583	4,8798
80,1	4,3483	4,3961	4,4403	4,4817	4,5204	4,5569	4,5915	4,6243	4,6556	4,6855	4,7141	4,7416	4,768	4,7934	4,818	4,8417	4,8646	4,8869	4,9085
80,2	4,3749	4,4229	4,4674	4,5088	4,5478	4,5845	4,6192	4,6521	4,6835	4,7135	4,7422	4,7698	4,7963	4,8219	4,8465	4,8703	4,8934	4,9157	4,9374
80,3	4,4017	4,4499	4,4945	4,5362	4,5753	4,6121	4,647	4,68	4,7116	4,7417	4,7706	4,7982	4,8249	4,8505	4,8753	4,8992	4,9223	4,9447	4,9666
80,4	4,4287	4,4771	4,5219	4,5638	4,603	4,64	4,675	4,7082	4,7399	4,7701	4,7991	4,8269	4,8536	4,8794	4,9042	4,9283	4,9515	4,974	4,9959
80,5	4,4559	4,5045	4,5495	4,5916	4,6309	4,6681	4,7032	4,7366	4,7684	4,7987	4,8278	4,8557	4,8825	4,9084	4,9334	4,9575	4,9808	5,0035	5,0254
80,6	4,4833	4,5321	4,5773	4,6195	4,6591	4,6964	4,7316	4,7651	4,797	4,8275	4,8568	4,8848	4,9118	4,9377	4,9627	4,987	5,0104	5,0331	5,0552
80,7	4,511	4,5599	4,6053	4,6477	4,6874	4,7248	4,7602	4,7939	4,826	4,8566	4,8859	4,914	4,9411	4,9672	4,9923	5,0167	5,0402	5,063	5,0852
80,8	4,5387	4,5879	4,6335	4,6761	4,7159	4,7536	4,7891	4,8229	4,8551	4,8859	4,9153	4,9436	4,9707	4,9969	5,0221	5,0466	5,0702	5,0931	5,1153
80,9	4,5668	4,6161	4,6619	4,7046	4,7447	4,7824	4,8182	4,8521	4,8844	4,9153	4,9448	4,9732	5,0005	5,0268	5,0522	5,0767	5,1004	5,1234	5,1457
81	4,5949	4,6445	4,6905	4,7334	4,7736	4,8116	4,8474	4,8815	4,914	4,9449	4,9746	5,0032	5,0305	5,0569	5,0824	5,107	5,1309	5,154	5,1763
81,1	4,6234	4,6732	4,7193	4,7624	4,8028	4,8409	4,8769	4,9111	4,9437	4,9748	5,0047	5,0332	5,0608	5,0873	5,1129	5,1376	5,1615	5,1847	5,2072
81,2	4,652	4,702	4,7484	4,7916	4,8322	4,8704	4,9066	4,9409	4,9737	5,0049	5,0349	5,0636	5,0912	5,1178	5,1436	5,1684	5,1924	5,2157	5,2383
81,3	4,6809	4,7311	4,7776	4,821	4,8618	4,9002	4,9365	4,971	5,0038	5,0353	5,0653	5,0942	5,1219	5,1487	5,1744	5,1994	5,2235	5,2469	5,2696
81,4	4,7099	4,7604	4,8071	4,8507	4,8916	4,9301	4,9666	5,0013	5,0343	5,0658	5,096	5,125	5,1528	5,1796	5,2056	5,2306	5,2549	5,2783	5,3011

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
78	4,3649	4,3837	4,4019	4,4197	4,437	4,4539	4,4705	4,4866	4,5024	4,5179	4,533	4,5478	4,5623	4,5765	4,5905	4,6042	4,6177	4,631	4,6439
78,1	4,39	4,4088	4,4271	4,445	4,4624	4,4794	4,496	4,5122	4,528	4,5435	4,5587	4,5736	4,5881	4,6025	4,6165	4,6302	4,6438	4,6571	4,6701
78,2	4,4152	4,4342	4,4525	4,4705	4,4879	4,505	4,5216	4,5379	4,5538	4,5694	4,5846	4,5996	4,6142	4,6286	4,6426	4,6564	4,67	4,6834	4,6964
78,3	4,4407	4,4596	4,4781	4,4961	4,5136	4,5308	4,5475	4,5638	4,5798	4,5954	4,6107	4,6257	4,6404	4,6548	4,6689	4,6828	4,6964	4,7099	4,723
78,4	4,4662	4,4853	4,5039	4,5219	4,5395	4,5567	4,5735	4,5899	4,6059	4,6216	4,637	4,652	4,6668	4,6813	4,6955	4,7094	4,7231	4,7365	4,7497
78,5	4,492	4,5112	4,5297	4,5479	4,5656	4,5829	4,5997	4,6162	4,6323	4,648	4,6635	4,6786	4,6933	4,7079	4,7221	4,7361	4,7499	4,7633	4,7766
78,6	4,518	4,5372	4,5559	4,5741	4,5918	4,6092	4,6261	4,6426	4,6588	4,6746	4,69	4,7052	4,7201	4,7347	4,749	4,763	4,7768	4,7904	4,8036
78,7	4,5441	4,5634	4,5821	4,6004	4,6182	4,6356	4,6526	4,6692	4,6855	4,7013	4,7168	4,7321	4,747	4,7616	4,776	4,7901	4,804	4,8176	4,8309
78,8	4,5704	4,5897	4,6086	4,6269	4,6448	4,6623	4,6793	4,696	4,7123	4,7282	4,7439	4,7592	4,7742	4,7889	4,8032	4,8174	4,8313	4,8449	4,8584
78,9	4,5969	4,6163	4,6352	4,6537	4,6716	4,6891	4,7063	4,723	4,7394	4,7554	4,771	4,7864	4,8014	4,8162	4,8307	4,8448	4,8588	4,8725	4,886
79	4,6236	4,6431	4,662	4,6806	4,6986	4,7162	4,7334	4,7502	4,7666	4,7826	4,7984	4,8138	4,8289	4,8437	4,8583	4,8725	4,8865	4,9003	4,9138
79,1	4,6504	4,67	4,6891	4,7076	4,7258	4,7434	4,7607	4,7775	4,794	4,8101	4,826	4,8414	4,8566	4,8715	4,886	4,9004	4,9144	4,9282	4,9419
79,2	4,6774	4,6971	4,7163	4,7349	4,7531	4,7708	4,7882	4,8051	4,8216	4,8378	4,8537	4,8692	4,8845	4,8994	4,914	4,9284	4,9425	4,9564	4,97
79,3	4,7047	4,7244	4,7436	4,7624	4,7806	4,7984	4,8158	4,8328	4,8494	4,8657	4,8816	4,8972	4,9125	4,9275	4,9422	4,9566	4,9708	4,9847	4,9984
79,4	4,7321	4,7519	4,7712	4,79	4,8083	4,8262	4,8437	4,8608	4,8775	4,8938	4,9098	4,9254	4,9408	4,9558	4,9706	4,9851	4,9993	5,0133	5,027
79,5	4,7597	4,7796	4,799	4,8179	4,8363	4,8542	4,8717	4,8889	4,9057	4,9221	4,9381	4,9538	4,9692	4,9843	4,9992	5,0137	5,028	5,042	5,0558
79,6	4,7875	4,8075	4,8269	4,8459	4,8644	4,8824	4,9	4,9172	4,934	4,9505	4,9666	4,9824	4,9979	5,013	5,0279	5,0425	5,0569	5,0709	5,0848
79,7	4,8155	4,8355	4,8551	4,8741	4,8927	4,9108	4,9285	4,9457	4,9626	4,9791	4,9953	5,0112	5,0267	5,042	5,0569	5,0716	5,086	5,1001	5,114
79,8	4,8437	4,8638	4,8834	4,9026	4,9212	4,9394	4,9571	4,9744	4,9914	5,008	5,0242	5,0402	5,0558	5,071	5,086	5,1008	5,1153	5,1295	5,1434
79,9	4,8721	4,8923	4,912	4,9312	4,9499	4,9682	4,986	5,0034	5,0204	5,0371	5,0534	5,0693	5,085	5,1004	5,1154	5,1302	5,1447	5,159	5,173
80	4,9007	4,921	4,9408	4,96	4,9788	4,9972	5,015	5,0325	5,0496	5,0663	5,0827	5,0988	5,1145	5,1299	5,145	5,1599	5,1745	5,1888	5,2029
80,1	4,9295	4,9499	4,9697	4,9891	5,0079	5,0263	5,0443	5,0618	5,079	5,0958	5,1123	5,1284	5,1441	5,1596	5,1748	5,1897	5,2044	5,2188	5,2329
80,2	4,9585	4,9789	4,9989	5,0183	5,0372	5,0557	5,0737	5,0914	5,1086	5,1255	5,142	5,1582	5,174	5,1896	5,2048	5,2198	5,2345	5,2489	5,2631
80,3	4,9877	5,0083	5,0282	5,0478	5,0668	5,0853	5,1034	5,1211	5,1384	5,1554	5,1719	5,1882	5,2041	5,2197	5,2351	5,2501	5,2648	5,2793	5,2936
80,4	5,0171	5,0377	5,0579	5,0775	5,0965	5,1151	5,1333	5,1511	5,1685	5,1855	5,2021	5,2185	5,2344	5,2501	5,2654	5,2805	5,2954	5,3099	5,3242
80,5	5,0467	5,0675	5,0877	5,1073	5,1265	5,1452	5,1635	5,1813	5,1987	5,2158	5,2325	5,2489	5,2649	5,2807	5,2961	5,3113	5,3261	5,3407	5,3551
80,6	5,0766	5,0974	5,1177	5,1374	5,1566	5,1754	5,1938	5,2117	5,2292	5,2464	5,2631	5,2796	5,2957	5,3115	5,327	5,3422	5,3572	5,3718	5,3863
80,7	5,1066	5,1275	5,1479	5,1677	5,187	5,2059	5,2243	5,2423	5,2599	5,2771	5,2939	5,3104	5,3266	5,3425	5,3581	5,3734	5,3884	5,4031	5,4176
80,8	5,1369	5,1579	5,1783	5,1982	5,2176	5,2365	5,255	5,2731	5,2908	5,3081	5,325	5,3415	5,3578	5,3737	5,3894	5,4047	5,4198	5,4346	5,4491
80,9	5,1674	5,1885	5,209	5,2289	5,2484	5,2675	5,286	5,3042	5,3219	5,3392	5,3563	5,3729	5,3892	5,4052	5,4209	5,4363	5,4515	5,4663	5,4809
81	5,1981	5,2193	5,2399	5,2599	5,2795	5,2986	5,3172	5,3354	5,3533	5,3707	5,3878	5,4044	5,4209	5,4369	5,4527	5,4681	5,4833	5,4982	5,5129
81,1	5,229	5,2503	5,271	5,2911	5,3108	5,33	5,3487	5,3669	5,3848	5,4024	5,4195	5,4363	5,4527	5,4688	5,4847	5,5002	5,5155	5,5304	5,5452
81,2	5,2602	5,2816	5,3023	5,3226	5,3423	5,3615	5,3803	5,3987	5,4166	5,4342	5,4514	5,4683	5,4848	5,501	5,5169	5,5325	5,5478	5,5628	5,5776
81,3	5,2916	5,3131	5,3339	5,3542	5,374	5,3933	5,4122	5,4307	5,4487	5,4663	5,4836	5,5005	5,5171	5,5334	5,5493	5,565	5,5804	5,5955	5,6103
81,4	5,3232	5,3447	5,3657	5,3861	5,406	5,4254	5,4443	5,4629	5,481	5,4987	5,516	5,533	5,5497	5,566	5,582	5,5978	5,6132	5,6284	5,6433

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
78	4,6567	4,6693	4,6817	4,6938	4,7058	4,7176	4,7292	4,7407	4,752	4,7631	4,7741	4,7849	4,7956	4,8062	4,8165	4,8268	4,8369	4,847	4,8569
78,1	4,6829	4,6955	4,708	4,7202	4,7322	4,7441	4,7557	4,7672	4,7786	4,7897	4,8008	4,8116	4,8223	4,8329	4,8434	4,8537	4,8639	4,874	4,8839
78,2	4,7093	4,722	4,7345	4,7467	4,7588	4,7707	4,7824	4,794	4,8053	4,8165	4,8276	4,8385	4,8493	4,8599	4,8704	4,8808	4,891	4,9011	4,9111
78,3	4,7359	4,7486	4,7612	4,7735	4,7856	4,7975	4,8093	4,8209	4,8323	4,8436	4,8547	4,8656	4,8764	4,8871	4,8976	4,908	4,9183	4,9285	4,9385
78,4	4,7627	4,7754	4,788	4,8004	4,8126	4,8245	4,8364	4,848	4,8594	4,8707	4,8819	4,8929	4,9037	4,9144	4,925	4,9355	4,9458	4,956	4,966
78,5	4,7896	4,8025	4,815	4,8274	4,8397	4,8517	4,8636	4,8753	4,8868	4,8981	4,9093	4,9204	4,9313	4,942	4,9526	4,9631	4,9735	4,9837	4,9937
78,6	4,8167	4,8296	4,8423	4,8548	4,867	4,8791	4,891	4,9027	4,9143	4,9257	4,9369	4,948	4,9589	4,9697	4,9804	4,9909	5,0013	5,0115	5,0217
78,7	4,844	4,857	4,8697	4,8822	4,8945	4,9067	4,9186	4,9304	4,9419	4,9534	4,9647	4,9758	4,9868	4,9977	5,0084	5,0189	5,0293	5,0397	5,0498
78,8	4,8715	4,8845	4,8973	4,9098	4,9222	4,9344	4,9464	4,9582	4,9699	4,9813	4,9927	5,0039	5,0149	5,0257	5,0365	5,0471	5,0576	5,0679	5,0781
78,9	4,8992	4,9122	4,9251	4,9377	4,9501	4,9623	4,9744	4,9862	4,9979	5,0095	5,0208	5,0321	5,0431	5,054	5,0648	5,0755	5,086	5,0963	5,1066
79	4,9271	4,9402	4,953	4,9657	4,9782	4,9904	5,0026	5,0144	5,0262	5,0378	5,0492	5,0605	5,0716	5,0825	5,0933	5,104	5,1146	5,125	5,1353
79,1	4,9551	4,9683	4,9812	4,9939	5,0064	5,0188	5,0309	5,0429	5,0546	5,0663	5,0777	5,0891	5,1002	5,1112	5,1221	5,1328	5,1434	5,1539	5,1642
79,2	4,9834	4,9966	5,0096	5,0224	5,0349	5,0473	5,0594	5,0714	5,0833	5,095	5,1065	5,1178	5,1291	5,1401	5,151	5,1618	5,1724	5,1829	5,1933
79,3	5,0119	5,0251	5,0381	5,0509	5,0635	5,076	5,0882	5,1003	5,1122	5,1239	5,1354	5,1469	5,1581	5,1692	5,1801	5,1909	5,2017	5,2122	5,2226
79,4	5,0405	5,0538	5,0669	5,0798	5,0924	5,1049	5,1172	5,1293	5,1412	5,153	5,1646	5,176	5,1873	5,1985	5,2095	5,2203	5,231	5,2416	5,2521
79,5	5,0694	5,0827	5,0958	5,1088	5,1215	5,134	5,1463	5,1585	5,1705	5,1823	5,1939	5,2054	5,2167	5,228	5,239	5,2499	5,2607	5,2713	5,2818
79,6	5,0985	5,1118	5,125	5,138	5,1507	5,1633	5,1757	5,1879	5,1999	5,2118	5,2235	5,235	5,2464	5,2576	5,2687	5,2797	5,2905	5,3012	5,3117
79,7	5,1277	5,1412	5,1543	5,1674	5,1802	5,1928	5,2052	5,2175	5,2296	5,2415	5,2532	5,2648	5,2762	5,2875	5,2987	5,3097	5,3205	5,3312	5,3418
79,8	5,1572	5,1707	5,1839	5,197	5,2099	5,2225	5,235	5,2473	5,2594	5,2714	5,2832	5,2948	5,3063	5,3176	5,3288	5,3398	5,3507	5,3615	5,3721
79,9	5,1868	5,2004	5,2137	5,2268	5,2398	5,2525	5,265	5,2773	5,2895	5,3015	5,3134	5,325	5,3366	5,3479	5,3591	5,3703	5,3812	5,392	5,4027
80	5,2167	5,2303	5,2437	5,2569	5,2698	5,2826	5,2952	5,3076	5,3198	5,3319	5,3438	5,3555	5,3671	5,3785	5,3898	5,4008	5,4119	5,4227	5,4335
80,1	5,2468	5,2604	5,2739	5,2871	5,3002	5,313	5,3256	5,3381	5,3504	5,3624	5,3744	5,3861	5,3977	5,4092	5,4205	5,4317	5,4427	5,4537	5,4644
80,2	5,2771	5,2908	5,3043	5,3175	5,3306	5,3435	5,3562	5,3687	5,381	5,3932	5,4052	5,417	5,4287	5,4402	5,4515	5,4627	5,4738	5,4848	5,4955
80,3	5,3076	5,3214	5,3349	5,3482	5,3614	5,3743	5,387	5,3996	5,412	5,4242	5,4362	5,4481	5,4598	5,4713	5,4827	5,494	5,5051	5,5161	5,5269
80,4	5,3383	5,3521	5,3657	5,3791	5,3923	5,4053	5,4181	5,4307	5,4431	5,4554	5,4675	5,4794	5,4911	5,5027	5,5142	5,5255	5,5367	5,5477	5,5586
80,5	5,3692	5,3831	5,3968	5,4102	5,4235	5,4365	5,4494	5,462	5,4745	5,4868	5,4989	5,5109	5,5227	5,5344	5,5458	5,5572	5,5684	5,5795	5,5904
80,6	5,4004	5,4144	5,4281	5,4416	5,4549	5,468	5,4809	5,4936	5,5061	5,5184	5,5306	5,5426	5,5545	5,5662	5,5778	5,5892	5,6004	5,6115	5,6225
80,7	5,4318	5,4458	5,4596	5,4732	5,4865	5,4996	5,5126	5,5254	5,5379	5,5503	5,5625	5,5746	5,5865	5,5983	5,6099	5,6213	5,6326	5,6438	5,6548
80,8	5,4634	5,4775	5,4913	5,5049	5,5183	5,5315	5,5445	5,5574	5,57	5,5824	5,5947	5,6068	5,6188	5,6306	5,6422	5,6537	5,6651	5,6763	5,6874
80,9	5,4953	5,5094	5,5233	5,5369	5,5504	5,5637	5,5767	5,5895	5,6022	5,6148	5,6271	5,6393	5,6512	5,6631	5,6748	5,6863	5,6977	5,709	5,7201
81	5,5273	5,5415	5,5554	5,5692	5,5827	5,596	5,6091	5,622	5,6348	5,6473	5,6597	5,6719	5,684	5,6959	5,7076	5,7192	5,7306	5,742	5,7531
81,1	5,5596	5,5739	5,5879	5,6016	5,6152	5,6286	5,6417	5,6547	5,6675	5,6801	5,6925	5,7048	5,7169	5,7289	5,7406	5,7523	5,7638	5,7751	5,7863
81,2	5,5922	5,6065	5,6205	5,6343	5,648	5,6614	5,6746	5,6877	5,7005	5,7131	5,7256	5,7379	5,7501	5,7621	5,7739	5,7856	5,7972	5,8085	5,8198
81,3	5,6249	5,6393	5,6534	5,6673	5,681	5,6944	5,7077	5,7208	5,7337	5,7464	5,759	5,7713	5,7835	5,7956	5,8074	5,8192	5,8308	5,8422	5,8535
81,4	5,658	5,6724	5,6865	5,7005	5,7143	5,7278	5,7411	5,7542	5,7671	5,78	5,7925	5,8049	5,8172	5,8293	5,8412	5,853	5,8646	5,8761	5,8875

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
78	4,8667	4,8763	4,8859	4,8953	4,9047	4,9139	4,9231	4,9322	4,9411	4,9499	4,9587	4,9674	4,976	4,9845	4,9929	5,0012	5,0095	5,0177	5,0258
78,1	4,8937	4,9034	4,913	4,9225	4,9319	4,9412	4,9504	4,9595	4,9684	4,9773	4,9861	4,9948	5,0034	5,012	5,0205	5,0288	5,0371	5,0453	5,0535
78,2	4,9209	4,9307	4,9404	4,9499	4,9593	4,9686	4,9778	4,9869	4,9959	5,0049	5,0137	5,0224	5,0311	5,0397	5,0482	5,0566	5,0649	5,0731	5,0813
78,3	4,9484	4,9582	4,9678	4,9774	4,9868	4,9962	5,0054	5,0146	5,0237	5,0326	5,0415	5,0502	5,059	5,0676	5,0761	5,0845	5,0929	5,1012	5,1094
78,4	4,9759	4,9858	4,9955	5,0051	5,0146	5,024	5,0332	5,0424	5,0515	5,0606	5,0694	5,0783	5,087	5,0956	5,1042	5,1127	5,121	5,1294	5,1376
78,5	5,0038	5,0136	5,0233	5,033	5,0425	5,052	5,0613	5,0705	5,0796	5,0886	5,0976	5,1064	5,1152	5,1239	5,1325	5,141	5,1494	5,1577	5,166
78,6	5,0317	5,0416	5,0514	5,0611	5,0706	5,0801	5,0895	5,0987	5,1079	5,117	5,1259	5,1348	5,1436	5,1523	5,161	5,1695	5,1779	5,1863	5,1947
78,7	5,0599	5,0698	5,0796	5,0893	5,099	5,1085	5,1179	5,1272	5,1363	5,1455	5,1545	5,1634	5,1722	5,1809	5,1896	5,1982	5,2067	5,2151	5,2234
78,8	5,0882	5,0982	5,1081	5,1178	5,1275	5,137	5,1464	5,1558	5,165	5,1742	5,1832	5,1921	5,201	5,2098	5,2185	5,2271	5,2356	5,244	5,2524
78,9	5,1168	5,1268	5,1367	5,1465	5,1561	5,1657	5,1752	5,1846	5,1939	5,203	5,2121	5,2211	5,23	5,2388	5,2475	5,2562	5,2648	5,2732	5,2816
79	5,1455	5,1556	5,1655	5,1754	5,185	5,1947	5,2042	5,2136	5,2229	5,2321	5,2412	5,2503	5,2592	5,268	5,2768	5,2855	5,2941	5,3026	5,311
79,1	5,1745	5,1846	5,1945	5,2044	5,2141	5,2238	5,2333	5,2428	5,2522	5,2614	5,2705	5,2796	5,2886	5,2974	5,3063	5,315	5,3236	5,3321	5,3406
79,2	5,2036	5,2137	5,2237	5,2337	5,2435	5,2532	5,2627	5,2722	5,2816	5,2909	5,3001	5,3092	5,3182	5,3271	5,3359	5,3446	5,3533	5,3619	5,3704
79,3	5,2329	5,2431	5,2531	5,2631	5,273	5,2826	5,2923	5,3018	5,3112	5,3206	5,3298	5,3389	5,348	5,3569	5,3658	5,3746	5,3832	5,3919	5,4004
79,4	5,2624	5,2726	5,2828	5,2928	5,3026	5,3124	5,3221	5,3316	5,3411	5,3504	5,3597	5,3689	5,3779	5,387	5,3958	5,4047	5,4134	5,422	5,4306
79,5	5,2922	5,3025	5,3126	5,3226	5,3326	5,3424	5,3521	5,3616	5,3712	5,3805	5,3898	5,399	5,4081	5,4172	5,4261	5,435	5,4437	5,4524	5,4611
79,6	5,3222	5,3324	5,3426	5,3527	5,3626	5,3725	5,3822	5,3919	5,4014	5,4109	5,4202	5,4294	5,4386	5,4476	5,4566	5,4655	5,4743	5,483	5,4917
79,7	5,3523	5,3627	5,3729	5,3829	5,393	5,4029	5,4126	5,4223	5,4319	5,4413	5,4508	5,46	5,4692	5,4783	5,4873	5,4962	5,5051	5,5138	5,5225
79,8	5,3827	5,3931	5,4033	5,4135	5,4235	5,4334	5,4433	5,453	5,4625	5,4721	5,4815	5,4908	5,5	5,5092	5,5182	5,5272	5,536	5,5449	5,5535
79,9	5,4132	5,4236	5,4339	5,4442	5,4542	5,4642	5,4741	5,4838	5,4935	5,503	5,5125	5,5218	5,5311	5,5402	5,5494	5,5583	5,5672	5,576	5,5848
80	5,444	5,4545	5,4648	5,4751	5,4852	5,4952	5,5051	5,5149	5,5246	5,5342	5,5437	5,553	5,5624	5,5716	5,5807	5,5897	5,5987	5,6075	5,6163
80,1	5,475	5,4855	5,4959	5,5062	5,5164	5,5264	5,5364	5,5462	5,5559	5,5655	5,575	5,5845	5,5939	5,6031	5,6123	5,6213	5,6303	5,6392	5,648
80,2	5,5063	5,5168	5,5273	5,5376	5,5478	5,5578	5,5678	5,5777	5,5875	5,5972	5,6067	5,6162	5,6256	5,6348	5,644	5,6531	5,6622	5,6711	5,6799
80,3	5,5377	5,5483	5,5588	5,5691	5,5794	5,5895	5,5995	5,6094	5,6192	5,629	5,6386	5,6481	5,6575	5,6668	5,676	5,6852	5,6942	5,7032	5,7121
80,4	5,5694	5,58	5,5905	5,6009	5,6112	5,6214	5,6314	5,6414	5,6513	5,661	5,6707	5,6802	5,6897	5,699	5,7083	5,7174	5,7265	5,7355	5,7445
80,5	5,6013	5,6119	5,6225	5,6329	5,6433	5,6535	5,6636	5,6736	5,6835	5,6933	5,7029	5,7125	5,722	5,7314	5,7407	5,7499	5,7591	5,7681	5,7771
80,6	5,6334	5,6441	5,6547	5,6652	5,6755	5,6858	5,696	5,706	5,7159	5,7257	5,7355	5,7451	5,7546	5,7641	5,7734	5,7827	5,7919	5,8009	5,8099
80,7	5,6657	5,6765	5,6871	5,6977	5,7081	5,7184	5,7285	5,7386	5,7486	5,7585	5,7682	5,7779	5,7875	5,7969	5,8063	5,8156	5,8248	5,834	5,843
80,8	5,6983	5,7091	5,7198	5,7304	5,7408	5,7512	5,7614	5,7715	5,7815	5,7914	5,8013	5,8109	5,8206	5,8301	5,8395	5,8488	5,858	5,8672	5,8763
80,9	5,7311	5,742	5,7527	5,7633	5,7738	5,7842	5,7944	5,8046	5,8146	5,8246	5,8345	5,8442	5,8538	5,8634	5,8728	5,8822	5,8915	5,9007	5,9098
81	5,7642	5,775	5,7858	5,7965	5,807	5,8174	5,8277	5,8379	5,8481	5,8581	5,8679	5,8777	5,8874	5,897	5,9065	5,9159	5,9252	5,9345	5,9436
81,1	5,7974	5,8083	5,8192	5,8299	5,8405	5,8509	5,8613	5,8716	5,8817	5,8917	5,9017	5,9115	5,9212	5,9308	5,9403	5,9498	5,9592	5,9684	5,9776
81,2	5,8309	5,8419	5,8528	5,8636	5,8742	5,8847	5,8951	5,9054	5,9155	5,9256	5,9356	5,9455	5,9552	5,9649	5,9745	5,984	5,9933	6,0027	6,0119
81,3	5,8647	5,8758	5,8867	5,8975	5,9081	5,9187	5,9291	5,9394	5,9497	5,9598	5,9698	5,9797	5,9895	5,9992	6,0088	6,0184	6,0278	6,0371	6,0464
81,4	5,8987	5,9098	5,9208	5,9316	5,9423	5,9529	5,9634	5,9738	5,984	5,9942	6,0042	6,0142	6,0241	6,0338	6,0434	6,053	6,0625	6,0719	6,0812

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
78	5,0338	5,0418	5,0497	5,0575	5,0653	5,073	5,0806	5,0882	5,0957	5,1031	5,1104	5,1178	5,125	5,1322	5,1394	5,1465	5,1535	5,1605	5,1674
78,1	5,0615	5,0695	5,0775	5,0853	5,0931	5,1008	5,1085	5,116	5,1236	5,131	5,1384	5,1458	5,1531	5,1603	5,1675	5,1746	5,1817	5,1887	5,1956
78,2	5,0894	5,0974	5,1054	5,1133	5,1211	5,1289	5,1365	5,1441	5,1517	5,1592	5,1666	5,174	5,1813	5,1886	5,1958	5,2029	5,21	5,2171	5,2241
78,3	5,1175	5,1255	5,1335	5,1415	5,1493	5,1571	5,1648	5,1724	5,18	5,1875	5,195	5,2024	5,2098	5,217	5,2242	5,2314	5,2385	5,2456	5,2526
78,4	5,1458	5,1538	5,1618	5,1698	5,1777	5,1855	5,1932	5,2009	5,2086	5,2161	5,2236	5,231	5,2384	5,2457	5,2529	5,2601	5,2673	5,2744	5,2814
78,5	5,1742	5,1823	5,1904	5,1984	5,2063	5,2141	5,2219	5,2296	5,2372	5,2448	5,2523	5,2598	5,2672	5,2745	5,2818	5,289	5,2962	5,3034	5,3104
78,6	5,2029	5,211	5,2191	5,2271	5,235	5,2429	5,2507	5,2585	5,2661	5,2737	5,2813	5,2888	5,2962	5,3036	5,3109	5,3181	5,3254	5,3325	5,3396
78,7	5,2317	5,2399	5,248	5,256	5,264	5,2719	5,2798	5,2875	5,2952	5,3029	5,3105	5,3179	5,3254	5,3328	5,3402	5,3474	5,3547	5,3619	5,369
78,8	5,2607	5,2689	5,2771	5,2852	5,2931	5,3011	5,309	5,3168	5,3245	5,3322	5,3398	5,3473	5,3548	5,3622	5,3696	5,3769	5,3842	5,3914	5,3985
78,9	5,2899	5,2982	5,3064	5,3145	5,3225	5,3305	5,3384	5,3462	5,354	5,3617	5,3693	5,3769	5,3844	5,3919	5,3993	5,4066	5,4139	5,4212	5,4283
79	5,3194	5,3276	5,3358	5,344	5,3521	5,3601	5,368	5,3759	5,3837	5,3914	5,3991	5,4067	5,4142	5,4217	5,4292	5,4365	5,4438	5,4511	5,4583
79,1	5,349	5,3573	5,3656	5,3737	5,3818	5,3899	5,3978	5,4057	5,4135	5,4213	5,429	5,4366	5,4442	5,4517	5,4592	5,4666	5,474	5,4812	5,4885
79,2	5,3789	5,3872	5,3954	5,4037	5,4118	5,4198	5,4279	5,4358	5,4436	5,4514	5,4591	5,4668	5,4745	5,482	5,4895	5,4969	5,5043	5,5116	5,5189
79,3	5,4089	5,4173	5,4255	5,4338	5,4419	5,4501	5,4581	5,4661	5,4739	5,4818	5,4895	5,4972	5,5048	5,5124	5,5199	5,5274	5,5348	5,5422	5,5495
79,4	5,4391	5,4476	5,4559	5,4641	5,4724	5,4805	5,4885	5,4965	5,5044	5,5123	5,5201	5,5278	5,5355	5,5431	5,5506	5,5581	5,5656	5,5729	5,5803
79,5	5,4696	5,478	5,4864	5,4947	5,5029	5,5111	5,5192	5,5272	5,5351	5,543	5,5508	5,5586	5,5663	5,5739	5,5815	5,5891	5,5965	5,6039	5,6113
79,6	5,5002	5,5087	5,5171	5,5255	5,5337	5,5419	5,55	5,5581	5,5661	5,574	5,5818	5,5897	5,5974	5,605	5,6126	5,6202	5,6277	5,6351	5,6425
79,7	5,5311	5,5396	5,548	5,5564	5,5647	5,5729	5,5811	5,5892	5,5972	5,6051	5,613	5,6208	5,6286	5,6363	5,644	5,6516	5,6591	5,6665	5,6739
79,8	5,5622	5,5707	5,5792	5,5876	5,596	5,6042	5,6124	5,6205	5,6285	5,6365	5,6445	5,6523	5,6601	5,6678	5,6755	5,6831	5,6907	5,6982	5,7056
79,9	5,5935	5,6021	5,6106	5,619	5,6274	5,6357	5,6439	5,6521	5,6601	5,6681	5,6761	5,684	5,6918	5,6996	5,7073	5,7149	5,7225	5,73	5,7375
80	5,625	5,6336	5,6422	5,6506	5,659	5,6674	5,6756	5,6838	5,6919	5,6999	5,708	5,7158	5,7237	5,7315	5,7393	5,7469	5,7545	5,7621	5,7696
80,1	5,6567	5,6654	5,674	5,6825	5,6909	5,6992	5,7076	5,7158	5,7239	5,732	5,74	5,748	5,7559	5,7637	5,7715	5,7791	5,7868	5,7944	5,8019
80,2	5,6887	5,6974	5,706	5,7145	5,723	5,7314	5,7397	5,748	5,7562	5,7643	5,7723	5,7803	5,7882	5,7961	5,8039	5,8116	5,8193	5,8269	5,8345
80,3	5,7209	5,7296	5,7383	5,7469	5,7553	5,7638	5,7721	5,7804	5,7886	5,7968	5,8049	5,8128	5,8208	5,8287	5,8365	5,8443	5,852	5,8596	5,8672
80,4	5,7533	5,7621	5,7708	5,7794	5,7879	5,7963	5,8047	5,8131	5,8213	5,8295	5,8376	5,8457	5,8537	5,8616	5,8694	5,8772	5,8849	5,8927	5,9003
80,5	5,786	5,7948	5,8035	5,8121	5,8207	5,8291	5,8376	5,846	5,8543	5,8624	5,8706	5,8787	5,8867	5,8947	5,9026	5,9104	5,9181	5,9259	5,9335
80,6	5,8188	5,8277	5,8364	5,8451	5,8537	5,8623	5,8707	5,879	5,8874	5,8956	5,9038	5,9119	5,92	5,9279	5,9359	5,9438	5,9515	5,9593	5,967
80,7	5,8519	5,8608	5,8696	5,8783	5,8869	5,8955	5,904	5,9124	5,9208	5,929	5,9372	5,9454	5,9535	5,9616	5,9695	5,9774	5,9852	5,993	6,0007
80,8	5,8853	5,8942	5,903	5,9117	5,9205	5,929	5,9376	5,946	5,9544	5,9627	5,971	5,9792	5,9873	5,9953	6,0033	6,0112	6,0191	6,0269	6,0346
80,9	5,9188	5,9278	5,9367	5,9455	5,9541	5,9628	5,9714	5,9799	5,9883	5,9966	6,0049	6,0131	6,0213	6,0293	6,0374	6,0453	6,0533	6,0611	6,0689
81	5,9527	5,9616	5,9705	5,9794	5,9881	5,9968	6,0054	6,0139	6,0224	6,0308	6,0391	6,0473	6,0555	6,0636	6,0716	6,0797	6,0876	6,0955	6,1033
81,1	5,9867	5,9958	6,0047	6,0135	6,0223	6,0311	6,0397	6,0482	6,0567	6,0651	6,0735	6,0818	6,09	6,0982	6,1062	6,1143	6,1222	6,1301	6,138
81,2	6,021	6,0301	6,0391	6,048	6,0568	6,0655	6,0742	6,0828	6,0913	6,0998	6,1081	6,1165	6,1248	6,1329	6,141	6,1491	6,1571	6,165	6,1729
81,3	6,0556	6,0647	6,0737	6,0827	6,0915	6,1002	6,109	6,1176	6,1261	6,1346	6,143	6,1514	6,1597	6,1679	6,1761	6,1842	6,1922	6,2002	6,2081
81,4	6,0904	6,0995	6,1086	6,1175	6,1264	6,1352	6,144	6,1527	6,1613	6,1698	6,1782	6,1866	6,1949	6,2032	6,2114	6,2195	6,2276	6,2356	6,2435

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
78	5,1743	5,1811	5,1879	5,1946	5,2013	5,2079	5,2145	5,2211	5,2276	5,234	5,2404	5,2468	5,2531	5,2594	5,2657	5,2719	5,278	5,2842	5,2902
78,1	5,2025	5,2094	5,2162	5,2229	5,2297	5,2363	5,2429	5,2495	5,256	5,2625	5,2689	5,2753	5,2817	5,288	5,2943	5,3005	5,3067	5,3128	5,3189
78,2	5,231	5,2378	5,2447	5,2514	5,2582	5,2649	5,2715	5,2781	5,2847	5,2912	5,2976	5,3041	5,3104	5,3167	5,323	5,3293	5,3355	5,3417	5,3478
78,3	5,2596	5,2665	5,2734	5,2802	5,2869	5,2937	5,3003	5,3069	5,3135	5,32	5,3265	5,333	5,3393	5,3457	5,352	5,3583	5,3645	5,3708	5,3769
78,4	5,2884	5,2953	5,3022	5,309	5,3159	5,3226	5,3293	5,3359	5,3426	5,3491	5,3556	5,3621	5,3685	5,3749	5,3812	5,3875	5,3938	5,4	5,4062
78,5	5,3174	5,3244	5,3313	5,3382	5,345	5,3517	5,3585	5,3651	5,3718	5,3783	5,3849	5,3914	5,3978	5,4042	5,4106	5,4169	5,4232	5,4294	5,4357
78,6	5,3466	5,3536	5,3605	5,3674	5,3743	5,3811	5,3878	5,3945	5,4012	5,4078	5,4144	5,4209	5,4273	5,4338	5,4402	5,4465	5,4529	5,4591	5,4653
78,7	5,376	5,3831	5,39	5,3969	5,4038	5,4106	5,4174	5,4241	5,4308	5,4374	5,444	5,4506	5,4571	5,4635	5,4699	5,4763	5,4827	5,489	5,4952
78,8	5,4057	5,4127	5,4197	5,4266	5,4335	5,4403	5,4472	5,4539	5,4606	5,4673	5,4739	5,4805	5,487	5,4935	5,4999	5,5063	5,5127	5,519	5,5253
78,9	5,4355	5,4425	5,4496	5,4565	5,4634	5,4703	5,4771	5,4839	5,4907	5,4973	5,504	5,5106	5,5171	5,5236	5,5301	5,5365	5,5429	5,5493	5,5556
79	5,4654	5,4725	5,4796	5,4866	5,4935	5,5004	5,5073	5,5141	5,5209	5,5276	5,5343	5,5408	5,5475	5,554	5,5605	5,567	5,5734	5,5797	5,5861
79,1	5,4957	5,5028	5,5099	5,5169	5,5239	5,5308	5,5377	5,5445	5,5513	5,558	5,5647	5,5714	5,578	5,5846	5,5911	5,5975	5,604	5,6104	5,6167
79,2	5,526	5,5332	5,5403	5,5474	5,5544	5,5614	5,5683	5,5751	5,5819	5,5887	5,5954	5,6021	5,6087	5,6153	5,6219	5,6284	5,6349	5,6413	5,6476
79,3	5,5567	5,5639	5,571	5,5781	5,5851	5,5921	5,599	5,6059	5,6128	5,6196	5,6263	5,6331	5,6397	5,6463	5,6529	5,6594	5,6659	5,6724	5,6788
79,4	5,5875	5,5947	5,6019	5,609	5,6161	5,6231	5,63	5,637	5,6438	5,6507	5,6574	5,6642	5,6709	5,6775	5,6841	5,6907	5,6972	5,7036	5,7101
79,5	5,6186	5,6258	5,633	5,6401	5,6473	5,6543	5,6613	5,6682	5,6751	5,6819	5,6888	5,6955	5,7022	5,7089	5,7155	5,7221	5,7286	5,7351	5,7416
79,6	5,6499	5,6571	5,6643	5,6715	5,6786	5,6857	5,6927	5,6997	5,7066	5,7135	5,7203	5,7271	5,7338	5,7405	5,7472	5,7538	5,7603	5,7669	5,7734
79,7	5,6813	5,6886	5,6959	5,7031	5,7102	5,7173	5,7244	5,7314	5,7383	5,7452	5,752	5,7589	5,7656	5,7724	5,779	5,7857	5,7923	5,7988	5,8054
79,8	5,713	5,7203	5,7276	5,7348	5,742	5,7492	5,7562	5,7633	5,7702	5,7771	5,784	5,7909	5,7977	5,8044	5,8111	5,8178	5,8244	5,831	5,8376
79,9	5,7449	5,7522	5,7596	5,7668	5,774	5,7812	5,7883	5,7954	5,8024	5,8093	5,8162	5,8231	5,8299	5,8367	5,8434	5,8501	5,8568	5,8634	5,8699
80	5,777	5,7844	5,7918	5,7991	5,8063	5,8135	5,8206	5,8277	5,8347	5,8417	5,8487	5,8556	5,8624	5,8692	5,876	5,8827	5,8894	5,896	5,9026
80,1	5,8094	5,8168	5,8242	5,8315	5,8388	5,846	5,8531	5,8603	5,8673	5,8743	5,8813	5,8882	5,8951	5,902	5,9087	5,9155	5,9222	5,9289	5,9355
80,2	5,842	5,8495	5,8568	5,8642	5,8715	5,8787	5,8859	5,8931	5,9001	5,9072	5,9142	5,9212	5,928	5,9349	5,9417	5,9485	5,9552	5,9619	5,9685
80,3	5,8748	5,8823	5,8897	5,8971	5,9044	5,9117	5,9189	5,9261	5,9332	5,9403	5,9473	5,9543	5,9612	5,9681	5,975	5,9817	5,9885	5,9952	6,0019
80,4	5,9078	5,9154	5,9228	5,9303	5,9375	5,9449	5,9521	5,9593	5,9665	5,9736	5,9806	5,9876	5,9946	6,0015	6,0084	6,0153	6,022	6,0287	6,0355
80,5	5,9411	5,9487	5,9561	5,9636	5,9709	5,9783	5,9856	5,9928	6	6,0071	6,0142	6,0212	6,0282	6,0352	6,0421	6,049	6,0558	6,0625	6,0692
80,6	5,9746	5,9822	5,9897	5,9972	6,0046	6,0119	6,0193	6,0266	6,0337	6,0409	6,048	6,0551	6,0621	6,0691	6,076	6,0829	6,0898	6,0965	6,1033
80,7	6,0084	6,016	6,0235	6,031	6,0385	6,0459	6,0532	6,0605	6,0677	6,0749	6,0821	6,0892	6,0962	6,1032	6,1102	6,1171	6,1239	6,1308	6,1375
80,8	6,0423	6,05	6,0576	6,0651	6,0726	6,08	6,0874	6,0947	6,1019	6,1092	6,1163	6,1235	6,1305	6,1376	6,1446	6,1515	6,1584	6,1653	6,1721
80,9	6,0766	6,0842	6,0919	6,0995	6,107	6,1144	6,1218	6,1292	6,1365	6,1437	6,1509	6,1581	6,1651	6,1722	6,1793	6,1862	6,1931	6,2	6,2069
81	6,1111	6,1187	6,1264	6,134	6,1415	6,149	6,1565	6,1638	6,1712	6,1785	6,1857	6,1928	6,2	6,2071	6,2142	6,2211	6,2281	6,235	6,2418
81,1	6,1458	6,1535	6,1612	6,1688	6,1764	6,1839	6,1914	6,1988	6,2061	6,2134	6,2207	6,2279	6,235	6,2422	6,2492	6,2563	6,2633	6,2702	6,2771
81,2	6,1807	6,1885	6,1962	6,2039	6,2115	6,219	6,2265	6,2339	6,2414	6,2487	6,256	6,2632	6,2704	6,2776	6,2847	6,2917	6,2987	6,3057	6,3126
81,3	6,2159	6,2237	6,2315	6,2392	6,2468	6,2544	6,2619	6,2694	6,2768	6,2842	6,2915	6,2988	6,306	6,3132	6,3203	6,3274	6,3345	6,3414	6,3484
81,4	6,2514	6,2592	6,267	6,2748	6,2824	6,29	6,2975	6,3051	6,3125	6,3199	6,3273	6,3346	6,3418	6,349	6,3562	6,3633	6,3704	6,3775	6,3845

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
78	5,2962	5,3023	5,3083	5,3142	5,3201	5,326	5,3318	5,3376	5,3434	5,3491	5,3548	5,3605	5,3661	5,3717	5,3773	5,3829	5,3884	5,3938	5,3993
78,1	5,325	5,331	5,337	5,343	5,3489	5,3548	5,3607	5,3665	5,3723	5,3781	5,3838	5,3894	5,3951	5,4008	5,4063	5,4119	5,4175	5,423	5,4284
78,2	5,3539	5,36	5,366	5,372	5,3779	5,3839	5,3897	5,3956	5,4014	5,4072	5,4129	5,4186	5,4243	5,43	5,4356	5,4412	5,4467	5,4523	5,4577
78,3	5,383	5,3891	5,3952	5,4012	5,4072	5,4131	5,419	5,4248	5,4307	5,4365	5,4423	5,448	5,4537	5,4594	5,465	5,4706	5,4762	5,4818	5,4873
78,4	5,4123	5,4184	5,4245	5,4306	5,4366	5,4425	5,4484	5,4543	5,4602	5,466	5,4718	5,4776	5,4833	5,489	5,4946	5,5003	5,5059	5,5115	5,517
78,5	5,4419	5,448	5,454	5,4601	5,4662	5,4721	5,4781	5,484	5,4899	5,4957	5,5015	5,5073	5,5131	5,5188	5,5244	5,5301	5,5358	5,5413	5,5469
78,6	5,4716	5,4777	5,4838	5,4899	5,4959	5,502	5,5079	5,5139	5,5198	5,5256	5,5315	5,5373	5,543	5,5488	5,5545	5,5602	5,5658	5,5715	5,577
78,7	5,5014	5,5076	5,5137	5,5198	5,5259	5,532	5,538	5,5439	5,5499	5,5557	5,5616	5,5674	5,5732	5,579	5,5847	5,5904	5,5961	5,6017	5,6074
78,8	5,5316	5,5377	5,5439	5,55	5,5562	5,5622	5,5682	5,5742	5,5802	5,586	5,5919	5,5978	5,6036	5,6094	5,6151	5,6209	5,6266	5,6322	5,6378
78,9	5,5618	5,5681	5,5743	5,5804	5,5865	5,5926	5,5986	5,6046	5,6107	5,6166	5,6225	5,6283	5,6342	5,64	5,6458	5,6515	5,6572	5,6629	5,6686
79	5,5923	5,5986	5,6048	5,611	5,6171	5,6232	5,6293	5,6354	5,6414	5,6473	5,6533	5,6591	5,665	5,6708	5,6766	5,6824	5,6882	5,6938	5,6995
79,1	5,6231	5,6293	5,6356	5,6418	5,648	5,6541	5,6602	5,6662	5,6723	5,6783	5,6842	5,6901	5,696	5,7019	5,7077	5,7135	5,7193	5,725	5,7306
79,2	5,654	5,6603	5,6666	5,6728	5,679	5,6851	5,6912	5,6974	5,7034	5,7094	5,7154	5,7213	5,7272	5,7331	5,739	5,7448	5,7505	5,7563	5,762
79,3	5,6851	5,6914	5,6978	5,704	5,7102	5,7164	5,7226	5,7286	5,7347	5,7408	5,7468	5,7527	5,7587	5,7645	5,7704	5,7763	5,782	5,7879	5,7936
79,4	5,7165	5,7228	5,7292	5,7354	5,7417	5,7479	5,754	5,7602	5,7663	5,7723	5,7783	5,7844	5,7903	5,7963	5,8021	5,808	5,8138	5,8196	5,8254
79,5	5,748	5,7544	5,7608	5,7671	5,7733	5,7796	5,7858	5,7919	5,798	5,8041	5,8102	5,8162	5,8221	5,8281	5,834	5,8399	5,8458	5,8516	5,8574
79,6	5,7798	5,7862	5,7926	5,7989	5,8052	5,8114	5,8177	5,8238	5,83	5,8361	5,8422	5,8483	5,8542	5,8602	5,8662	5,8721	5,8779	5,8838	5,8896
79,7	5,8118	5,8182	5,8246	5,831	5,8373	5,8436	5,8499	5,856	5,8622	5,8684	5,8744	5,8805	5,8865	5,8925	5,8985	5,9044	5,9103	5,9162	5,922
79,8	5,8441	5,8505	5,8569	5,8633	5,8697	5,876	5,8822	5,8884	5,8946	5,9008	5,9069	5,913	5,919	5,9251	5,931	5,937	5,9429	5,9489	5,9547
79,9	5,8765	5,883	5,8894	5,8958	5,9022	5,9085	5,9148	5,9211	5,9273	5,9334	5,9396	5,9457	5,9518	5,9579	5,9639	5,9699	5,9758	5,9817	5,9876
80	5,9091	5,9157	5,9221	5,9285	5,9349	5,9413	5,9476	5,9539	5,9601	5,9664	5,9725	5,9787	5,9848	5,9908	5,9969	6,0029	6,0088	6,0148	6,0207
80,1	5,942	5,9486	5,9551	5,9615	5,9679	5,9743	5,9807	5,987	5,9933	5,9995	6,0057	6,0119	6,018	6,0241	6,0301	6,0362	6,0422	6,0481	6,054
80,2	5,9751	5,9817	5,9882	5,9947	6,0012	6,0076	6,014	6,0203	6,0266	6,0329	6,0391	6,0453	6,0514	6,0576	6,0637	6,0697	6,0757	6,0817	6,0876
80,3	6,0085	6,0151	6,0217	6,0282	6,0346	6,0411	6,0475	6,0538	6,0601	6,0664	6,0727	6,0789	6,0851	6,0912	6,0974	6,1034	6,1094	6,1155	6,1215
80,4	6,0421	6,0487	6,0553	6,0618	6,0683	6,0748	6,0812	6,0876	6,0939	6,1003	6,1065	6,1128	6,119	6,1251	6,1313	6,1374	6,1435	6,1495	6,1555
80,5	6,0759	6,0826	6,0892	6,0957	6,1023	6,1087	6,1152	6,1216	6,128	6,1343	6,1406	6,1469	6,1531	6,1593	6,1655	6,1716	6,1777	6,1838	6,1898
80,6	6,11	6,1167	6,1233	6,1299	6,1364	6,143	6,1495	6,1559	6,1623	6,1686	6,1749	6,1813	6,1875	6,1938	6,1999	6,2061	6,2122	6,2183	6,2244
80,7	6,1443	6,151	6,1577	6,1643	6,1709	6,1774	6,1839	6,1903	6,1968	6,2032	6,2095	6,2158	6,2221	6,2284	6,2346	6,2408	6,2469	6,253	6,2591
80,8	6,1788	6,1856	6,1922	6,1989	6,2055	6,2121	6,2186	6,2251	6,2316	6,2379	6,2443	6,2507	6,257	6,2633	6,2695	6,2757	6,2819	6,288	6,2941
80,9	6,2136	6,2204	6,2271	6,2338	6,2404	6,247	6,2535	6,2601	6,2666	6,273	6,2794	6,2858	6,2921	6,2984	6,3046	6,3109	6,3171	6,3233	6,3294
81	6,2487	6,2555	6,2622	6,2689	6,2756	6,2822	6,2888	6,2953	6,3018	6,3083	6,3147	6,3211	6,3275	6,3338	6,3401	6,3463	6,3525	6,3587	6,3649
81,1	6,2839	6,2908	6,2975	6,3043	6,311	6,3176	6,3242	6,3308	6,3373	6,3438	6,3503	6,3567	6,3631	6,3694	6,3758	6,382	6,3883	6,3945	6,4007
81,2	6,3195	6,3263	6,3332	6,3399	6,3466	6,3533	6,3599	6,3666	6,3731	6,3796	6,3861	6,3925	6,399	6,4053	6,4117	6,418	6,4243	6,4305	6,4367
81,3	6,3553	6,3622	6,369	6,3758	6,3825	6,3892	6,3959	6,4025	6,4091	6,4157	6,4222	6,4286	6,4351	6,4415	6,4478	6,4542	6,4605	6,4668	6,473
81,4	6,3914	6,3983	6,4051	6,4119	6,4187	6,4255	6,4321	6,4388	6,4454	6,452	6,4585	6,465	6,4715	6,4779	6,4843	6,4907	6,497	6,5033	6,5095

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
78	5,4047	5,4102	5,4155	5,4209	5,4262	5,4315	5,4367	5,4419
78,1	5,4339	5,4393	5,4447	5,4501	5,4554	5,4607	5,466	5,4712
78,2	5,4632	5,4687	5,4741	5,4795	5,4848	5,4902	5,4954	5,5007
78,3	5,4927	5,4982	5,5036	5,5091	5,5144	5,5198	5,5251	5,5304
78,4	5,5225	5,528	5,5334	5,5389	5,5443	5,5496	5,555	5,5603
78,5	5,5524	5,558	5,5634	5,5688	5,5743	5,5797	5,585	5,5904
78,6	5,5826	5,5881	5,5936	5,5991	5,6045	5,6099	5,6153	5,6207
78,7	5,6129	5,6185	5,624	5,6295	5,6349	5,6404	5,6458	5,6512
78,8	5,6434	5,649	5,6546	5,6601	5,6655	5,671	5,6764	5,6818
78,9	5,6742	5,6798	5,6854	5,6909	5,6964	5,7019	5,7073	5,7128
79	5,7051	5,7108	5,7164	5,7219	5,7274	5,733	5,7384	5,7439
79,1	5,7363	5,7419	5,7476	5,7531	5,7587	5,7642	5,7697	5,7752
79,2	5,7677	5,7733	5,779	5,7846	5,7902	5,7957	5,8012	5,8067
79,3	5,7993	5,805	5,8106	5,8163	5,8218	5,8274	5,833	5,8384
79,4	5,8311	5,8368	5,8425	5,8481	5,8537	5,8593	5,8649	5,8704
79,5	5,8631	5,8688	5,8745	5,8802	5,8859	5,8915	5,8971	5,9026
79,6	5,8954	5,9011	5,9069	5,9125	5,9182	5,9238	5,9294	5,935
79,7	5,9279	5,9336	5,9394	5,9451	5,9507	5,9564	5,962	5,9676
79,8	5,9605	5,9663	5,9721	5,9778	5,9836	5,9892	5,9949	6,0005
79,9	5,9935	5,9993	6,005	6,0108	6,0165	6,0222	6,0279	6,0336
80	6,0266	6,0324	6,0383	6,044	6,0498	6,0555	6,0612	6,0669
80,1	6,0599	6,0658	6,0717	6,0775	6,0833	6,089	6,0947	6,1004
80,2	6,0935	6,0994	6,1053	6,1112	6,1169	6,1227	6,1284	6,1342
80,3	6,1274	6,1333	6,1392	6,1451	6,1509	6,1567	6,1624	6,1682
80,4	6,1615	6,1674	6,1733	6,1792	6,185	6,1909	6,1967	6,2024
80,5	6,1958	6,2018	6,2077	6,2136	6,2195	6,2253	6,2311	6,2369
80,6	6,2304	6,2363	6,2423	6,2482	6,2541	6,26	6,2658	6,2716
80,7	6,2651	6,2712	6,2771	6,2831	6,289	6,2949	6,3008	6,3066
80,8	6,3002	6,3062	6,3122	6,3182	6,3242	6,3301	6,3359	6,3418
80,9	6,3355	6,3416	6,3476	6,3536	6,3595	6,3655	6,3714	6,3773
81	6,371	6,3771	6,3831	6,3892	6,3952	6,4011	6,4071	6,413
81,1	6,4068	6,413	6,419	6,4251	6,4311	6,4371	6,443	6,449
81,2	6,4429	6,449	6,4552	6,4612	6,4672	6,4733	6,4793	6,4852
81,3	6,4792	6,4854	6,4915	6,4976	6,5037	6,5097	6,5157	6,5217
81,4	6,5158	6,5219	6,5281	6,5343	6,5403	6,5464	6,5524	6,5584

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
81,5	4,7392	4,7898	4,8368	4,8806	4,9217	4,9603	4,997	5,0318	5,0649	5,0966	5,1269	5,156	5,1839	5,2109	5,2369	5,2621	5,2864	5,31	5,3329
81,6	4,7687	4,8195	4,8667	4,9106	4,9519	4,9908	5,0276	5,0625	5,0958	5,1276	5,158	5,1872	5,2154	5,2424	5,2685	5,2937	5,3182	5,3419	5,3649
81,7	4,7984	4,8495	4,8968	4,941	4,9824	5,0214	5,0584	5,0935	5,1269	5,1588	5,1894	5,2187	5,2469	5,2741	5,3003	5,3257	5,3503	5,374	5,3971
81,8	4,8283	4,8796	4,9271	4,9715	5,0131	5,0523	5,0894	5,1246	5,1582	5,1903	5,221	5,2505	5,2788	5,3061	5,3324	5,3579	5,3825	5,4064	5,4296
81,9	4,8585	4,91	4,9578	5,0023	5,0441	5,0834	5,1207	5,1561	5,1898	5,222	5,2528	5,2824	5,3108	5,3383	5,3647	5,3903	5,415	5,439	5,4623
82	4,8889	4,9406	4,9885	5,0333	5,0753	5,1148	5,1522	5,1878	5,2216	5,2539	5,2849	5,3146	5,3432	5,3707	5,3973	5,4229	5,4478	5,4719	5,4952
82,1	4,9195	4,9714	5,0196	5,0645	5,1067	5,1464	5,1839	5,2197	5,2536	5,2861	5,3172	5,347	5,3757	5,4034	5,43	5,4558	5,4808	5,505	5,5284
82,2	4,9504	5,0025	5,0509	5,096	5,1383	5,1782	5,2159	5,2518	5,2859	5,3185	5,3497	5,3797	5,4085	5,4363	5,4631	5,4889	5,514	5,5383	5,5618
82,3	4,9814	5,0338	5,0824	5,1277	5,1702	5,2103	5,2481	5,2841	5,3184	5,3512	5,3825	5,4126	5,4415	5,4694	5,4963	5,5223	5,5475	5,5719	5,5955
82,4	5,0128	5,0654	5,1141	5,1597	5,2023	5,2426	5,2806	5,3168	5,3512	5,384	5,4155	5,4458	5,4749	5,5029	5,5299	5,556	5,5812	5,6057	5,6295
82,5	5,0443	5,0972	5,1462	5,1919	5,2347	5,2751	5,3134	5,3496	5,3842	5,4172	5,4489	5,4792	5,5084	5,5365	5,5636	5,5899	5,6152	5,6398	5,6637
82,6	5,0761	5,1292	5,1784	5,2243	5,2673	5,3079	5,3463	5,3827	5,4175	5,4507	5,4824	5,5129	5,5422	5,5704	5,5976	5,624	5,6495	5,6742	5,6981
82,7	5,1082	5,1615	5,2109	5,257	5,3002	5,3409	5,3795	5,4161	5,451	5,4843	5,5162	5,5468	5,5762	5,6046	5,6319	5,6584	5,684	5,7088	5,7329
82,8	5,1405	5,194	5,2436	5,2899	5,3334	5,3743	5,413	5,4498	5,4847	5,5182	5,5502	5,581	5,6105	5,639	5,6665	5,6931	5,7188	5,7437	5,7679
82,9	5,173	5,2268	5,2766	5,3231	5,3667	5,4078	5,4467	5,4836	5,5188	5,5524	5,5846	5,6155	5,6451	5,6737	5,7013	5,728	5,7538	5,7788	5,8031
83	5,2058	5,2598	5,3098	5,3566	5,4004	5,4417	5,4807	5,5178	5,5531	5,5868	5,6192	5,6502	5,6799	5,7087	5,7364	5,7632	5,7891	5,8143	5,8386
83,1	5,2389	5,2931	5,3434	5,3903	5,4342	5,4757	5,515	5,5522	5,5877	5,6215	5,654	5,6851	5,7151	5,7439	5,7718	5,7987	5,8247	5,85	5,8744
83,2	5,2722	5,3267	5,3771	5,4242	5,4684	5,5101	5,5494	5,5869	5,6225	5,6565	5,6891	5,7204	5,7505	5,7794	5,8074	5,8344	5,8605	5,8859	5,9105
83,3	5,3057	5,3605	5,4112	5,4585	5,5028	5,5446	5,5842	5,6218	5,6576	5,6918	5,7245	5,7559	5,7861	5,8152	5,8433	5,8704	5,8967	5,9222	5,9469
83,4	5,3396	5,3945	5,4455	5,493	5,5375	5,5795	5,6193	5,657	5,6929	5,7273	5,7601	5,7917	5,8221	5,8512	5,8795	5,9067	5,9331	5,9586	5,9834
83,5	5,3736	5,4289	5,48	5,5277	5,5725	5,6147	5,6546	5,6925	5,7286	5,7631	5,7961	5,8277	5,8583	5,8876	5,9159	5,9433	5,9698	5,9955	6,0204
83,6	5,408	5,4635	5,5149	5,5628	5,6078	5,6501	5,6902	5,7282	5,7645	5,7991	5,8323	5,8641	5,8947	5,9242	5,9526	5,9801	6,0068	6,0326	6,0576
83,7	5,4427	5,4983	5,55	5,5981	5,6433	5,6858	5,7261	5,7643	5,8007	5,8355	5,8688	5,9008	5,9315	5,9611	5,9897	6,0173	6,0441	6,0699	6,0951
83,8	5,4776	5,5335	5,5853	5,6337	5,679	5,7218	5,7622	5,8006	5,8372	5,8721	5,9056	5,9377	5,9686	5,9983	6,027	6,0547	6,0816	6,1076	6,1328
83,9	5,5128	5,569	5,621	5,6696	5,7151	5,758	5,7986	5,8372	5,874	5,909	5,9427	5,9749	6,0059	6,0358	6,0646	6,0925	6,1194	6,1456	6,1709
84	5,5482	5,6046	5,6569	5,7057	5,7515	5,7946	5,8354	5,8741	5,911	5,9463	5,98	6,0124	6,0436	6,0735	6,1025	6,1305	6,1575	6,1838	6,2093
84,1	5,584	5,6407	5,6932	5,7422	5,7881	5,8315	5,8724	5,9113	5,9484	5,9838	6,0177	6,0502	6,0815	6,1116	6,1407	6,1688	6,196	6,2223	6,248
84,2	5,62	5,6769	5,7297	5,7789	5,8251	5,8686	5,9098	5,9488	5,986	6,0216	6,0556	6,0883	6,1198	6,15	6,1792	6,2075	6,2348	6,2612	6,287
84,3	5,6563	5,7135	5,7665	5,8159	5,8623	5,906	5,9474	5,9866	6,024	6,0597	6,0939	6,1267	6,1583	6,1887	6,218	6,2464	6,2738	6,3004	6,3262
84,4	5,693	5,7504	5,8036	5,8533	5,8998	5,9437	5,9853	6,0247	6,0622	6,0981	6,1324	6,1654	6,1971	6,2276	6,2571	6,2856	6,3132	6,3399	6,3658
84,5	5,7299	5,7875	5,841	5,8909	5,9377	5,9818	6,0235	6,0631	6,1008	6,1368	6,1713	6,2044	6,2363	6,267	6,2965	6,3251	6,3528	6,3797	6,4057
84,6	5,767	5,825	5,8787	5,9288	5,9758	6,0201	6,062	6,1018	6,1397	6,1758	6,2105	6,2438	6,2757	6,3066	6,3363	6,365	6,3928	6,4198	6,446
84,7	5,8046	5,8628	5,9168	5,967	6,0143	6,0587	6,1008	6,1407	6,1789	6,2152	6,25	6,2834	6,3155	6,3465	6,3763	6,4052	6,4331	6,4602	6,4865
84,8	5,8423	5,9008	5,9551	6,0056	6,053	6,0977	6,14	6,1801	6,2183	6,2549	6,2899	6,3234	6,3556	6,3867	6,4168	6,4457	6,4738	6,501	6,5274
84,9	5,8805	5,9392	5,9937	6,0445	6,0921	6,1369	6,1794	6,2198	6,2582	6,2948	6,3299	6,3637	6,3961	6,4273	6,4574	6,4866	6,5147	6,542	6,5686

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
81,5	5,3551	5,3767	5,3977	5,4182	5,4381	5,4577	5,4767	5,4953	5,5135	5,5313	5,5487	5,5657	5,5825	5,5989	5,615	5,6308	5,6462	5,6615	5,6765
81,6	5,3871	5,4089	5,43	5,4505	5,4706	5,4902	5,5093	5,528	5,5462	5,5641	5,5816	5,5987	5,6155	5,632	5,6481	5,664	5,6796	5,6948	5,7099
81,7	5,4195	5,4413	5,4625	5,4832	5,5033	5,5229	5,5421	5,5609	5,5792	5,5971	5,6147	5,6319	5,6488	5,6654	5,6815	5,6975	5,7131	5,7285	5,7436
81,8	5,452	5,474	5,4952	5,516	5,5362	5,556	5,5752	5,594	5,6125	5,6305	5,6481	5,6654	5,6823	5,6989	5,7152	5,7312	5,7469	5,7623	5,7775
81,9	5,4848	5,5068	5,5282	5,549	5,5693	5,5892	5,6085	5,6274	5,6459	5,664	5,6817	5,6991	5,7161	5,7328	5,7492	5,7652	5,781	5,7964	5,8117
82	5,5179	5,5399	5,5614	5,5823	5,6028	5,6226	5,6421	5,6611	5,6796	5,6978	5,7156	5,733	5,7501	5,7669	5,7833	5,7994	5,8152	5,8308	5,8461
82,1	5,5512	5,5733	5,5949	5,6159	5,6364	5,6564	5,6759	5,695	5,7136	5,7319	5,7497	5,7673	5,7844	5,8012	5,8177	5,8339	5,8498	5,8654	5,8807
82,2	5,5847	5,607	5,6287	5,6498	5,6703	5,6904	5,71	5,7291	5,7479	5,7662	5,7841	5,8017	5,8189	5,8358	5,8524	5,8686	5,8846	5,9003	5,9157
82,3	5,6185	5,6408	5,6626	5,6838	5,7045	5,7247	5,7443	5,7636	5,7824	5,8007	5,8188	5,8364	5,8537	5,8707	5,8873	5,9037	5,9197	5,9355	5,9509
82,4	5,6526	5,675	5,6968	5,7181	5,7389	5,7591	5,7789	5,7982	5,8171	5,8356	5,8537	5,8714	5,8888	5,9058	5,9225	5,9389	5,955	5,9708	5,9864
82,5	5,6869	5,7094	5,7314	5,7527	5,7735	5,7939	5,8138	5,8331	5,8521	5,8707	5,8888	5,9066	5,9241	5,9412	5,958	5,9744	5,9906	6,0065	6,0221
82,6	5,7214	5,7441	5,7661	5,7876	5,8085	5,8289	5,8489	5,8683	5,8874	5,906	5,9242	5,9421	5,9596	5,9768	5,9937	6,0102	6,0264	6,0424	6,0581
82,7	5,7563	5,779	5,8011	5,8227	5,8436	5,8642	5,8842	5,9038	5,9229	5,9416	5,9599	5,9779	5,9955	6,0127	6,0297	6,0463	6,0626	6,0786	6,0943
82,8	5,7914	5,8142	5,8364	5,858	5,8791	5,8997	5,9198	5,9395	5,9587	5,9775	5,9959	6,0139	6,0316	6,0489	6,0659	6,0826	6,0989	6,1151	6,1309
82,9	5,8267	5,8496	5,872	5,8936	5,9149	5,9355	5,9557	5,9755	5,9948	6,0136	6,0321	6,0502	6,068	6,0854	6,1024	6,1192	6,1356	6,1518	6,1677
83	5,8623	5,8853	5,9077	5,9296	5,9509	5,9716	5,9919	6,0117	6,0311	6,0501	6,0686	6,0868	6,1047	6,1221	6,1393	6,1561	6,1726	6,1889	6,2048
83,1	5,8982	5,9213	5,9439	5,9658	5,9871	6,008	6,0284	6,0483	6,0677	6,0868	6,1054	6,1237	6,1416	6,1591	6,1763	6,1933	6,2098	6,2262	6,2422
83,2	5,9344	5,9576	5,9802	6,0022	6,0237	6,0446	6,0651	6,0851	6,1046	6,1237	6,1425	6,1608	6,1788	6,1964	6,2137	6,2307	6,2474	6,2637	6,2799
83,3	5,9708	5,9942	6,0169	6,039	6,0605	6,0816	6,1021	6,1222	6,1418	6,1611	6,1798	6,1983	6,2163	6,234	6,2514	6,2684	6,2852	6,3016	6,3178
83,4	6,0076	6,031	6,0538	6,076	6,0977	6,1188	6,1394	6,1596	6,1793	6,1986	6,2175	6,236	6,2541	6,2719	6,2893	6,3065	6,3233	6,3398	6,356
83,5	6,0446	6,0681	6,091	6,1133	6,1351	6,1563	6,177	6,1972	6,2171	6,2365	6,2554	6,274	6,2922	6,31	6,3276	6,3448	6,3617	6,3783	6,3945
83,6	6,0819	6,1055	6,1285	6,1509	6,1728	6,1941	6,2149	6,2352	6,2552	6,2746	6,2936	6,3123	6,3306	6,3485	6,3661	6,3834	6,4003	6,417	6,4333
83,7	6,1195	6,1432	6,1663	6,1888	6,2108	6,2322	6,2531	6,2735	6,2935	6,313	6,3321	6,3509	6,3693	6,3873	6,4049	6,4223	6,4394	6,4561	6,4725
83,8	6,1574	6,1812	6,2044	6,227	6,249	6,2705	6,2915	6,3121	6,3321	6,3517	6,3709	6,3898	6,4082	6,4263	6,4441	6,4615	6,4786	6,4954	6,5119
83,9	6,1955	6,2195	6,2428	6,2655	6,2876	6,3092	6,3303	6,3509	6,3711	6,3908	6,4101	6,429	6,4475	6,4657	6,4835	6,501	6,5182	6,5351	6,5517
84	6,234	6,2581	6,2815	6,3043	6,3265	6,3482	6,3694	6,3901	6,4103	6,4301	6,4495	6,4685	6,4871	6,5054	6,5232	6,5408	6,5581	6,575	6,5917
84,1	6,2728	6,297	6,3205	6,3434	6,3657	6,3875	6,4088	6,4295	6,4499	6,4698	6,4893	6,5083	6,527	6,5453	6,5633	6,581	6,5983	6,6153	6,632
84,2	6,3119	6,3361	6,3598	6,3827	6,4052	6,427	6,4485	6,4693	6,4898	6,5097	6,5292	6,5484	6,5672	6,5856	6,6037	6,6215	6,6388	6,6559	6,6728
84,3	6,3513	6,3756	6,3994	6,4225	6,445	6,467	6,4885	6,5094	6,53	6,55	6,5696	6,5889	6,6078	6,6262	6,6444	6,6622	6,6797	6,6969	6,7137
84,4	6,391	6,4155	6,4393	6,4625	6,4851	6,5072	6,5287	6,5498	6,5704	6,5906	6,6103	6,6297	6,6486	6,6672	6,6854	6,7033	6,7208	6,7381	6,7551
84,5	6,431	6,4556	6,4795	6,5028	6,5255	6,5477	6,5694	6,5905	6,6113	6,6315	6,6513	6,6707	6,6897	6,7084	6,7267	6,7447	6,7623	6,7797	6,7967
84,6	6,4714	6,496	6,5201	6,5435	6,5663	6,5886	6,6103	6,6316	6,6524	6,6727	6,6926	6,7121	6,7312	6,75	6,7684	6,7865	6,8041	6,8216	6,8387
84,7	6,512	6,5368	6,5609	6,5845	6,6074	6,6298	6,6516	6,673	6,6939	6,7143	6,7343	6,7539	6,7731	6,7919	6,8103	6,8285	6,8463	6,8638	6,881
84,8	6,553	6,5779	6,6022	6,6258	6,6488	6,6713	6,6933	6,7147	6,7357	6,7562	6,7763	6,796	6,8153	6,8341	6,8527	6,8709	6,8888	6,9063	6,9236
84,9	6,5943	6,6193	6,6437	6,6675	6,6906	6,7131	6,7352	6,7567	6,7778	6,7984	6,8186	6,8384	6,8577	6,8767	6,8954	6,9137	6,9317	6,9493	6,9666

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
81,5	5,6912	5,7057	5,7199	5,7339	5,7477	5,7613	5,7747	5,7879	5,8009	5,8137	5,8263	5,8388	5,8511	5,8633	5,8752	5,887	5,8987	5,9103	5,9217
81,6	5,7247	5,7392	5,7535	5,7676	5,7814	5,7951	5,8085	5,8218	5,8348	5,8477	5,8604	5,8729	5,8852	5,8974	5,9095	5,9213	5,9331	5,9447	5,9562
81,7	5,7584	5,773	5,7873	5,8015	5,8154	5,8291	5,8426	5,8559	5,869	5,882	5,8947	5,9073	5,9197	5,9319	5,944	5,9559	5,9677	5,9794	5,9909
81,8	5,7924	5,8071	5,8215	5,8357	5,8496	5,8634	5,877	5,8903	5,9035	5,9164	5,9292	5,9419	5,9543	5,9666	5,9788	5,9907	6,0026	6,0143	6,0258
81,9	5,8266	5,8414	5,8558	5,8701	5,8841	5,8979	5,9115	5,925	5,9382	5,9512	5,964	5,9767	5,9892	6,0016	6,0138	6,0258	6,0377	6,0495	6,061
82	5,8611	5,8759	5,8904	5,9048	5,9188	5,9327	5,9464	5,9599	5,9732	5,9862	5,9991	6,0119	6,0244	6,0368	6,049	6,0611	6,0731	6,0849	6,0965
82,1	5,8958	5,9107	5,9253	5,9397	5,9538	5,9678	5,9815	5,995	6,0083	6,0215	6,0345	6,0472	6,0598	6,0723	6,0846	6,0967	6,1087	6,1206	6,1322
82,2	5,9309	5,9458	5,9604	5,9749	5,9891	6,0031	6,0169	6,0305	6,0438	6,0571	6,07	6,0829	6,0955	6,1081	6,1204	6,1326	6,1446	6,1565	6,1682
82,3	5,9661	5,9811	5,9958	6,0103	6,0246	6,0386	6,0525	6,0661	6,0796	6,0928	6,1059	6,1188	6,1315	6,1441	6,1565	6,1687	6,1808	6,1927	6,2045
82,4	6,0016	6,0167	6,0315	6,0461	6,0604	6,0745	6,0884	6,1021	6,1156	6,1289	6,142	6,155	6,1677	6,1804	6,1928	6,2051	6,2173	6,2292	6,2411
82,5	6,0375	6,0526	6,0674	6,082	6,0964	6,1106	6,1245	6,1383	6,1518	6,1652	6,1784	6,1914	6,2042	6,2169	6,2294	6,2418	6,254	6,266	6,2779
82,6	6,0735	6,0886	6,1036	6,1183	6,1327	6,1469	6,161	6,1748	6,1884	6,2018	6,2151	6,2281	6,241	6,2538	6,2663	6,2787	6,2909	6,303	6,3149
82,7	6,1098	6,1251	6,14	6,1548	6,1693	6,1836	6,1977	6,2116	6,2253	6,2387	6,252	6,2651	6,278	6,2908	6,3034	6,3159	6,3282	6,3403	6,3523
82,8	6,1465	6,1617	6,1767	6,1915	6,2062	6,2205	6,2346	6,2486	6,2623	6,2759	6,2892	6,3024	6,3154	6,3282	6,3409	6,3533	6,3657	6,3779	6,3899
82,9	6,1833	6,1987	6,2138	6,2287	6,2433	6,2577	6,2719	6,2859	6,2997	6,3133	6,3267	6,34	6,353	6,3659	6,3786	6,3911	6,4035	6,4158	6,4279
83	6,2205	6,2359	6,2511	6,266	6,2807	6,2952	6,3094	6,3235	6,3374	6,351	6,3645	6,3777	6,3909	6,4038	6,4166	6,4292	6,4416	6,4539	6,4661
83,1	6,2579	6,2734	6,2886	6,3036	6,3184	6,3329	6,3473	6,3614	6,3753	6,389	6,4026	6,4159	6,429	6,4421	6,4548	6,4675	6,48	6,4924	6,5046
83,2	6,2956	6,3112	6,3265	6,3415	6,3564	6,371	6,3854	6,3996	6,4136	6,4273	6,4409	6,4543	6,4675	6,4806	6,4935	6,5062	6,5187	6,5311	6,5434
83,3	6,3336	6,3493	6,3646	6,3798	6,3947	6,4093	6,4238	6,438	6,4521	6,4659	6,4795	6,493	6,5063	6,5194	6,5323	6,5451	6,5577	6,5701	6,5825
83,4	6,372	6,3877	6,4031	6,4183	6,4333	6,448	6,4625	6,4768	6,4909	6,5048	6,5185	6,532	6,5453	6,5585	6,5715	6,5843	6,597	6,6095	6,6219
83,5	6,4106	6,4263	6,4418	6,4571	6,4721	6,4869	6,5015	6,5159	6,53	6,5439	6,5577	6,5713	6,5847	6,5979	6,611	6,6238	6,6365	6,6491	6,6615
83,6	6,4495	6,4653	6,4808	6,4962	6,5113	6,5261	6,5408	6,5552	6,5694	6,5834	6,5972	6,6109	6,6244	6,6377	6,6508	6,6637	6,6765	6,6891	6,7015
83,7	6,4887	6,5045	6,5202	6,5356	6,5507	6,5657	6,5804	6,5949	6,6092	6,6232	6,6371	6,6508	6,6643	6,6777	6,6908	6,7038	6,7166	6,7293	6,7419
83,8	6,5282	6,5441	6,5599	6,5753	6,5905	6,6055	6,6203	6,6348	6,6491	6,6633	6,6772	6,691	6,7045	6,718	6,7312	6,7443	6,7571	6,7699	6,7825
83,9	6,568	6,584	6,5998	6,6154	6,6306	6,6457	6,6605	6,6751	6,6895	6,7037	6,7177	6,7315	6,7452	6,7586	6,7719	6,785	6,798	6,8107	6,8234
84	6,6081	6,6242	6,64	6,6557	6,671	6,6861	6,701	6,7157	6,7301	6,7444	6,7585	6,7724	6,7861	6,7996	6,8129	6,8261	6,8391	6,8519	6,8646
84,1	6,6485	6,6647	6,6806	6,6963	6,7117	6,7269	6,7418	6,7566	6,7711	6,7854	6,7996	6,8135	6,8273	6,8409	6,8543	6,8675	6,8806	6,8935	6,9062
84,2	6,6892	6,7055	6,7215	6,7373	6,7527	6,768	6,783	6,7978	6,8124	6,8268	6,841	6,855	6,8688	6,8825	6,8959	6,9092	6,9223	6,9353	6,9481
84,3	6,7304	6,7467	6,7627	6,7785	6,7941	6,8094	6,8245	6,8394	6,8541	6,8685	6,8827	6,8968	6,9107	6,9244	6,9379	6,9513	6,9644	6,9774	6,9903
84,4	6,7718	6,7881	6,8042	6,8201	6,8358	6,8512	6,8663	6,8813	6,896	6,9105	6,9248	6,9389	6,9529	6,9666	6,9802	6,9936	7,0069	7,0199	7,0329
84,5	6,8135	6,8299	6,8461	6,8621	6,8777	6,8932	6,9084	6,9235	6,9382	6,9528	6,9672	6,9814	6,9954	7,0092	7,0229	7,0363	7,0497	7,0628	7,0757
84,6	6,8555	6,872	6,8883	6,9043	6,9201	6,9356	6,9509	6,966	6,9808	6,9955	7,0099	7,0242	7,0383	7,0522	7,0659	7,0794	7,0927	7,1059	7,1189
84,7	6,8978	6,9145	6,9308	6,9469	6,9628	6,9784	6,9938	7,0089	7,0238	7,0385	7,053	7,0673	7,0815	7,0954	7,1091	7,1227	7,1362	7,1495	7,1626
84,8	6,9406	6,9573	6,9737	6,9899	7,0058	7,0214	7,0369	7,0521	7,0671	7,0819	7,0964	7,1108	7,125	7,139	7,1529	7,1665	7,18	7,1933	7,2064
84,9	6,9836	7,0004	7,0169	7,0332	7,0491	7,0648	7,0804	7,0957	7,1107	7,1256	7,1402	7,1546	7,1689	7,183	7,1969	7,2105	7,2241	7,2375	7,2507

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
81,5	5,933	5,9441	5,9551	5,966	5,9767	5,9874	5,998	6,0083	6,0187	6,0288	6,0389	6,0489	6,0588	6,0686	6,0783	6,0879	6,0974	6,1069	6,1162
81,6	5,9675	5,9786	5,9897	6,0006	6,0114	6,0221	6,0327	6,0431	6,0535	6,0638	6,0739	6,0839	6,0938	6,1037	6,1134	6,1231	6,1326	6,1421	6,1514
81,7	6,0022	6,0135	6,0245	6,0355	6,0464	6,0571	6,0677	6,0782	6,0886	6,0989	6,1091	6,1192	6,1291	6,139	6,1488	6,1585	6,1681	6,1776	6,187
81,8	6,0372	6,0485	6,0597	6,0707	6,0815	6,0923	6,103	6,1135	6,124	6,1343	6,1445	6,1546	6,1646	6,1746	6,1844	6,1941	6,2038	6,2133	6,2228
81,9	6,0725	6,0838	6,095	6,1061	6,117	6,1279	6,1385	6,1491	6,1596	6,17	6,1803	6,1904	6,2005	6,2104	6,2203	6,2301	6,2397	6,2493	6,2588
82	6,108	6,1194	6,1306	6,1417	6,1527	6,1636	6,1744	6,185	6,1955	6,2059	6,2162	6,2264	6,2365	6,2465	6,2564	6,2662	6,2759	6,2856	6,2951
82,1	6,1438	6,1553	6,1665	6,1776	6,1887	6,1996	6,2104	6,2211	6,2316	6,2421	6,2525	6,2627	6,2729	6,2829	6,2928	6,3027	6,3125	6,3221	6,3317
82,2	6,1799	6,1913	6,2027	6,2138	6,2249	6,2359	6,2467	6,2575	6,2681	6,2786	6,289	6,2993	6,3095	6,3195	6,3296	6,3394	6,3492	6,3589	6,3686
82,3	6,2161	6,2277	6,2391	6,2503	6,2615	6,2725	6,2833	6,2941	6,3047	6,3153	6,3258	6,3361	6,3463	6,3565	6,3665	6,3764	6,3863	6,396	6,4057
82,4	6,2528	6,2643	6,2758	6,2871	6,2982	6,3093	6,3202	6,3311	6,3418	6,3523	6,3628	6,3732	6,3834	6,3936	6,4037	6,4137	6,4236	6,4334	6,443
82,5	6,2896	6,3012	6,3127	6,3241	6,3353	6,3464	6,3574	6,3682	6,379	6,3896	6,4002	6,4105	6,4209	6,4311	6,4412	6,4513	6,4612	6,471	6,4807
82,6	6,3268	6,3384	6,35	6,3613	6,3726	6,3837	6,3948	6,4057	6,4165	6,4272	6,4377	6,4482	6,4586	6,4689	6,479	6,4891	6,499	6,5089	6,5187
82,7	6,3642	6,3759	6,3875	6,3989	6,4102	6,4214	6,4325	6,4434	6,4543	6,465	6,4756	6,4862	6,4966	6,5068	6,517	6,5272	6,5372	6,5471	6,5569
82,8	6,4018	6,4136	6,4252	6,4367	6,4481	6,4593	6,4705	6,4815	6,4924	6,5032	6,5138	6,5244	6,5348	6,5452	6,5554	6,5655	6,5756	6,5856	6,5955
82,9	6,4398	6,4516	6,4633	6,4749	6,4863	6,4976	6,5088	6,5198	6,5308	6,5416	6,5523	6,5629	6,5734	6,5837	6,5941	6,6042	6,6144	6,6243	6,6342
83	6,4781	6,49	6,5017	6,5133	6,5248	6,5361	6,5473	6,5584	6,5694	6,5803	6,5911	6,6017	6,6122	6,6226	6,633	6,6432	6,6533	6,6634	6,6733
83,1	6,5167	6,5286	6,5404	6,552	6,5635	6,5749	6,5862	6,5973	6,6083	6,6193	6,63	6,6408	6,6514	6,6618	6,6722	6,6825	6,6927	6,7028	6,7127
83,2	6,5555	6,5674	6,5793	6,591	6,6026	6,614	6,6253	6,6365	6,6476	6,6586	6,6694	6,6801	6,6908	6,7013	6,7117	6,722	6,7323	6,7424	6,7524
83,3	6,5947	6,6067	6,6186	6,6303	6,6419	6,6534	6,6647	6,676	6,6871	6,6982	6,709	6,7198	6,7305	6,7411	6,7515	6,7619	6,7722	6,7824	6,7925
83,4	6,6341	6,6462	6,6581	6,6699	6,6816	6,6931	6,7045	6,7158	6,727	6,738	6,749	6,7598	6,7706	6,7812	6,7916	6,8021	6,8124	6,8226	6,8327
83,5	6,6738	6,6859	6,6979	6,7098	6,7215	6,7331	6,7446	6,7559	6,7671	6,7782	6,7892	6,8001	6,8109	6,8216	6,8321	6,8426	6,8529	6,8632	6,8734
83,6	6,7139	6,7261	6,7381	6,75	6,7618	6,7734	6,7849	6,7963	6,8076	6,8187	6,8297	6,8407	6,8515	6,8622	6,8728	6,8834	6,8938	6,904	6,9143
83,7	6,7543	6,7665	6,7786	6,7905	6,8023	6,814	6,8256	6,837	6,8483	6,8595	6,8706	6,8816	6,8925	6,9032	6,9139	6,9245	6,9349	6,9453	6,9555
83,8	6,7949	6,8072	6,8194	6,8313	6,8432	6,8549	6,8666	6,8781	6,8894	6,9007	6,9118	6,9228	6,9337	6,9446	6,9552	6,9659	6,9763	6,9867	6,9971
83,9	6,8358	6,8482	6,8604	6,8725	6,8844	6,8962	6,9079	6,9194	6,9308	6,9421	6,9533	6,9644	6,9753	6,9862	6,9969	7,0076	7,0181	7,0286	7,0389
84	6,8772	6,8896	6,9018	6,9139	6,9259	6,9377	6,9495	6,9611	6,9725	6,9839	6,9951	7,0062	7,0172	7,0281	7,0389	7,0496	7,0602	7,0707	7,0811
84,1	6,9188	6,9312	6,9436	6,9558	6,9678	6,9796	6,9914	7,0031	7,0146	7,026	7,0373	7,0484	7,0595	7,0704	7,0813	7,092	7,1027	7,1132	7,1236
84,2	6,9607	6,9732	6,9856	6,9978	7,0099	7,0219	7,0337	7,0454	7,057	7,0684	7,0798	7,091	7,1021	7,113	7,1239	7,1348	7,1454	7,156	7,1665
84,3	7,003	7,0156	7,028	7,0402	7,0524	7,0644	7,0763	7,088	7,0996	7,1112	7,1225	7,1338	7,145	7,156	7,167	7,1778	7,1886	7,1992	7,2097
84,4	7,0456	7,0582	7,0707	7,0831	7,0952	7,1073	7,1192	7,131	7,1427	7,1543	7,1657	7,177	7,1882	7,1993	7,2103	7,2212	7,232	7,2427	7,2532
84,5	7,0885	7,1013	7,1137	7,1261	7,1384	7,1505	7,1625	7,1743	7,186	7,1977	7,2092	7,2205	7,2318	7,2429	7,2539	7,2649	7,2757	7,2865	7,2971
84,6	7,1318	7,1445	7,1572	7,1696	7,1819	7,194	7,2061	7,218	7,2298	7,2414	7,253	7,2644	7,2757	7,2869	7,298	7,309	7,3199	7,3306	7,3413
84,7	7,1754	7,1882	7,2009	7,2133	7,2257	7,2379	7,2501	7,262	7,2738	7,2855	7,2972	7,3086	7,32	7,3312	7,3424	7,3534	7,3643	7,3751	7,3859
84,8	7,2194	7,2323	7,245	7,2575	7,2699	7,2822	7,2943	7,3064	7,3182	7,33	7,3416	7,3532	7,3646	7,3759	7,387	7,3982	7,4091	7,42	7,4308
84,9	7,2637	7,2767	7,2894	7,302	7,3145	7,3268	7,339	7,3511	7,363	7,3748	7,3865	7,3981	7,4095	7,4209	7,4321	7,4433	7,4543	7,4652	7,476

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
81,5	6,1254	6,1346	6,1437	6,1527	6,1616	6,1705	6,1792	6,188	6,1966	6,2052	6,2137	6,222	6,2304	6,2387	6,247	6,2551	6,2632	6,2712	6,2792
81,6	6,1608	6,17	6,1791	6,1881	6,1971	6,206	6,2148	6,2235	6,2322	6,2408	6,2493	6,2578	6,2662	6,2745	6,2827	6,2909	6,2991	6,3071	6,3152
81,7	6,1963	6,2056	6,2147	6,2238	6,2328	6,2417	6,2506	6,2594	6,268	6,2767	6,2853	6,2938	6,3022	6,3105	6,3188	6,3271	6,3352	6,3433	6,3514
81,8	6,2321	6,2414	6,2506	6,2598	6,2688	6,2777	6,2866	6,2954	6,3042	6,3129	6,3215	6,33	6,3385	6,3469	6,3552	6,3635	6,3716	6,3798	6,3879
81,9	6,2682	6,2775	6,2868	6,2959	6,305	6,314	6,323	6,3318	6,3406	6,3493	6,358	6,3665	6,375	6,3834	6,3918	6,4001	6,4083	6,4165	6,4246
82	6,3045	6,314	6,3232	6,3324	6,3415	6,3506	6,3595	6,3684	6,3772	6,386	6,3946	6,4033	6,4118	6,4203	6,4286	6,437	6,4453	6,4535	6,4616
82,1	6,3412	6,3506	6,3599	6,3692	6,3783	6,3874	6,3964	6,4053	6,4142	6,4229	6,4317	6,4403	6,4489	6,4574	6,4658	6,4742	6,4825	6,4907	6,4989
82,2	6,3781	6,3875	6,3969	6,4061	6,4153	6,4244	6,4335	6,4425	6,4513	6,4602	6,4689	6,4776	6,4862	6,4948	6,5032	6,5116	6,52	6,5282	6,5365
82,3	6,4152	6,4247	6,4341	6,4434	6,4526	6,4618	6,4709	6,4799	6,4888	6,4977	6,5065	6,5152	6,5238	6,5324	6,5409	6,5493	6,5577	6,566	6,5743
82,4	6,4527	6,4622	6,4716	6,481	6,4902	6,4994	6,5086	6,5176	6,5266	6,5355	6,5443	6,5531	6,5617	6,5703	6,5789	6,5873	6,5958	6,6041	6,6124
82,5	6,4904	6,5	6,5094	6,5188	6,5281	6,5374	6,5465	6,5556	6,5646	6,5735	6,5824	6,5912	6,5999	6,6086	6,6171	6,6256	6,6341	6,6425	6,6508
82,6	6,5284	6,538	6,5475	6,5569	6,5663	6,5755	6,5848	6,5939	6,6029	6,6119	6,6208	6,6296	6,6383	6,6471	6,6557	6,6642	6,6727	6,6811	6,6895
82,7	6,5667	6,5763	6,5858	6,5954	6,6047	6,6141	6,6233	6,6324	6,6415	6,6505	6,6594	6,6683	6,6771	6,6858	6,6945	6,7031	6,7116	6,7201	6,7284
82,8	6,6052	6,6149	6,6245	6,634	6,6435	6,6528	6,6621	6,6713	6,6804	6,6895	6,6984	6,7073	6,7161	6,7249	6,7336	6,7423	6,7508	6,7593	6,7677
82,9	6,6441	6,6538	6,6635	6,673	6,6825	6,6919	6,7012	6,7104	6,7196	6,7287	6,7377	6,7466	6,7555	6,7643	6,773	6,7817	6,7902	6,7988	6,8073
83	6,6832	6,693	6,7026	6,7123	6,7218	6,7312	6,7405	6,7498	6,759	6,7682	6,7772	6,7862	6,7951	6,8039	6,8128	6,8214	6,83	6,8386	6,8471
83,1	6,7226	6,7325	6,7422	6,7518	6,7614	6,7709	6,7803	6,7896	6,7989	6,808	6,8171	6,8261	6,835	6,8439	6,8527	6,8615	6,8701	6,8788	6,8873
83,2	6,7624	6,7723	6,782	6,7917	6,8013	6,8108	6,8203	6,8296	6,8389	6,8481	6,8572	6,8663	6,8752	6,8842	6,8931	6,9018	6,9105	6,9191	6,9277
83,3	6,8025	6,8123	6,8221	6,8319	6,8415	6,8511	6,8606	6,8699	6,8793	6,8885	6,8977	6,9068	6,9158	6,9248	6,9336	6,9424	6,9512	6,9599	6,9685
83,4	6,8428	6,8527	6,8626	6,8723	6,882	6,8916	6,9011	6,9106	6,9199	6,9292	6,9384	6,9475	6,9567	6,9657	6,9745	6,9834	6,9922	7,0009	7,0095
83,5	6,8834	6,8934	6,9033	6,9131	6,9229	6,9325	6,942	6,9515	6,9609	6,9703	6,9795	6,9887	6,9978	7,0068	7,0158	7,0246	7,0335	7,0423	7,0509
83,6	6,9244	6,9344	6,9444	6,9542	6,964	6,9737	6,9833	6,9928	7,0023	7,0116	7,0209	7,0301	7,0393	7,0483	7,0573	7,0663	7,0751	7,0839	7,0926
83,7	6,9657	6,9757	6,9858	6,9956	7,0055	7,0152	7,0248	7,0344	7,0438	7,0533	7,0626	7,0719	7,081	7,0902	7,0992	7,1081	7,117	7,1259	7,1346
83,8	7,0073	7,0174	7,0274	7,0373	7,0472	7,057	7,0667	7,0763	7,0858	7,0952	7,1046	7,1139	7,1231	7,1323	7,1413	7,1504	7,1593	7,1682	7,177
83,9	7,0492	7,0594	7,0694	7,0794	7,0893	7,0991	7,1089	7,1185	7,128	7,1375	7,1469	7,1563	7,1656	7,1748	7,1839	7,1929	7,2019	7,2108	7,2197
84	7,0915	7,1017	7,1117	7,1218	7,1317	7,1416	7,1514	7,161	7,1707	7,1802	7,1896	7,199	7,2084	7,2175	7,2267	7,2358	7,2448	7,2537	7,2626
84,1	7,134	7,1442	7,1544	7,1645	7,1745	7,1844	7,1942	7,2039	7,2136	7,2232	7,2326	7,2421	7,2514	7,2607	7,2699	7,279	7,2881	7,297	7,306
84,2	7,1769	7,1872	7,1974	7,2076	7,2175	7,2275	7,2374	7,2471	7,2568	7,2665	7,276	7,2855	7,2949	7,3041	7,3134	7,3226	7,3317	7,3407	7,3496
84,3	7,2201	7,2304	7,2407	7,2509	7,2609	7,2709	7,2808	7,2907	7,3004	7,3101	7,3197	7,3291	7,3386	7,3479	7,3573	7,3665	7,3756	7,3846	7,3937
84,4	7,2637	7,2741	7,2844	7,2946	7,3047	7,3147	7,3247	7,3346	7,3444	7,3541	7,3637	7,3732	7,3827	7,3921	7,4014	7,4107	7,4199	7,429	7,438
84,5	7,3076	7,318	7,3284	7,3387	7,3488	7,3589	7,3689	7,3788	7,3886	7,3984	7,4081	7,4177	7,4271	7,4366	7,446	7,4552	7,4644	7,4736	7,4827
84,6	7,3519	7,3624	7,3727	7,3831	7,3933	7,4034	7,4134	7,4234	7,4333	7,4431	7,4527	7,4624	7,4719	7,4814	7,4908	7,5001	7,5094	7,5186	7,5278
84,7	7,3965	7,407	7,4175	7,4278	7,4381	7,4482	7,4583	7,4683	7,4782	7,4881	7,4978	7,5075	7,5171	7,5266	7,5361	7,5454	7,5548	7,564	7,5731
84,8	7,4414	7,452	7,4625	7,4729	7,4832	7,4934	7,5035	7,5136	7,5235	7,5335	7,5432	7,5529	7,5626	7,5722	7,5817	7,5911	7,6005	7,6097	7,6189
84,9	7,4868	7,4974	7,5079	7,5184	7,5288	7,539	7,5492	7,5593	7,5692	7,5791	7,589	7,5988	7,6085	7,6181	7,6276	7,6371	7,6464	7,6558	7,665

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
81,5	6,2872	6,295	6,3028	6,3106	6,3183	6,3259	6,3335	6,3411	6,3485	6,356	6,3633	6,3707	6,3779	6,3852	6,3924	6,3996	6,4066	6,4137	6,4207
81,6	6,3232	6,331	6,3388	6,3467	6,3544	6,362	6,3696	6,3772	6,3847	6,3922	6,3997	6,407	6,4143	6,4216	6,4288	6,436	6,4432	6,4502	6,4573
81,7	6,3594	6,3673	6,3752	6,383	6,3908	6,3985	6,4061	6,4137	6,4213	6,4287	6,4362	6,4436	6,451	6,4583	6,4655	6,4727	6,4799	6,487	6,4941
81,8	6,3959	6,4039	6,4118	6,4196	6,4274	6,4352	6,4428	6,4505	6,4581	6,4655	6,473	6,4805	6,4878	6,4952	6,5024	6,5097	6,5169	6,5241	6,5311
81,9	6,4327	6,4407	6,4486	6,4565	6,4643	6,4721	6,4798	6,4875	6,4951	6,5026	6,5102	6,5176	6,525	6,5324	6,5397	6,5469	6,5542	6,5613	6,5685
82	6,4697	6,4778	6,4857	6,4936	6,5015	6,5093	6,5171	6,5247	6,5324	6,54	6,5475	6,555	6,5625	6,5698	6,5772	6,5845	6,5918	6,599	6,6061
82,1	6,507	6,5151	6,5231	6,5311	6,539	6,5468	6,5546	6,5623	6,57	6,5776	6,5852	6,5927	6,6002	6,6076	6,615	6,6223	6,6296	6,6368	6,644
82,2	6,5446	6,5527	6,5608	6,5688	6,5767	6,5845	6,5923	6,6001	6,6078	6,6155	6,6231	6,6306	6,6381	6,6456	6,653	6,6604	6,6677	6,675	6,6822
82,3	6,5825	6,5906	6,5987	6,6067	6,6146	6,6226	6,6305	6,6382	6,6459	6,6536	6,6613	6,6689	6,6764	6,6839	6,6913	6,6988	6,7061	6,7134	6,7206
82,4	6,6206	6,6288	6,6369	6,6449	6,653	6,6609	6,6688	6,6766	6,6844	6,6921	6,6998	6,7074	6,7149	6,7225	6,7299	6,7374	6,7448	6,7521	6,7594
82,5	6,6591	6,6673	6,6754	6,6835	6,6915	6,6995	6,7074	6,7153	6,7231	6,7309	6,7386	6,7462	6,7538	6,7614	6,7688	6,7763	6,7837	6,7911	6,7984
82,6	6,6978	6,706	6,7142	6,7223	6,7304	6,7384	6,7463	6,7542	6,7621	6,7699	6,7776	6,7853	6,793	6,8005	6,808	6,8155	6,823	6,8304	6,8377
82,7	6,7368	6,745	6,7533	6,7615	6,7695	6,7776	6,7856	6,7935	6,8013	6,8091	6,8169	6,8247	6,8323	6,84	6,8475	6,855	6,8625	6,8699	6,8773
82,8	6,7761	6,7844	6,7926	6,8008	6,809	6,817	6,8251	6,8331	6,841	6,8488	6,8566	6,8643	6,872	6,8797	6,8873	6,8949	6,9023	6,9098	6,9172
82,9	6,8157	6,824	6,8323	6,8405	6,8487	6,8568	6,8649	6,8729	6,8808	6,8887	6,8965	6,9043	6,9121	6,9198	6,9273	6,935	6,9425	6,95	6,9574
83	6,8556	6,864	6,8723	6,8805	6,8887	6,8969	6,9049	6,913	6,921	6,9289	6,9368	6,9446	6,9523	6,9601	6,9677	6,9754	6,9829	6,9905	6,9979
83,1	6,8958	6,9042	6,9125	6,9209	6,9291	6,9372	6,9454	6,9534	6,9615	6,9694	6,9773	6,9852	6,993	7,0007	7,0084	7,0161	7,0237	7,0312	7,0387
83,2	6,9362	6,9447	6,9531	6,9614	6,9697	6,9779	6,9861	6,9942	7,0022	7,0102	7,0182	7,026	7,0339	7,0416	7,0494	7,057	7,0647	7,0723	7,0798
83,3	6,977	6,9855	6,994	7,0024	7,0107	7,0189	7,0271	7,0352	7,0433	7,0513	7,0593	7,0672	7,0751	7,0829	7,0907	7,0984	7,1061	7,1137	7,1213
83,4	7,0182	7,0267	7,0352	7,0435	7,0519	7,0602	7,0684	7,0766	7,0847	7,0927	7,1008	7,1088	7,1166	7,1245	7,1323	7,1401	7,1478	7,1553	7,163
83,5	7,0596	7,0681	7,0766	7,085	7,0934	7,1018	7,1101	7,1183	7,1264	7,1345	7,1426	7,1506	7,1585	7,1664	7,1742	7,182	7,1897	7,1974	7,2051
83,6	7,1013	7,1099	7,1184	7,127	7,1353	7,1437	7,152	7,1602	7,1684	7,1766	7,1846	7,1927	7,2007	7,2086	7,2164	7,2243	7,232	7,2398	7,2474
83,7	7,1434	7,152	7,1606	7,1691	7,1775	7,1859	7,1943	7,2026	7,2108	7,219	7,2271	7,2352	7,2432	7,2511	7,259	7,2669	7,2746	7,2824	7,2902
83,8	7,1858	7,1944	7,203	7,2116	7,2201	7,2285	7,2369	7,2452	7,2535	7,2617	7,2698	7,2779	7,2859	7,294	7,3019	7,3098	7,3176	7,3254	7,3331
83,9	7,2284	7,2372	7,2458	7,2544	7,2629	7,2714	7,2798	7,2882	7,2965	7,3047	7,3129	7,321	7,3291	7,3371	7,3451	7,353	7,3609	7,3688	7,3765
84	7,2715	7,2802	7,2889	7,2976	7,3061	7,3146	7,3231	7,3315	7,3398	7,3481	7,3563	7,3645	7,3726	7,3807	7,3887	7,3967	7,4045	7,4124	7,4202
84,1	7,3149	7,3236	7,3323	7,3411	7,3497	7,3582	7,3667	7,3751	7,3835	7,3918	7,4001	7,4083	7,4164	7,4245	7,4326	7,4406	7,4485	7,4564	7,4643
84,2	7,3585	7,3674	7,3761	7,3849	7,3935	7,4021	7,4107	7,4191	7,4275	7,4358	7,4441	7,4524	7,4605	7,4687	7,4768	7,4848	7,4928	7,5007	7,5086
84,3	7,4026	7,4114	7,4203	7,429	7,4377	7,4463	7,4549	7,4634	7,4718	7,4802	7,4885	7,4969	7,5051	7,5133	7,5213	7,5294	7,5374	7,5454	7,5533
84,4	7,447	7,4559	7,4647	7,4735	7,4823	7,491	7,4995	7,5081	7,5165	7,525	7,5333	7,5416	7,5499	7,5581	7,5662	7,5744	7,5824	7,5905	7,5983
84,5	7,4917	7,5007	7,5096	7,5184	7,5271	7,5358	7,5444	7,5531	7,5616	7,5701	7,5785	7,5868	7,5951	7,6033	7,6115	7,6197	7,6278	7,6358	7,6438
84,6	7,5368	7,5458	7,5547	7,5636	7,5724	7,5811	7,5898	7,5984	7,607	7,6155	7,6239	7,6323	7,6407	7,6489	7,6572	7,6654	7,6735	7,6815	7,6895
84,7	7,5822	7,5913	7,6003	7,6091	7,618	7,6268	7,6355	7,6441	7,6527	7,6613	7,6698	7,6782	7,6865	7,6949	7,7032	7,7114	7,7195	7,7277	7,7357
84,8	7,6281	7,6371	7,6461	7,6551	7,664	7,6728	7,6815	7,6902	7,6989	7,7074	7,716	7,7244	7,7329	7,7412	7,7495	7,7577	7,7659	7,7741	7,7821
84,9	7,6742	7,6833	7,6924	7,7014	7,7103	7,7192	7,728	7,7366	7,7453	7,754	7,7625	7,771	7,7795	7,7879	7,7962	7,8045	7,8127	7,8209	7,8291

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
81,5	6,4277	6,4346	6,4415	6,4483	6,4551	6,4619	6,4686	6,4753	6,4819	6,4885	6,4951	6,5017	6,5082	6,5146	6,521	6,5274	6,5337	6,5401	6,5463
81,6	6,4643	6,4712	6,4781	6,485	6,4918	6,4986	6,5053	6,5121	6,5187	6,5254	6,532	6,5385	6,5451	6,5515	6,558	6,5644	6,5708	6,5771	6,5835
81,7	6,5011	6,5081	6,515	6,5219	6,5288	6,5356	6,5424	6,5491	6,5558	6,5625	6,5691	6,5757	6,5822	6,5887	6,5952	6,6016	6,6081	6,6145	6,6208
81,8	6,5382	6,5452	6,5522	6,5591	6,566	6,5729	6,5797	6,5864	6,5931	6,5998	6,6065	6,6131	6,6197	6,6262	6,6327	6,6392	6,6456	6,652	6,6584
81,9	6,5756	6,5826	6,5896	6,5965	6,6035	6,6103	6,6172	6,624	6,6307	6,6374	6,6442	6,6508	6,6574	6,664	6,6705	6,677	6,6835	6,6899	6,6963
82	6,6132	6,6203	6,6273	6,6343	6,6413	6,6482	6,655	6,6618	6,6686	6,6754	6,6821	6,6887	6,6954	6,702	6,7086	6,7151	6,7216	6,728	6,7344
82,1	6,6511	6,6582	6,6653	6,6723	6,6793	6,6862	6,6931	6,7	6,7068	6,7136	6,7203	6,727	6,7337	6,7403	6,7469	6,7534	6,76	6,7664	6,7729
82,2	6,6894	6,6965	6,7036	6,7106	6,7176	6,7246	6,7315	6,7384	6,7452	6,752	6,7588	6,7655	6,7722	6,7788	6,7855	6,792	6,7986	6,8051	6,8116
82,3	6,7278	6,735	6,7421	6,7492	6,7562	6,7633	6,7702	6,7771	6,784	6,7908	6,7976	6,8044	6,8111	6,8177	6,8244	6,831	6,8375	6,8441	6,8506
82,4	6,7666	6,7738	6,7809	6,7881	6,7951	6,8021	6,8091	6,8161	6,823	6,8299	6,8366	6,8435	6,8502	6,8569	6,8636	6,8702	6,8768	6,8834	6,8899
82,5	6,8057	6,8129	6,8201	6,8272	6,8343	6,8414	6,8484	6,8553	6,8623	6,8692	6,876	6,8828	6,8896	6,8963	6,903	6,9097	6,9163	6,9229	6,9295
82,6	6,845	6,8523	6,8595	6,8666	6,8738	6,8808	6,8879	6,8949	6,9019	6,9088	6,9157	6,9225	6,9293	6,936	6,9428	6,9495	6,9562	6,9628	6,9694
82,7	6,8847	6,892	6,8992	6,9063	6,9135	6,9206	6,9277	6,9348	6,9418	6,9487	6,9556	6,9624	6,9693	6,9761	6,9829	6,9896	6,9962	7,0029	7,0095
82,8	6,9245	6,9319	6,9392	6,9464	6,9536	6,9607	6,9678	6,9749	6,9819	6,9889	6,9959	7,0028	7,0096	7,0165	7,0232	7,03	7,0367	7,0434	7,05
82,9	6,9648	6,9722	6,9795	6,9867	6,994	7,0011	7,0083	7,0153	7,0224	7,0294	7,0364	7,0433	7,0502	7,057	7,0639	7,0707	7,0774	7,0841	7,0908
83	7,0054	7,0127	7,02	7,0274	7,0346	7,0418	7,049	7,0561	7,0632	7,0702	7,0772	7,0842	7,0911	7,098	7,1048	7,1116	7,1184	7,1251	7,1319
83,1	7,0462	7,0536	7,0609	7,0683	7,0755	7,0828	7,09	7,0971	7,1043	7,1113	7,1184	7,1254	7,1323	7,1393	7,1461	7,153	7,1597	7,1665	7,1733
83,2	7,0873	7,0947	7,1022	7,1096	7,1168	7,1241	7,1313	7,1385	7,1457	7,1528	7,1598	7,1668	7,1738	7,1808	7,1877	7,1946	7,2014	7,2081	7,215
83,3	7,1288	7,1362	7,1437	7,1511	7,1585	7,1658	7,173	7,1802	7,1874	7,1945	7,2016	7,2087	7,2156	7,2227	7,2296	7,2365	7,2433	7,2501	7,2569
83,4	7,1705	7,178	7,1855	7,193	7,2003	7,2077	7,215	7,2222	7,2294	7,2366	7,2437	7,2507	7,2578	7,2648	7,2718	7,2787	7,2856	7,2925	7,2993
83,5	7,2126	7,2202	7,2276	7,2352	7,2425	7,2499	7,2572	7,2645	7,2718	7,279	7,2861	7,2932	7,3003	7,3073	7,3144	7,3213	7,3282	7,3351	7,342
83,6	7,2551	7,2627	7,2702	7,2776	7,2851	7,2925	7,2999	7,3072	7,3144	7,3216	7,3289	7,336	7,3431	7,3501	7,3572	7,3642	7,3712	7,3781	7,3849
83,7	7,2978	7,3054	7,3129	7,3205	7,328	7,3354	7,3428	7,3501	7,3574	7,3647	7,3719	7,3791	7,3862	7,3933	7,4004	7,4074	7,4143	7,4213	7,4283
83,8	7,3408	7,3485	7,3561	7,3637	7,3711	7,3786	7,3861	7,3934	7,4008	7,408	7,4153	7,4225	7,4297	7,4368	7,4438	7,4509	7,458	7,465	7,4719
83,9	7,3842	7,3919	7,3995	7,4071	7,4147	7,4221	7,4297	7,4371	7,4444	7,4517	7,459	7,4663	7,4735	7,4806	7,4877	7,4948	7,5019	7,5089	7,5158
84	7,428	7,4357	7,4434	7,451	7,4585	7,466	7,4735	7,481	7,4884	7,4957	7,5031	7,5103	7,5176	7,5248	7,5319	7,5391	7,5461	7,5531	7,5602
84,1	7,472	7,4798	7,4875	7,4951	7,5027	7,5103	7,5178	7,5253	7,5327	7,5401	7,5475	7,5548	7,5621	7,5693	7,5765	7,5836	7,5907	7,5978	7,6048
84,2	7,5165	7,5243	7,5319	7,5396	7,5473	7,5549	7,5625	7,57	7,5774	7,5848	7,5922	7,5995	7,6069	7,6141	7,6213	7,6285	7,6356	7,6427	7,6498
84,3	7,5612	7,569	7,5768	7,5845	7,5922	7,5998	7,6074	7,6149	7,6224	7,6299	7,6373	7,6446	7,652	7,6593	7,6665	7,6737	7,6809	7,688	7,6951
84,4	7,6062	7,6141	7,6219	7,6297	7,6374	7,645	7,6527	7,6603	7,6678	7,6753	7,6828	7,6901	7,6975	7,7048	7,7121	7,7194	7,7266	7,7338	7,7408
84,5	7,6517	7,6596	7,6674	7,6752	7,683	7,6907	7,6984	7,706	7,7136	7,721	7,7286	7,736	7,7433	7,7507	7,758	7,7653	7,7725	7,7798	7,7869
84,6	7,6975	7,7055	7,7134	7,7211	7,729	7,7367	7,7444	7,752	7,7596	7,7672	7,7747	7,7821	7,7896	7,797	7,8043	7,8117	7,8189	7,8261	7,8334
84,7	7,7437	7,7517	7,7596	7,7674	7,7752	7,7831	7,7908	7,7984	7,806	7,8137	7,8212	7,8287	7,8362	7,8436	7,8509	7,8583	7,8656	7,8729	7,8801
84,8	7,7902	7,7982	7,8062	7,8141	7,8219	7,8297	7,8375	7,8452	7,8529	7,8605	7,8681	7,8756	7,8831	7,8906	7,898	7,9054	7,9127	7,9201	7,9273
84,9	7,8372	7,8451	7,8532	7,8611	7,869	7,8768	7,8846	7,8924	7,9001	7,9077	7,9153	7,9229	7,9305	7,938	7,9454	7,9528	7,9602	7,9675	7,9748

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
81,5	6,5526	6,5588	6,565	6,5712	6,5773	6,5834	6,5894	6,5955
81,6	6,5897	6,5959	6,6021	6,6083	6,6145	6,6206	6,6267	6,6328
81,7	6,6271	6,6333	6,6396	6,6458	6,6519	6,6581	6,6642	6,6703
81,8	6,6647	6,671	6,6773	6,6835	6,6897	6,6959	6,702	6,7081
81,9	6,7026	6,7089	6,7152	6,7215	6,7277	6,7339	6,7401	6,7462
82	6,7408	6,7472	6,7535	6,7598	6,766	6,7722	6,7784	6,7846
82,1	6,7793	6,7857	6,792	6,7983	6,8046	6,8109	6,8171	6,8232
82,2	6,8181	6,8244	6,8308	6,8372	6,8435	6,8497	6,856	6,8621
82,3	6,8571	6,8635	6,8699	6,8762	6,8826	6,8889	6,8951	6,9014
82,4	6,8964	6,9029	6,9093	6,9157	6,9221	6,9284	6,9346	6,9409
82,5	6,936	6,9425	6,949	6,9554	6,9618	6,9681	6,9744	6,9807
82,6	6,9759	6,9825	6,9889	6,9953	7,0018	7,0082	7,0145	7,0208
82,7	7,0161	7,0227	7,0292	7,0356	7,0421	7,0485	7,0549	7,0612
82,8	7,0566	7,0632	7,0697	7,0762	7,0827	7,0891	7,0955	7,1019
82,9	7,0974	7,104	7,1106	7,1171	7,1236	7,1301	7,1365	7,1429
83	7,1385	7,1452	7,1518	7,1583	7,1649	7,1713	7,1778	7,1842
83,1	7,1799	7,1866	7,1932	7,1998	7,2064	7,2128	7,2194	7,2259
83,2	7,2217	7,2283	7,235	7,2416	7,2482	7,2548	7,2612	7,2677
83,3	7,2637	7,2704	7,2771	7,2838	7,2904	7,297	7,3035	7,31
83,4	7,3061	7,3128	7,3195	7,3262	7,3329	7,3395	7,346	7,3526
83,5	7,3488	7,3556	7,3623	7,369	7,3757	7,3823	7,3889	7,3955
83,6	7,3918	7,3986	7,4054	7,4121	7,4188	7,4254	7,4321	7,4386
83,7	7,4351	7,4419	7,4487	7,4555	7,4622	7,4689	7,4756	7,4822
83,8	7,4788	7,4856	7,4925	7,4993	7,506	7,5128	7,5195	7,5261
83,9	7,5228	7,5296	7,5365	7,5434	7,5502	7,5569	7,5636	7,5703
84	7,5671	7,574	7,5809	7,5878	7,5946	7,6014	7,6082	7,6149
84,1	7,6118	7,6187	7,6257	7,6325	7,6394	7,6462	7,653	7,6597
84,2	7,6568	7,6638	7,6708	7,6777	7,6846	7,6914	7,6983	7,705
84,3	7,7022	7,7092	7,7162	7,7232	7,73	7,7369	7,7438	7,7506
84,4	7,7479	7,755	7,762	7,769	7,7759	7,7829	7,7897	7,7966
84,5	7,794	7,8011	7,8082	7,8152	7,8221	7,8291	7,836	7,8428
84,6	7,8405	7,8476	7,8547	7,8617	7,8687	7,8757	7,8826	7,8895
84,7	7,8873	7,8945	7,9015	7,9086	7,9157	7,9227	7,9296	7,9366
84,8	7,9345	7,9417	7,9488	7,9559	7,963	7,9701	7,977	7,984
84,9	7,982	7,9893	7,9964	8,0036	8,0107	8,0177	8,0248	8,0318

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	1	1,1	1,2	1,3	1,4	1,5	1,6	1,7	1,8	1,9	2	2,1	2,2	2,3	2,4	2,5	2,6	2,7	2,8
85	5,9189	5,9779	6,0326	6,0836	6,1314	6,1765	6,2192	6,2597	6,2983	6,3351	6,3704	6,4043	6,4368	6,4682	6,4985	6,5278	6,556	6,5835	6,6101

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	2,9	3	3,1	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4	4,1	4,2	4,3	4,4	4,5	4,6	4,7
85	6,6359	6,6611	6,6856	6,7094	6,7326	6,7554	6,7775	6,7991	6,8203	6,841	6,8613	6,8811	6,9006	6,9197	6,9384	6,9567	6,9748	6,9925	7,0099

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	4,8	4,9	5	5,1	5,2	5,3	5,4	5,5	5,6	5,7	5,8	5,9	6	6,1	6,2	6,3	6,4	6,5	6,6
85	7,0271	7,0439	7,0605	7,0768	7,0929	7,1087	7,1242	7,1395	7,1547	7,1696	7,1843	7,1989	7,2131	7,2273	7,2412	7,255	7,2686	7,282	7,2953

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	6,7	6,8	6,9	7	7,1	7,2	7,3	7,4	7,5	7,6	7,7	7,8	7,9	8	8,1	8,2	8,3	8,4	8,5
85	7,3084	7,3213	7,3342	7,3468	7,3594	7,3717	7,384	7,3961	7,4081	7,42	7,4317	7,4434	7,4549	7,4663	7,4776	7,4888	7,4999	7,5108	7,5216

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	8,6	8,7	8,8	8,9	9	9,1	9,2	9,3	9,4	9,5	9,6	9,7	9,8	9,9	10	10,1	10,2	10,3	10,4
85	7,5325	7,5431	7,5537	7,5642	7,5746	7,5849	7,5951	7,6052	7,6153	7,6252	7,6351	7,645	7,6547	7,6643	7,6739	7,6834	7,6929	7,7022	7,7115

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	10,5	10,6	10,7	10,8	10,9	11	11,1	11,2	11,3	11,4	11,5	11,6	11,7	11,8	11,9	12	12,1	12,2	12,3
85	7,7207	7,7299	7,739	7,748	7,757	7,7659	7,7747	7,7835	7,7922	7,8009	7,8095	7,818	7,8265	7,8349	7,8433	7,8516	7,8599	7,8682	7,8763

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	12,4	12,5	12,6	12,7	12,8	12,9	13	13,1	13,2	13,3	13,4	13,5	13,6	13,7	13,8	13,9	14	14,1	14,2
85	7,8844	7,8925	7,9005	7,9084	7,9164	7,9243	7,9321	7,9398	7,9476	7,9554	7,963	7,9706	7,9782	7,9857	7,9931	8,0006	8,008	8,0154	8,0227

Table of external index of viability and disease resistance of population - γ_h

e_0 / m_0	14,3	14,4	14,5	14,6	14,7	14,8	14,9	15
85	8,03	8,0372	8,0444	8,0516	8,0587	8,0659	8,0729	8,0799

ADDENDUM

C

Comparative analysis of some elaborations

ADDENDUM

C_1

Short comparative analysis of the law of survival of populations and the law of survival of real generations

Short comparative analysis of the law of survival of populations and the law of survival of real generations

Characteristic	**The law of survival of populations**	**The law of survival of real generations**
Objective	Projection of survival of populations free from accidental fluctuations	Projection of survival of real generations free from accidental fluctuations
Tasks being solved	1) Determining of integral parameters of population health for a certain year or another period under study 2) Transfer from the law of survival of populations to the law of survival of real generations 3) Projection of average life expectancy after any age free from accidental fluctuations of mortality 4) Projection of the life resource used in any age interval free from accidental fluctuations of mortality	1) Making a dynamic row of integral parameters of health for a certain period 2) Transfer from the law of survival of real generations to the law of survival of populations 3) Projection of average life expectancy of representatives of real generations after any age free from accidental fluctuations of mortality 4) Projection of the life resource used by representatives of real generations in any age interval free from accidental fluctuations of mortality
Data sources	TM “TAGOR” for a certain year or another period under study	A set of TM “TAGOR” for a long period of time - 20 years and more
Mathematical basis	The method of the least squares	The method of the least squares, a set of the methods of the analysis of dynamic temporary rows

ADDENDUM

C_2

Short comparative analysis of the traditional tables of mortality and trend tables of mortality

Short comparative analysis of the traditional tables of mortality and trend tables of mortality

Characteristic	**TM "TAGOR"**	**TMt "TAGOR"**
Objective	Projection of survival of population by real data on structure of population, birth and mortality	Projection of survival of population by integral parameters of population health free from accidental fluctuations of mortality
Tasks being solved	1) Determining of probability of survival and death of the representatives of every age group by real data on structure of population and mortality 2) Determining of a number of survivors to every age by real data on structure of population, birth and mortality 3) Determining of average life expectancy after every age by real data on structure of population, birth and mortality 4) Determining of life resource used by every age group by real data on structure of population, birth and mortality	1) Determining of probability of survival and death of the representatives of every age group by integral parameters of population health 2) Determining of a number of survivors to every age by integral parameters of population health 3) Determining of average life expectancy after every age by integral parameters of population health 4) Determining of life resource used by every age group by integral parameters of population health
Data sources	Data on population structure at the beginning of the year or period under study, mortality for the year or period under study(with accurate dates of birth and death of the dead) and data on birth for the year or period under study (with dates of birth)	"TAGOR" tables or (while using express methods) official data on mortality at the age under 1 and average life expectancy at birth
Mathematical basis	Formulas of the probability theory	The method of the least squares, a set of the methods of the analysis of dynamic temporary rows

ADDENDUM

C_3

Short comparative analysis of the traditional tables of mortality and the tables of mortality for small territories

Short comparative analysis of the traditional tables of mortality

and the tables of mortality for small territories +)

Characteristic	**TM "TAGOR"**	**TMt "TAGOR"**
Objective	Projection of survival of population by real data on structure of population, birth and mortality	Projection of survival of small population by real data on structure of population, birth and mortality and control of efficiency of medical and preventive activities in such populations
Tasks being solved	1) Determining of probability of survival and death of the representatives of every age group by real data on structure of population and mortality 2) Determining of a number of survivors to every age by real data on structure of population, birth and mortality 3) Determining of average life expectancy after every age by real data on structure of population, birth and mortality 4) Determining of life resource used by every age group by real data on structure of population, birth and mortality	1) Determining of probability of survival and death of the representatives of every age group of small population by real data on structure of population and mortality 2) Determining of a number of survivors to every age by real data on structure of population, birth and mortality in small population 3) Determining of average life expectancy after every age by real data on structure of population, birth and mortality 4) Determining of life resource used by every age group by real data on structure of population, birth and mortality in small population
Data sources	Data on population structure at the beginning of the year or period under study, mortality for the year or period under study (with accurate dates of birth and death of the dead) and data on birth for the year or period under study (with dates of birth)	Data on population structure at the beginning of the year or period under study, mortality for the year or period under study (with accurate dates of birth and death of the dead) and data on birth for the year or period under study (with dates of birth)
Mathematical basis	Formulas of the probability theory	Formulas of the probability theory

+) The validity of making vehicle TM for small territories is disputed by some researchers on the basis that they are contrary to the law of large numbers. But the law of large numbers only states that with the increase of sampling the frequency of a particular outcome occurrence tends to the probability of this outcome. If we deal with the general population (for the area under study), then there is no necessity to make difference between probability and frequency of occurrence. It is another matter that in a small population for small age groups there can be substantial amendments to migration. That is, based on the fact that temporary fluctuations in population number and number of deaths in a small population can be significant, there is a question only about the long-term prediction by using these tables and no more.

ADDENDUM

C_4

Short comparative analysis of the elaborated methods of infant mortality and the method used by WHO

Short comparative analysis of the elaborated method of infant mortality and the method used by WHO

Characteristic	**TM of WHO**	**TM "TAGOR"**
Objective	Determining of death probability at the age under 1 in a certain year	Determining of death probability for a certain year generation of the born people
Tasks being solved	1) Determining of age coefficient of mortality 2) Determining of probability of death at the age under 1	1) Determining of age coefficient of mortality 2) Determining of probability of death at the age under 1
Data sources	Data on a number of individuals born alive in a certain and previous years and data on a number of the individuals who died at the age under 1 in a certain year	Data on a number of individuals born alive in a certain year with the dates of birth and data on a number of the individuals who died in a certain and the following years with the dates of birth and death of the dead
Mathematical basis	Formulas of the probability theory	Formulas of the probability theory

ADDENDUM

C_5

Short comparative analysis of the tables of morbidity-mortality and trend tables of morbidity-mortality

Short comparative analysis of the tables of morbidity-mortality and trend tables of morbidity-mortality

Charac teristic	**MT/M_bT "TAGOR"**	**MT_t / M_bT_t "TAGOR"**
Objecti ve	Projection of life and health preservation of population members as for certain chronic diseases and projection of these diseases prevalence by real data on structure of population, birth and mortality	Projection of life and health preservation of population members as for certain chronic diseases and projection of these diseases prevalence by integral parameters of population survival and health
Tasks being solved	1) Determining of probability of survival and death of the representatives of every age group by real data on structure of population, morbidity and mortality 2) Determining of a number of survivors to every age and preserving health as for certain chronic diseases by real data on structure of population, birth and mortality 3) Determining of average life expectancy and its healthy part after every age by real data on structure of population, morbidity, birth and mortality 4) Determining of life and health resources used by every age group by real data on structure of population, birth, morbidity and mortality	1) Determining of probability of survival and death of the representatives of every age group by the parameters of the law of survival of population health 2) Determining of a number of survivors to every age and preserving health as for certain chronic diseases by the parameters of the law of survival of population health 3) Determining of average life expectancy and its healthy part after every age by the parameters of the law of survival of population health 4) Determining of life and health resources used by every age group by the parameters of the law of survival of population health
Data sources	Data on population structure at the beginning of the year (period) under study, primary morbidity and mortality for the year (period) under study (with full dates of birth and death of the dead and dates of the disease finding out) and data on birth for the year or period under study (with dates of birth)	Data on population structure at the beginning of the year (period) under study, primary morbidity and mortality for the year (period) under study (with full dates of birth and death of the dead and dates of the disease finding out) and data on birth for the year or period under study (with dates of birth) or (with the use of express methods) data on morbidity at the age under 1 and average life expectancy of the healthy part of life
Mathem atical basis	Formulas of the probability theory	The method of the least squares

ADDENDUM

C_6

Short comparative analysis of the law of survival of populations and the law of preservation of health

The law of survival of populations	The law of preservation of health
+) $$l(x) = \exp\left\{-\frac{(x/x_0)^{\alpha}}{\gamma[1-(x/x_0)]}\right\},$$ where $l(x)$ – relative share of individuals, surviving from birth till the age x; - in the system analysis: an indicator of preserving (losing, using) the resource of health and life by generations (population, populations); - in the mathematical analysis: function of life preserving; x_0–life expectancy limit (age limit) of the generation born simultaneously; - in the system analysis: specific(biological) resource of health of people (living on the same territory) necessary for life preserving; _________________________ +) The parameters of formula are defined on the basis of data of general (trend) tables of mortality (MT_t "TAGOR"), that is, made with the use of full dates of birth and death of the dead and processed with the application of the method of the least squares (MLS)	+) $$l_h(x) = \exp\left[-\frac{(x/x_{0h})^{\alpha_h}}{\gamma_h(1-x/x_{0h})}\right],$$ where $l_h(x)$- relative share of individuals, surviving from birth till the age x healthy, not ill with *h*-disease (group or class of *h*-diseases); - in the system analysis: an indicator of preserving (losing, using)the resource of health and life by generations (population, populations) due to the prevalence and consequences of *h*-disease; - in the mathematical analysis: function of life preserving; x_{0h}- life expectancy limit (age limit) of the generation born simultaneously without (officially diagnosed) *h*-disease; - age limit of preserving healthy state of population as for *h*-disease; - age limit, which can be reached without falling ill with *h*-disease (being healthy as for it, group or class of *h*-diseases); - in the system analysis: complex – inborn (biological) and acquired (social) – limit resource of health providing life- and *h*-disease resistance; _________________________ +) The parameters of formula are defined on the basis of data of combined (trend) tables of morbidity, disease course and mortality (M_bT_t "TAGOR"), made with the use of full dates of birth and death of the dead and processed with the application of the method of the least squares (MLS)

- internal α, inborn viability (biological aspect) or internal vitality (social aspect) of the generation born simultaneously(population, populations);	- internal α_h, inborn *h*-disease resistance of the generation born simultaneously (population, populations) – biological and social aspects (in combination);
- innate ability to the own preservation (to preserve general health, not to die, to survive), gotten as an inheritance from parents and displayed primarily in the period of maturation (adaptation), fading with the years of life;	- innate ability to preserving of life and, at the same time, *h*-health – as resistance to *h*-disease (group or class of *h*-diseases), gotten as an inheritance from parents and displayed primarily in the period of maturation (adaptation), fading with the years of life;
- innate general resource of health necessary for life preserving, gotten from parents;	- innate *h*- resource of health (as a part of general resource of health) – innate resistance to *h*-disease (gotten from parents);
- critical index of mortality (loss of resource of health, necessary for life preserving) primarily in the period of maturation (adaptation);	- critical index of loss of health resistance resource as for *h*-disease (group or class of *h*-diseases) primarily in the period of maturation (adaptation);
- index of probability to adapt to the environment of living;	- index of probability to adapt to the environment of living, where *h*-pathology is spread, preserving life and, at the same time, health as for this pathology;
- quality of population gene pool.	- quality of population gene pool from the point of view of resistance to *h*-disease (s);
	- coefficient of population gene pool resistance to *h*-diseases exposure to it.
- external γ vitality of population (populations) generations – as a general resistance to negative influence of habitat, including way of life in it;	- external γ_h *h*-disease resistance – as a resistance to the influence of anthropogenic (socio-ecological)habitat factors including way of life in it,
- resistance of generations (population, populations) born simultaneously to	

preservation of specific natural parameters of health providing survival till the age *x* under the conditions of changing habitat; - index (speed) of loss of specific (biological) health resource, necessary for preserving life depending on quality of habitat; - index (speed and time) of proximity to health loss, necessary for preserving life in the habitat with γ – a quality of vitality; - index of ability of population (populations) generations to adapt habitat to internal needs (as an index of interaction); - index of benevolence (quality) of habitat from the point of view of preserving of innate health resource necessary for preserving health in the mature age: middle and senior age groups. (-) – sign "minus" means that the function of surviving (in other words: preserving of health and life resource) is always less that unity (1.0) and its value decreases with the time being, years of life, with the increase of age, years of life.	facilitating prevalence and action of *h*-disease with the development of negative consequences leading to death; - *h*-disease resistance of generations (population, populations)born simultaneously till the age *x*under the conditions of *h*-disease prevalence in the habitat; - index (speed) of loss of resistance to the action of *h*-disease taking into consideration the quality of habitat; - index (speed and time) of decreasing the resource of resistance to *h*-disease, leading (causing) to complete loss of life and health in the mature age in the habitat; - index of resistance of population (populations) to influence of *h*-disease – as an index of interaction (adaption and resistance); - index of benevolence (quality) of habitat from the point of view of possibility to preserve *h*-health, that is not to fall ill with *h*-disease (group, class of *h*-diseases) in the mature age: middle and senior age groups; -coefficient of "favoring" of population habitat and way of its life to health preserving under the influence of *h*-diseases. (-) - sign "minus" means that the function of resistance to *h*-disease is always less that unity (1.0) and its value decreases with the time being, years of life, with the increase of age, years of life.

INFORMATION ABOUT THE AUTHOR

V.L.Tarallo, Doctor of Medical Science, Full Professor was born in 1945, in Chernovtsy (Ukraine, Bukovina). He got higher education in Krasnoiarsk Medical Institute (Russia, Siberia). He defended his PhD thesis “Cybernetic diagnostics of chronical low-grade pyrexia” in 1973. He worked as a senior lecturer of the Department of Social Hygiene and Organization of Health Protection of Krasnoiarsk Medical Institute till 1978. In 1978 he became Associate Professor and from 1982 V.L.Tarallo was Head of the Department of Social Hygiene and Organization of Health Care of Chernivtsi Medical Institute. He defended his thesis for a Doctor’s degree “Scientific basis for integral evaluation of population health”. He is an author of 8 monographs, 12 manuals, 6 inventions, 3 laws – the law of survival of populations, the law of survival of real generations and the law of preservation of health (registered in the International Information Intellectual Novelty Registration Chamber of CEC UNO), 36 novelties, 20 methodical recommendations, 270 scientific and training-methodical articles. His scientific achievements are as follows: elaboration of leading aspects of the theory of health, the theory of health protection, the theory of population health management, the theory of diagnosis, the theory of cybernetic modeling of diagnostics and diseases clinical course, the methodological basis of the system research of medical and social objects and phenomena. He established leading system constituent elements of health, defined current integral indicators, their norms and standards, criteria of habitability of territories for population from the point of view of its health preservation. V.L.Tarallo developed the methods of the system analysis of morbidity, clinical course of diseases and mortality of them by all classes of ISC, the methods of measurement of the limit age of homo sapiens existing, the methods of measurement of "full" risks to people's life and health, directions and resource conditions of their terminating for all territories of the world, the methods of control of efficiency of the current health improvement programs by created prognosticating tables of population health for any territories of the world. He is a doctor-organizer of health care of the highest category.

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