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## PHYSICAL REHABILITATION OF STUDENTS THE SPECIAL GROUP OF HEALTH

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The purpose of this research is the study of influence of special correction eye exercises on visual analyzer, aerobic exercises on rehabilitation of students with myopia of moderate and low stage the special group of health. The analysis of functional condition of eye was determined by Hugo Münsterberg technique directed on determination of selectivity and concentration of attention and also a high interference immunity, a technique "memory for the images", intended for the iconic memory study. Physical working capacity level and physical state were detected by Harward step test.

24 female examinees aged from 16 till 20 with myopia of moderate stage were divided into two groups: control and the main ones with 12 people in each group. The rehabilitation course lasted 90 days. The respiratory exercises, general developing exercises and improving of swimming, special exercises to correct sight by M. Corbett technique were included into the program of rehabilitation of the main group. The control group visited only physical training classes.

Results and discussion. The analysis of psychodiagnostic test results of both groups showed that in the main group the value by Hugo Münsterberg technique is higher than in the control group on 33.33 % ( $p < 0,05$ ), following the results of test «Memory for the images» on 42.86 % ( $p < 0,05$ ). The received values are authentic. The following conclusion can be made:

special correction eye exercises by M. Corbett technique carried out in the main group promoted improvement of sight, attention, and memory.

The comparative characteristic of Harward step test (IGST) revealed authentic discrepancies in data between examinees of the main and control groups. So, discrepancies between step test – 11.45 % ( $p < 0,05$ ). Therefore, in the main group after the rehabilitation course the state of cardiovascular system improved and it's the major factor providing increase of working capacity and improvement of functional capacity of the organism. During rehabilitation course changes in the state of the visual system in the main group indicating on improvement of attention and memory were evident. Special correction eye exercises by M. Corbett technique included into the rehabilitation course appeared to be efficient. The comparative characteristic of psychodiagnostic test after the course of rehabilitation in the main group showed better results than in the control one ( $p < 0,05$ ). Special correction eye exercises by M. Corbett technique and respiratory and general developing exercises in combination with swimming proved to be more effective both for the state of organ of vision, and also for improvement of level of working capacity, and can be recommended for rehabilitation of students with myopia of moderate and low stage.

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## ОЦЕНКА СОСТОЯНИЯ ИММУНИТЕТА И НЕКОТОРЫХ ГУМОРАЛЬНЫХ СИСТЕМ РЕГУЛЯЦИИ – ПРОФИЛАКТИКА ЗАБОЛЕВАНИЙ СПОРТСМЕНОВ И КРИТЕРИЙ ПОВЫШЕНИЯ СПОРТИВНОГО МАСТЕРСТВА

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Состояние иммунной системы прямо не влияет на характер энергообеспечения мышечной деятельности. Но снижение реактивности с повторными заболеваниями, неадекватная реакция иммунной системы на метаболические нарушения могут, с одной стороны ухудшать адаптацию к физическим нагрузкам, а с другой стороны, являются критериями состояния адаптационных механизмов.

**Целью** данной работы была оценка состояния иммунитета и нейрогормональной регуляции адаптации к большим физическим нагрузкам у спортсменов высокого класса.

**Материал и методы исследования.** У 100

высококвалифицированных спортсменов (60 пловцов, 40 велосипедистов) в возрасте от 15 до 21 лет изучали уровень кортизола, серотонина плазмы крови и показатели иммунного статуса. Все обследования проводились до и после велоэргометрического теста РВС170.

**Результаты и обсуждение.** Модуляция некоторых регуляторных нейрогуморальных систем характеризовалась нормальным уровнем кортизола на фоне гиперсеротонинемии у всех спортсменов. Кроме этого, у спортсменов выявлено повышение уровня провоспалительных интерлекинов Ил-2, Ил-8, ФНО- $\alpha$  при повышении противовоспалительных интерлекинов Ил-