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DEVELOPMENT OF STRENGTH ENDURANCE QUALITIES AMONG STUDENTS

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Annotation: The article describes the features of the development of power endurance in athletes of various sports (using the example of powerlifting, weightlifting, weight lifting). Strength endurance is defined as the ability to overcome or counter a certain resistance through muscle activity (muscle effort).

Key words: power endurance, powerlifting, weightlifting, weight lifting, training effect.

At the current stage of development, the primary task is to prepare a physically healthy person, since it is the younger generation that represents the labor and reproductive potential of the adult population of the country. In this regard, the basis of physical training is laid in childhood in the process of developing the motor qualities of children, subsequent physical abilities of athletes. A special role is played by the strength endurance of young athletes.

The use of means for the development of strength endurance allows you to effectively influence muscle groups and structurally important for the manifestation of efforts in physical activity, and a reasonable combination of strength exercises with other means of physical training (running, aerobics, sports games, etc.) allows you to achieve a high level of development of strength and strength endurance of young men.

Any human motor action is the result of the coordinated activity of the central nervous system and peripheral parts of the motor system, in particular the musculoskeletal system. The central nervous system produces excitation pulses delivered by motor neurons and axons to muscle fibers. As a result, the muscles strain with a certain force that allows you to move the body or its individual links in space. According to N.K. Bernstein, "the basis of each of the motor actions of a person is the manifestation of muscle strength as an integral physical quality, on which the manifestation of all other physical qualities depends to one degree or another" (speed, endurance, etc.).

In the most general form in the theory of physical education, the concept of "force" means the ability to overcome a certain resistance or counter it through the activity of muscles. The resistance can be the force of earth gravitation, which is equal to the body weight of a person, or the reaction of the support during interaction.

A person's strength endurance means his ability to overcome moderate external resistance as efficiently as possible, for specific conditions of production, sports or other motor activity. At the same time, we mean the diverse nature of muscle functioning: maintaining the necessary posture, repeated explosive efforts, cyclic work of a certain intensity, etc.

Strength endurance is "the ability of muscles to produce maximum force for a long time, without significant loss in the strength of muscle contractions. From this definition, it can be seen that strength endurance manifests itself only in the case of large weights and significant muscle contractions.

Strength endurance determines the ability of a person to do work with an effort close to the maximum and as long as possible. For example, squat with a barbell: the more repetitions a person can perform in the first and subsequent approaches in the correct technique without losing weight, the higher his power endurance.

As the main means of developing strength qualities, so-called strength physical exercises are used, the performance of which requires a greater amount of muscle tension than in the usual conditions of their functioning: local, regional and total. An effective means of developing the strength abilities of athletes is powerlifting - power eventing.

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Powerlifting classes imply excellent physical training, self-confidence, good muscle tone, strengthening the entire body of those involved. In this regard, the question arises about the search for the most effective means and methods of harmonious education of strength endurance, in connection with which the problem of studying the development of strength endurance of athletes is of particular relevance.

To develop strength abilities, there are certain methods: maximum effort method, isometric method, repeated effort method, dynamic effort method, isokinetic effort method.

As the main methods for the development of strength in force trainees in the bench press, the maximum effort method, the "to failure" method should be used. For this purpose, several methodological techniques are used: uniform, "pyramid," maximum. With methodical intake, uniform exercises are performed with weight 90-95% from the maximum 2-3 times in 2-4 approaches with rest intervals of 3-5 minutes at an arbitrary pace.

The maximum methodological technique implies the performance of exercises with the maximum possible burden at a given time: 1time x 3-4 approaches with arbitrary rest. The isometric method assumes a short-term stress of the muscles without changing their length for 6 to 12 seconds to resist the resistance of various objects.

If we consider kettlebell lifting, then power endurance comes first, while in powerlifting and weightlifting it is important, but not paramount. Nevertheless, without training power endurance in powerlifting, there will be no progress in power performance, and speed and power endurance plays a large role in weightlifting.

In kettlebell lifting, an increase in the pace of lifting weights in classic and utility exercises over a period of time is the main one for the development of power endurance. In weightlifters, the most effective are combined exercises - a complex of classic and auxiliary exercises in one approach. Effectiveness is determined by increasing the time of exposure to the athlete's body, taking into account the combination of exercises on certain muscle groups. For example, a high training effect is achieved by a combination of traction to knee-thrust jerk-jerk classic-squat with a bar in a jerk grip.

Thus, strength endurance is the ability to overcome or counter a certain resistance through muscle activity. To develop power abilities in powerlifting, the maximum force method, isometric method, repeated force method, dynamic force method, isokinetic force method are used. In weightlifters, combined exercises are the most effective. Kettlebell lifting uses an increase in the pace of lifting weights in classic and utility exercises over time.

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