

MEANS USED IN THE RESTORATION OF THE PHYSICAL AND FUNCTIONAL STATE OF STUDENTS ORGANISM AFTER PHYSICAL EDUCATION AND SPORTS

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ARTICLE INFO.

Key words:

Training, Physical Education, Sport, Physical, Healthy, Will, Responsibility, Recovery, Tool, Pedagogy, Psychological, Medicine, Fatigue, Fatigue, Massage, Bath, Sauna, Hammam, Ecology, Environment, Exercises.

Abstract

This article proposes scientifically based ideas and recommendations about the means used to restore the physical and functional state of the body of students after physical education and sports. It also explains the effect on the body of the means used to restore the physical and functional state of the body, and the use of methods aimed at losses and reducing fatigue. During the training, the role of food intake in order to restore the strength and energy expended by the participants is revealed.

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Enter. It is known that in the fourth priority area of the Action Strategy, directed to "Development of the social sphere", special attention is paid to the development of the spheres of education, culture, science, literature, art and sports, improvement of the state policy regarding youth. Also, in the Resolution of the President of the Republic of Uzbekistan dated June 3, 2017 No. PQ-3031 "On measures for the further development of physical education and mass sports", "In all regions of our country mass sports are important in human and family life, promoting that it is the basis of physical and spiritual health" "It is emphasized that there are important and urgent tasks in promoting, protecting young people entering life with high hopes from harmful habits, creating the necessary conditions for them to realize their abilities and talents, selecting talented athletes from among them, and improving the targeted training system."

Implementation of these tasks in the educational system and regular reforming will bear fruit. President Sh.M. Mirziyoev's words, "Life itself and the demands of the people are putting before us new and more complex tasks that need to be found in practical solutions." In turn, it is necessary to further improve and develop the work we are doing, to develop measures based on scientifically based proposals and recommendations, and to implement them.

Analysis of literature on the topic. The current technical and technological development is causing many environmental problems on the planet Earth. These problems by themselves have different effects on the human body with its negative aspects. This process is especially evident in the recovery of the physical and functional state of the student body after physical education and sports training [1, 2, 3, 4, 5, 7, 8].

Along with the organization and holding of sports events in our republic, the scope, intensity and

number of sports competitions are also increasing. According to scientific data, 73-75% of students are currently engaged in regular sports in their free time. In addition to organizing active recreation, students engaged in sports should take the necessary measures to ensure the recovery of their bodies [3, 4].

Research methodology. At present, in order to eliminate the strain of excessive physical, functional and mental loads of the participants in modern physical training and sports, the rational use of burr means for the recovery of the body is of great importance. Recovery tools were transferred in two forms:

1. Due to the analysis of the body recovery system of students engaged in physical education and sports training and competitions.
2. Through the analysis of the recovery of work ability of students engaged in physical training and sports training and competitions after medical rehabilitation, illness, injury, extreme fatigue and extreme stress.

There are three main means of restoring the body of students engaged in physical education and sports training and competitions - they are divided into pedagogical, psychological and medical groups. Planned and properly structured sports training through pedagogical tools accelerates recovery processes and increases sports results. In this case, it is necessary to control that it is properly carried out by combining intensive and wave loads with rest in micro and macro cycles. Also, the body is restored due to special recovery, rest days, training in different conditions, muscle relaxation exercises, light running, breathing exercises, and proper planning of the final parts of the training, etc. On the basis of mental (psychological) means: - the elation of the mental state, movement and physiological functions of the organism are quickly restored. These include methods of managing various nervous and mental states: moderate sleep, sleep rest, self-confidence, strength of will, muscle relaxation, leisure activities, friends, listening to music, walking in the fresh air, etc [5].

So, the restoration of the physical and functional state of the student's body after physical training and sports training is understood as the return of the physiological state of the body to the state of homeostasis (maintenance of the internal environment) after the change of the functional state of the body. The predominance of the aerobic condition is a characteristic aspect of recovery processes. We know that after a certain load, the body's spent energy resources and its physiological functions are not restored, but its important functional structure appears. Therefore, knowing and taking into account recovery processes will always help training loads properly.

As a result of carrying out loads in physical education and sports training, strong changes occur in the internal environment of the body, energy resources are reduced, thermoregulation is disturbed, the functioning of the cardiovascular and respiratory systems is disturbed. Medicines help to improve their functioning. As a result, fatigue disappears, work capacity increases and the body's adaptation to the next load is facilitated. A wide range of complex tools are used in sports medicine to restore the body's ability to work for students engaged in physical education and sports. Special proper and safe nutrition, diet and pharmacological preparations made from plants are used for this purpose. Also, students engaged in physical education and sports are widely used hygienic means to restore the body's ability to work - standard daily regime, natural means in nature, etc. It should be noted that the most important way to restore the body's ability to work is to use massage, bath, sauna, thermo (hot) - electro, baro-magnetic and other methods [3, 4, 5].

Many medicines have a negative and high effect on the body. Improper use of these tools, incompatibility with the state of the body, increase in the norm (dosage), negatively affects the health of the practitioner, and leads to deterioration of his work ability. Therefore, when using medical devices, it is necessary to take into account the individual condition, age, gender, health, physical development, state of the organism, stage and character of training or competition. These tools are required to be used

under the supervision of a doctor.

Analysis and results. When we analyzed the recovery of the physical and functional state of the students' body after physical education and sports training, and the state of fatigue in their body, it became known that there are often observed situations.

Fatigue, tiredness, itchiness - a physiological state with a decrease in working capacity as a result of excessive stress on the body. Physical fatigue is accompanied by a breakdown of functions such as muscle strength and smooth movement. There is a difference between acute and chronic fatigue. Extreme fatigue occurs as a result of strenuous physical work. Chronic fatigue is a condition associated with incomplete recovery of various functional systems and changes in the whole body over months and years. The speed of fatigue is determined by the nature of work. For example, we saw that a person is much faster when doing work that strains the muscles while standing in one way, and a little less tired when doing work at a steady pace. It was pointed out that a person's attitude towards the work performed also plays an important role in the occurrence of fatigue. Most people don't show signs of burnout until a long period of emotional upheaval. Not getting enough rest or working too hard for long periods of time can lead to fatigue or burnout. Fatigue caused by physical exertion will pass after a short rest. Fatigue is a condition that causes the development of a pre-pathological state, which occurs when the process of fatigue is aggravated, when participating in training without recovery after illness, when the routine of training is violated.

In order to increase the body activity and working capacity of those engaged in physical training and sports training, it is advisable to conduct the next training in the state of incomplete recovery. In the process of speeding up sports training and improving sports performance, great importance should be attached to the regular use of body work capacity recovery [3, 4].

The use of theoretical-methodological and practical proposals, recommendations, methods of application of methods for the recovery of the physical and functional state of the student body after physical training and sports training was implemented. Based on the scientific results obtained during the pedagogical experience:

The indicators of the physical and functional condition of the students of Tashkent State Transport University were applied. As a result, physical and functional indicators of students (teenagers) improved: endurance by 10-12%, speed by 18-20%, flexibility by 17-19%, leg muscle strength by 22-24%, arm muscle strength by 14-16%. , it was observed that the rate of recovery of breathing frequency was much closer to the initial rate obtained before training (14.8 times/min - initial rate, 17.6 times/min - recovery rate) [5].

Combined exercises aimed at increasing their physical and functional indicators and alleviating psycho-emotional feelings were used during the training sessions held in the climate and mountain conditions of the "Khojakent" resort of Tashkent region. As a result, students' physical fitness increased by 13.5-15%, functional training increased by 9.2%, the results of adaptation to climate and conditions increased by 7-8%, the body's recovery rate before training sessions increased by 5.9%, after training , the recovery after 10 minutes of training was 11.7%, an increase was achieved by giving special combination exercises. Functional tests: arterial blood pressure (ABPmm/s.) 9-11%, systolic pressure (SP) by 14%, diastolic pressure (DB) by 9.5-10%, heart rate (UQCh) times/min 15- by 16%, respiratory frequency (NOCh times/min) by 8.3-10%, Shtange's test by 5-6%, Genchi's test by 4.5-5%, lung vital capacity (LVCml) by 10%. The rate of increase in physical fitness: lifting the body lying on the back (the number of executions in 30 seconds) by 29-21%, bending and straightening the arms while resting on the floor (times) by 17-19.5%, pull-ups on the barbell (times) by 14.5-15 by .5%, shuttle run 3x10 m (seconds) by 19-21%, endurance 3000 m, distance running by 13-15%, standing long jump (cm) by 20-22%, integral indicator of physical fitness by 18-20 % increased, their results were analyzed through tests. As a result, students' interest in physical training increased by 42%, health promotion by 48.7%,

physical self-improvement by 54.8%, and the need for emotional relief and relaxation by 40.7% [5].

Conclusions and suggestions. Accelerating or preventing the recovery processes of the physical, functional and fatigue state of the student's body after physical education and sports training is characterized by following a healthy lifestyle, proper and safe nutrition, giving great importance to the daily routine.

Based on scientific information, we can say that the growth and development of the organism, stability of morphological changes and the functional state of biological systems are ensured due to metabolism. As a result of high physical loads, there is an increase in the body's appetite for nutrients, partly for proteins and vitamins. As a result, the energy consumption increases with the increase in power and power consumption of loads. It will be necessary for practitioners and teachers to determine the appropriate energy levels for different physical loads. In order to speed up the recovery process, it is necessary to increase the amount of liquid by 0.5-1 liter and 9-10% of the caloric intake during training and competitions. Also, it is necessary to pay special attention to the consumption of food and protein substances during the recovery period of the body. The protein content of the diet should be 50-60% of meat, fish, liver, dairy products. Amino acids included in proteins, glutamine (milk wheat proteins), lipoproteins (milk, liver, beef proteins and choline) in beef liver, tongue, egg yolk, and peas provide regeneration. Fats and carbohydrates play a major role in the regeneration processes of the body. Oil products should not exceed 20-25%, the amount of carbohydrates should be increased. In order to increase glycogen reserves in the liver muscles, 24-28 hours after loading, the diet of the athletes should be enriched with carbohydrates. It is desirable that 60% of daily calories should be consumed. That's why athletes should eat food enriched with various vitamins. The main development force of our time is our student youth.

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