DYNAMICS OF BODY FUNCTIONS IN ADAPTATION AND ITS STAGES

Sh.M.Tairov
Teacher of the Department of "Sports Psychology, Social and Natural Sciences", Fergana Branch of the Institute of Retraining and Advanced Qualification of Physical Education and Sports Specialists
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Abstract: Adaptation is the process of adaptation of the organism to the changing conditions of the environment: adaptation is an international term, and the actual problem of the process of adaptation of the organism to nature, production and social conditions is considered in the article.

Key words: Adaptation, cell, organ, system, organism, innate adaptation, activity, adequate environmental conditions, homeostasis, stability, ability.

Аннотация: Адаптация – это процесс приспособления организма к изменяющимся условиям окружающей среды: адаптация – международный термин, и в статье рассматривается актуальная проблема процесса приспособления организма к природным, производственным и социальным условиям.

Ключевые слова: Адаптация, клетка, орган, система, организм, врожденная адаптация, активность, адекватные условия среды, гомеостаз, устойчивость, способность.

Adaptation includes all types of innate and acquired adaptive activities in cells, organs, systems and organisms. Adaptation maintains homeostasis stability in inadequate environmental conditions, ensures work capacity, maximum life span and production. But not all people can adapt to the same conditions of the environment in the same way and fully, in this case the gender, age, type of the nervous system, level of health, and physical fitness of the person are important. Adaptation is divided into two: rapid (non-improved) and long-term (improved) adaptation.

A rapid adaptation reaction occurs immediately after the onset of the effect, and is carried out through a previously formed ready-made physiological mechanism. The important aspect of this period is that the activity of the organism passes within the limit of physiological possibility and provides the necessary adaptation effect to the full extent.

Rapid adaptation includes reactions that occur in response to exposure. For example, protection from painful effects, increased heat production and decreased heat loss in the body under the influence of severe cold; reduction of

heat loss in response to the high temperature of the external environment; increased heat loss in response to the high temperature of the external environment, increased functions of the blood circulation and respiratory systems, redistribution of blood flow in the body, changes in oxygen transport systems blood, blood circulation, respiratory systems and tissue oxygen absorption in conditions of insufficient oxygen Other reactions can be shown.

As a result of such changes in the work of functional systems, they adapt to the effects of inadequate factors in the body, that is, they prevent the derailment of life processes. In cases where adaptation is insufficiently ensured, physiological processes may be disturbed, and the body's health may weaken.

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