



PHYSIOLOGICAL CHARACTERISTICS OF ADAPTATION TO PHYSICAL LOADS.

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Annotation: The article deals with the current problem of adaptation as the general universal characteristics of all living organisms that ensure life activity in changing conditions, the process of adequate adaptation of the functional and structural elements of the organism to the environment.

Key words: Adaptation, process, mechanism, research, interdisciplinary, problem, development, physiological.

Adaptation is a general universal feature that ensures the life activity of all living organisms in changing conditions, and consists of the process of adequate adaptation of the functional and structural elements of the organism to the environment.

It is more correct to attribute the study of the adaptation process and its mechanisms to an interdisciplinary problem, and it may be the most important in understanding many aspects of the development of sportsmen's susceptibility to diseases, health, and fitness.

The system of forming and training a strong, beautiful and resilient person has always been connected with his adaptation to physical loads. Physical stress is the most ancient and natural factor affecting a person. This factor, which is related to nature itself through the earth's gravity, has always accompanied a person, and the activity of a person has always been an important link in his adaptation to the environment around him. One of the unconditional conditions for the development of adaptation to physical loads is the use of the physiological reserves of the body and its mobilization.

From the physiological point of view, the repetition of exercises and the increase in physical loads lead to the expense of reverse biological relations, which allows to improve the functional capabilities of the organs and systems of the body based on the mechanism of self-control. Exercises from this position lead to the activation of the adaptation mechanism, the addition of physiological reserves, and due to this, the human body adapts to increased loads faster and easier, and its physical, physiological and mental qualities, and the state of alertness, increase and improve.

The physiological essence of the state of employment is such a level of the organism's functional state that it is characterized by the improvement of the control mechanism, the increase of physiologic reserves, their readiness for mobilization, and it is expressed by a high level of stability and great work capacity for continuous and intense physical loads. The state of engagement developed in the course of exercise corresponds to the stage of adaptation of the organism to physical loads according to its physiological mechanism and morphofunctional essence. In the concepts of "adaptation and adaptation", on the one hand, "exercise, engagement" and on the other hand, the main thing is to achieve a new level of

working ability based on the formation of a special adaptive functional system with a certain level of physiological constants (invariant values) in the body.

First of all, the characterization and research of these processes and situations related to the justification of rationally structured exercise loads is the special right of pedagogues. Adaptation and flexibility of athletes to physical loads and all functional and structural reconstructions in the body during these loads belong to biological criteria and constitute the main scientific and educational problem of physiologists and medical workers.

Adaptation of the body to physical exercises consists of the mobilization of the body's functional reserves and their use, improvement of existing physiological mechanisms of control.

In the process of adaptation, no new functional phenomena and mechanisms are observed, only existing mechanisms begin to work better, faster and more efficiently. On the basis of adaptation to physical loads, there are neuro-humorous mechanisms that add and improve the functioning of movement units (muscles and muscle groups). In the adaptation of athletes, the activity of a number of functional systems increases at the expense of their reserves, in which the system-organizing factor should be the useful result of adaptation - the fulfillment of the task, that is, the final result of sports. A set of functional systems that ensure the final result of sports is formed by the athlete's body to achieve this result. The absence of a result or its insufficient level can not only form this complex, but also destroy it, stop working depending on the size and character of physiological reserve, will, motivation and other factors. Thus, adaptation to the type of muscle activity is a systemic response of the body aimed at achieving a state of high activity and reducing the physiological value for this.

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