

INTRODUCTION TO SPORTS PHYSIOLOGY

Ergashev Azizbek

Fergana transport and Service Technical School
Department of socio-economic humanities and
Natural Sciences. Special science teacher

Annotation: This article briefly discusses the importance of sports physiology, which is important for the present day.

Keywords: sports, medicine, physiology, sports physiology, health.

Physiology studies the processes of life activity (function) of the living organism and the organs, tissues, cells and cellular structural elements in it, the connection of the organism with the external environment. The study of various diseases of a person helps to understand the mechanism of most normal physiological processes, as well as to determine the function of certain organs. Another important aspect of physiology is the explanation that the diseases associated with the period that are currently found in humans are deviations from the norm level of various burdens that the body takes on in a daily lifestyle. Physiology is considered closely related to all medical sciences. It is only when the physiological processes occurring in a healthy organism are identified that it is possible to understand the impaired functions of the body in various diseases, to establish the correct ways of treating diseases, and avoid these diseases. For example, the discovery of blood groups became the basis for the science of physiology to important activities in medicine, such as blood transfusions. In solving the problems before the educational system in the innovative processes taking place today, young people are needed who are able to master new information and evaluate the acquired knowledge by themselves, who make the necessary decisions, are independent, as well as free-thinking. Medicine, in turn, has created an incredible number of possibilities for Physiology. Physiology seeks to observe life phenomena and make qualitative and quantitative assessments at different structural levels – from systems or cells, that is, to accurately visualize (them) and formalize the results of observation. When knowing the function or importance of a member in the body, physiologists either remove (remove, or extirpate method) this member or a piece of it, or transplant it to a new place in the body (transplant, or transplant method) as well as observe what the consequences will be after this procedure. To find out if the activity of the organ is due to the action of the nervous system, the nerve fibers that go to that organ are shaved (method of denervation). The study of adaptation in a person allows you to determine effective measures to adapt to living conditions. Health and disease prevention help to understand the mechanisms of development of various functions and abilities of the body. With the assimilation of air, space, underwater spaces, as well as the growth of the population into new geographical-climatic districts, the problem of adaptation is becoming more and more significant.

The justification of the physiological laws of the organization of sports training includes the identification and study of the physiological characteristics of changes in the human body in physical education and sports training, depending on age, gender and special conditions of the environment. Justification of training with health-improving physical education. Sports Physiology occupies an important place in the theory of physical education, forming the basis of the knowledge necessary for the coach and teacher to achieve high sports results and maintain the health of athletes. Therefore, the coach and instructor will be able to better know the physiological processes that occur in the body of the athlete during the training and competition activities in order to build and improve his professional activities on a scientific basis, argue on his own orders

and recommendations, not to overdo it and not harm the athlete's health. The athlete must also understand the essence of the changes that occur during the rehabilitation period in his body, to actively and competently influence them, to accelerate recovery reactions.

All sports exercises can be divided into two large groups. For the first group of exercises, very large (in competitions — borderline) physical loads are characteristic. They impose only high demands on leading physiological systems and require physical actions such as strength, agility, endurance. Such exercises include all kinds of sports such as athletics, swimming, skiing and skating, rowing, sports, solo wrestling, etc. The second group consists of technical exercises, namely: motorsport, sailing, skiing, parachuting, horse, avia and deltaplanerism. The most numerous in terms of number, when performing the first group of exercises, the movement of the athlete in space is carried out mainly at the expense of internal forces (muscle forces). During the performance of technical exercises in the second group, the movements of the athlete, mainly of external forces (not muscle forces), that is, the torque of the car motor (in motorsport); gravity forces (skiing, parachute sports); it is carried out at the expense of the strength of the air flow (in sailing, avia and deltaplanerism). For the physiological classification of sports exercises, an indicator of relative physiological strength (physiological load, physiological tension, weight of work) is used. As such indicators, in response to the physical load performed under certain conditions of the external environment, the relative physiological shifts that occur in leading physiological systems serve. These shifts are determined by comparing the current working indicators of leading physiological systems with the marginal (maximum) indicators.

Literature used:

1. Safarova D., Khairullaeva N. Physiology and sports physiology. Chirchiq 2023.
- 2.2. Nazarov S. Application of innovative technologies in sports physiology classes. Academic Research in Educational Sciences.
- 3.3. Allamuratov Sh. Physiology and sports physiology. Tashkent "Turan-Iqbal" 2010.