

**FEATURES OF MEDICAL FEED AT SACCHARINE DIABETES**

Kalmykova Y.S.

Kharkiv State Academy of Physical Culture

**Annotation.** The basic approaches are considered to application of medical feed at saccharine diabetes. An analysis is conducted more than 30 literary sources. It is set that a dietotherapy is obligatory for all of patients saccharine diabetes and allows to obtain his indemnification more than in third of cases. It is marked that at saccharine diabetes of the I type it is necessary basis of diet to count the severe observance of time of reception of meal, constancy of its composition and amount. At diabetes II type a substantial value is acquired by achievement and subsequent support of ideal mass of body. It is set that basic modern principles of dietotherapy at saccharine diabetes is: physiological composition of carbonhydratess (55-60%), fats (20-25%) and albumens (15-20%); calculation of power value of day's ration taking into account mass of body, age, floor, power charges; exception from the diet of the refined carbonhydratess which are easily mastered; a feed must be a shot; severe mode of distributing of power value of day's ration and sacchariferous value of meal on an amount and clock of reception of meal.

**Keywords:** saccharine diabetes, dietotherapy, feed, meal, carbonhydratess.

**Introduction.**

A dietotherapy (DTh) continues to remain the basic method of treatment of diabetes mellitus. It is obligatory for all patients without exception with a diabetes mellitus (DM) and allows to obtain its indemnification more than at third of cases. In connection with absence of etiotropic therapy of diabetes mellitus the only real prophylactic measure of origin and development of vascular complications on the modern stage is maximal indemnification of various metabolic violations peculiar to this disease [6, 9]. Dietotherapy assists not only of decreasing of arterial pressure, but also can decrease possibility of risk of progress of coronal heart trouble due to it lipid falling effect [2, 3].

Regardless of etiology, duration and character of motion of DM the necessary condition of effective treatment of patients is inhibition by them physiology diet that envisages coverage of all power charges depending on character of labour activity [1, 4, 5]. DTh helps to attain complete normalization of metabolism for patients on DM, it must assist the offensive of good feel, support of capacity, normal development of children and teenagers, patients on DM, to normal motion of pregnancy for women and increase of life-span [8, 10, 21].

Violations of diet result mostly to the increase of dose of sugar falling preparations, sometimes the basis of insulin and sulphonamide resistance, accompanied by development of obesity [11, 12]. Rough errors in a diet conduce to proof decompensation of DM, assist early appearance and rapid progress of diabetic angiopathy and row of chronic complications of DM [17].

At setting of curative feed do not take into account concomitant pathology and complication of basic disease, not enough attention attend for prophylaxis and correction of dysl-epidemic [15]. There is not single diet through the necessity of account of power charges, ideal mass of body, dose of sugar lowering preparations and concomitant diseases weight.

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**Aim, task, material and methods.**

*Aim of work* - to consider the basic approaches to application of dietotherapy at a diabetes mellitus.

**Results.**

With the aim of reduction of level to glycemia, content of lipids in the serum of blood, reduction to surplus of body weight for patients with a diabetes mellitus is used a diet with moderate limitation of carbohydrates and complete exception of the refined sugars with sufficient content of proteins that answer physiology needs of a man and fats [14, 19]. The food ration of patients is necessarily enriched by vegetables: cabbage, carrot, kidney bean, peas, beet; by fruit: red and white currant; rye bread, that consumed as a source of food fibres (from a calculation 18-25 gr on a day) [20].

DTh differentiates depending on the type of DM. Basis of diet at DM of 1 type can be strict regime of taking meals, and also constancy of its composition and amount. For warning of the hypoglycemia states expedient additional receptions of meal. At DM of 2 type substantial value is acquired by an achievement and further support of ideal body weight. In this time applied the automated calculation of diet to the patients on DM [24].

Main modern principles of DTh at DM are:

- physiological component of carbohydrate (55-60%), fats (20-25%) and proteins (15-20%) [25, 29];
- a calculation of power value of day's ration with taking into account mass of body, age, sex, power charges weight;
- exception from the diet of the refined carbohydrates that is easily mastered;
- feed must be a shot: breakfast - 25% of day's calorie content, second breakfast - 10%, dinner - 35%, afternoon - 10%, supper - 20% [26];
- mode of distribution of power value of day's ration and sacchariferous value of meal after a number and to the o'clock of reception of meal [16, 30].

An estimation of power balance, balance between the receipt of energy with a meal and its expense in the process of vital functions, is extraordinarily important. At the computer count of daily allowance energy consumptions of patients was set in permanent establishment, that at DM of 1 type even the moderate deficit of calorie content of meal does not allow to obtain satisfactory indemnification of metabolism. It is revealed that correlative copulas between efficiency of treatment of patients on DN of 1 type and individual energy consumptions and it is set that the moderate deficit of calorie content of meal is anymore unfavorable for motion of diabetes, than him moderate surplus [28].

The following tendencies can be single out in the development of DTh at DM for the last years:

- I. Usage of dietary fibers (DF).
- II. Usage of sugar substitute (SS).
- III. Purpose of substances that reduce absorption of glucose.

I. Dietary fibers are contained in vegetables (cabbage, carrot, beet, kidney bean, peas etc.), berries (raspberry, red and white currant etc.), fruits, nuts and other plants. Their concentration in different food products varies considerably. The main therapeutic effects at using of DF by patients with DM are:

- decline of level of glycemia and glucosuria,
- reduction to content of lipids in the serum of blood [18, 27],
- elimination of surplus of body weight at patients with the insulin-dependent type of disease [7, 23].

The presence of these effects allows to recommend the wide use of DF in the dietotherapy of patients on DM, especially there is an idea about the insufficient consumption of DF as factor of risk of DM of 2 type.

Near the decline of glycemia and glucosuria application of DF assists the improvement of indexes of glycated haemoglobin.

It is considered that healthy persons must consume about 30 g of DF every day, thus half from them - due to cereal products. At DM their dose also presents 18-25 g\*of day<sup>-1</sup>, maybe its increase to 40 g\*of day<sup>-1</sup>.

II. Sugar substitute are widely enough used in the dietotherapy of DM. Limitation of the use of the refined carbohydrates in a number of cases is difficult carried many by patients on DM. In connection with this 20-30% of patients can not survive the protracted exception of sugar substitutes from a food ration and systematic violate a diet. Most authors consider that high-calorie SS (sorbitol, xylite, fructose) must be appointed in a dose to 30 g on twenty-four hours [24, 26].

III. To the substances that reduce suction of glucose belongs acarbose – complex oligosaccharide of microbial origin. It detains suction of carbohydrates in bowels by inhibition  $\alpha$ - glucoside hydrolase as a result of which suction of sucrose increases that conduces to the decline to glycemia [26, 30].

Diet number 9 is used with the aim of conditioning for maintenance of positive carbohydrate balance, normalization of violations of carbohydrate exchange and prevention of violations of lipometabolism. In early 20th of XX century, watching patients, a professor M. Pevxner came to the conclusion, that diet with normal content of fats (to 100 g) and poor carbohydrates results in the gradual decline of body and normalization of carbohydrate exchange weight. It is find out that overweight depended, mainly, on the amount of consumable carbohydrates, but not fats, as considered before. On this principle is based all lowcarbohydrate diets appeared relatively recently. Thus, in basis of diet №9 principle of decline of calorie content of ration lies due to reduction of absorb carbohydrates. Undoubtedly advantage of diet №9 is balanced ration at that organism gets all the substances need to him. Content of carbohydrates is not so radically reduced, as, for example, in the Atkins protein diet (20 g). It means that diet №9 can be used long enough, unlike the above-mentioned diets [22].

Chemical composition of meal in diet №9 is balanced. Energy value – 2300 kcal. During the day organism gets about 100 g of proteins (60% of which are animal origin), 80 g of fats (25-30% of them are of vegetable origin with high level of polyunsaturated fatty acids, mass of 24 hour ration – to 30 kg, all meals are cooked and baked). Proposed to take meal not huge portions every 3-4 hour. Quantity of taking meals at diet №9 can rich 5-6 times per day, carbohydrates allocate all day; after the injection of insulin patient must take meal with carbohydrates.

Using this diet is necessary to eliminate easy-absorb carbohydrates from a ration, such as sugar, honey, cooking, vine, chocolate, raisin/pl, dried apricots, dried apricots, fig, candies, pastry wares and pleasures. It is allowed to use in a feed milk, lactate products, cheeses, cheese, sour cream, dairy and vegetable butter, meat of bird and fish (unfat sorts). In addition, the use of soup on low meat or fish broth with a small amount of vegetables, cereals, pasta, and dishes and side dishes of vegetables and leafy greens. You can also enter the diet of vegetables, containing no more than 4-5% carbohydrates, such as tomatoes, cabbage, zucchini, cucumbers, spinach, radishes and lettuce. Such vegetables as potatoes, beets, turnips and carrots are allowed to include in the diet of setting off the settled amount of carbohydrates. Bread is recommended to use mostly black, 200-300 grams per day. Should limit the use of pasta and flour products and cereals and other foods that contain carbohydrates. Sugar should be replaced sorbitol or xylitol to 20-40 grams per day (taking into consideration their caloric content). You can use fruits and berries, preferably sour or sweet and sour to 200 grams per day in raw form, as well as compotes with xylitol or sorbitol.

The main disadvantages of diet number 9 - is the need to prepare meals independently measuring the right amount of products and their counting, and its calories are little different from the usual diet, which requires adherence to a diet for a long time, patients with overweight.

Diet for each patient diabetes adjusted individually. In this case, there is no single diet because of the need to consider energy costs, ideal body weight, dose of hypoglycemic drugs and related diseases. Diabetic patients with concomitant diseases of internal organs prescribe combined diet. For example, if liver prescribe diet number 9/5, which limited fat to 60 grams, are excluded extractives and sweets [13].

In recent years, the publication of the application in diabetic patients, the so-called "free diet." This is achieved mainly through the introduction of the diet of patients with products that contain high amounts of carbohydrates. But "free diet" implies primarily the use of hardware insulin delivery systems that mimic physiological rhythm inkretsiyi hormone that allows us to achieve normoglycemia [2, 8].

#### Conclusion.

Diet for each patient with diabetes selected individually. The basic principles of the modern diet in diabetes are: physiological composition of carbohydrates (55-60%), fat (20-25%) and protein (15-20%); calculation of the energy value of a daily diet including weight, age, sex, energy costs, and exclusion from the diet of refined carbohydrates, easily absorbed, food should be fractional; strict mode of distribution of the energy value of the daily diet and sugar values of food and the number of hours of eating.

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**Information about the author:**

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**Kalmykova Y.S.:** yamamaha13@gmail.com; Kharkov State Academy of Physical Culture; Klochkovskaya str. 99, Kharkov, 61022, Ukraine.

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