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# THE IMPORTANCE OF DEVELOPING ENDURANCE IN STUDENTS

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**Annotatsiya:** Chidamlilik shunday fazilatki, u qiyinchilik bilan tarbiyalanadi, yo’qotish esa oson. Chidamlilikni tarbiyalayotgan organizmda o’tayotgan bir necha jarayonni ajratish mumkin: Chidamlilik jismoniy harakat sifati bo’lib, odam organizmining uzoq vaqt davomida mushaklar ishini faol bajarilishida toliqishni yengish qobiliyatidir. Chidamlilik sifati ikki xil bo’ladi, umumiy va maxsus. Umumiy chidamliliik - organizmning uzoq vaqt davomida har qanday mushaklarning ish bajarganida charchoqni yengish qobiliyatiga aytiladi. Maxsus chidamlilik - jismoniy mashqlar yoki sport turlarining biriga xos bo’lgan mushaklar ishi uzoq vaqt davomida bajarilganda charchoqni yengish bilan belgilanadi.

**Kalit so’zlar:** Tarbiya, chidamlilik, umumiy, maxsus, sport, vaqt, mashq, jismoniy sifat, harakat, energiya, faol.

**Аннотация:** Устойчивость — это качество, которое трудно развить и легко потерять. Можно выделить несколько процессов, протекающих в организме, развивающем выносливость: Выносливость - качество физического движения, способность организма человека преодолевать утомление при активном выполнении мышечной работы в течение длительного времени. Качества выносливости бывают двух видов, общие и специальные. Общая выносливость – это способность организма преодолевать утомление при длительной работе любых мышц. Специфическая выносливость определяется преодолением утомления при длительном выполнении мышечной работы, характерной для физических упражнений или занятий спортом.

**Ключевые слова:** Воспитание, выносливость, общее, специальное, спорт, время, упражнения, физические качества, движение, энергия, активность.

**Abstract:** Resilience is a quality that is hard to cultivate and easy to lose. It is possible to distinguish several processes that take place in the organism that develops endurance: Endurance is the quality of physical movement, the ability of the human body to overcome fatigue during the active performance of muscle work for a long time. Endurance qualities are of two types, general and special. General endurance is the body's ability to overcome fatigue when working any muscles for a long time. Specific endurance is determined by overcoming fatigue during long-term performance of muscle work characteristic of physical exercise or sports.

**Key words:** Education, endurance, general, special, sport, time, exercise, physical quality, movement, energy, active.

**INTRODUCTION** Endurance is the ability of the body to overcome fatigue as a result of physical activity. It depends on the characteristics of the central nervous system and energy metabolism. Endurance is such a quality that it is difficult to cultivate, but easy to lose. Several processes occurring in the body that are cultivating endurance can be distinguished: Endurance is a quality of physical activity, the ability of the human body to overcome fatigue during active muscle work for a long time. The quality of endurance is of two types,

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general and special. General endurance - refers to the ability of the body to overcome fatigue when performing work of any muscle for a long time. Special endurance - is determined by overcoming fatigue when performing muscle work specific to one of the types of physical exercises or sports. Special endurance develops on the basis of general endurance and arises from the process of accurate and thorough performance of speed, strength and endurance exercises. The level of endurance training is primarily expressed in the rapid and beneficial breakdown of glycogen in the blood, in the cardiovascular, respiratory, muscular and nervous systems, in the kidneys, and in the increase in functional capacity. [1,1]

**LITERATURE REVIEW AND METHODOLOGY** In order for the body to achieve a good functional state, it is necessary to use all exercises aimed at developing endurance. Energy metabolism indicators are necessary to assess the functional state of the athlete at a given level and level of physical training. To determine this, the main and additional indicators are used; g) the main indicators of aerobic endurance are the following; maximum air exchange of the lungs is equal to the volume of oxygen saturation of the blood, the minute volume of blood, the difference in arteriovenous oxygen: d) the main indicator of anaerobic endurance is the task of saturating the body with maximum oxygen, that is, the oxidation of all metabolic products that accumulate in the body after heavy physical exertion and their removal from the body in the required high amount. The part of the maximal oxygen saturation function, that is, the part that goes to the oxidation of the main product of anaerobic glycogen, lactic acid, is called the “maximal oxygen function of the lactate fraction”. [3,5]

An additional indicator of anaerobic endurance can serve as an indicator of the activity level of the fermentative system, the total reserve of substances used for anaerobic resynthesis of adenosine triphosphate, as well as an indicator of adaptive and compensatory changes in various tissues and organs; e) types of physical training differ from each other in their parameters (the size of the muscle mass, the type of muscle tension, the plan of the exercise being performed, the power). Each of the main parameters of training corresponds to a separate type of muscle work when performing work. For example, one can choose a physical exercise in which the muscle work can be local, equivalent to the holding, maximum in its activity. The development of endurance in aerobic and anaerobic modes is carried out by performing a specific muscle work. This involves physiological and biochemical changes in the body. The magnitude of these changes allows us to monitor the adequacy of physical exercise to the level of the organism's adaptability. In addition, it assesses how the problems of variability in the human body are resolved, and the success and endurance in this area are increased. [4,6]

In training endurance, the correct choice of training methods is of great importance. The uniform or uniform speed method is characterized by uniform work of low and medium intensity. It plays a major role in training and improving anaerobic processes. The use of this method is recommended in the initial period and in the preparatory stages, and is a prerequisite for beginner athletes as the easiest and most useful method. The recovery method is characterized by three main parameters of the loads: duration, speed (intensity), short duration of repetitions and 2 parameters of rest - duration and speed. For example, a sprinter runs 100 m at a fast pace 10 times: the rest interval is 10 minutes, rest is slow. This method is mainly used by highly qualified athletes, that is, in the final preparations before the main competition. Alternating style - it is also characterized by three stages of tension (duration, intensity, short interval between repetitions) and one rest parameter - duration. For example: a distance of 2000 m is run in an alternating style, of which 50 m is fast, 50 m is slow. In this method, the return of the next fast part of each distance occurs when the muscle is not fully recovered. This method is used by athletes from young beginners to elite athletes. [2,5]

Varying the length of the fast part of the run, as well as the slow part of the run. This method is necessary to maintain the achieved result and can be effectively used to improve it. Interval repetition is characterized

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by 4 parameters of the method of complication: duration (number of repetitions of series, number of series 134) and 4 rest parameters (rest interval within a series, rest interval between series and the nature of this rest interval). For example: 4 sets of running 50x60 m, 3/4 of the effort, 1 minute rest between sets, 5 minutes between sets, slow rest between sets, mixed between sets (slow in the first minute, the next 3 minutes - fast running, the last minute - slow). The interval training method allows you to perform exercises in many variations, so its application is very wide, it can be considered the main method in training endurance:

a) maximum effort method - the athlete is given the heaviest possible load (load) or performs a very complex exercise, in which the exercises are performed infrequently, repeated a maximum of 1-2 times. If over time it becomes possible to perform these exercises more than indicated in the training, then in order to maintain the essence of the method, it is necessary to increase the intensity and complicate the exercise;

b) the repetition method - performing exercises that are slightly lighter than the previous one or are performed at a higher level, 30-60 minutes, in which the exercises are repeated as many times as possible;

c) the interval-repetition method - with a not very heavy load; or using your own body weight, performed in series, and the time of performing the exercise is: - rest time between repetitions and series; - the number of series in the warm-up; - most importantly, the speed of each exercise is clearly limited.

Later, the expression “circular training” arose from the interval-repetition method, and to this day this method is considered the main tool for developing strength abilities in the body. Speaking about the methods of developing the agility (speed) qualities of the body, we will mention methods similar to the methods for developing endurance, but with the following conditions:

a) any exercise or its repetition must be performed at maximum speed;

b) the exercises should be performed at a high level of intensity until the time limit is reached;

c) rest between repeated exercises should allow the body to recover;

g) the duration of rest depends on the stages of achieving sports skills. It should be noted that not just one quality is developed in an athlete, but all qualities.

For example, in a 25-meter pool, the following interval-repetition exercises are performed; 2 times (with an intensity of 75 seconds, a rest between series of 45 seconds, a rest between repetitions of 3 minutes. In this case: a) speed develops when swimming short distances; b) endurance - when performing a series of repetitions of the entire exercise; c) strength - when swimming long distances; d) flexibility - in any movement; d) agility - increases when performing turns. The development of all qualities is especially manifested in periodic exercises. Planning sports training Before embarking on the issue of planning sports training exercises, it is necessary to determine its tasks and goals. The main goal of sports training is to train highly qualified athletes. They must be ready for productive work, to defend their homeland. To solve this main problem, it is necessary to pay attention to the following in training: 1. Educational issue. The upbringing of an athlete takes place in the following stages:

a) moral - aimed at forming an athlete's worldview, interest, attitude to himself, others, and work;

b) intellectual - provides for the upbringing of the creative and cognitive abilities of the individual; c) aesthetic - educates the ability to perceive the beauty of the environment, work, sports activities;

g) will is aimed at educating the athlete's ability to set goals for himself and strive to achieve them.

2. Health improvement - is solved through comprehensive physical education of the individual. We must foresee the physical qualities of health strengthening and the formation of the body through physical improvement.

3. It is an educational and pedagogical process, the goal of which is achieved through technical, tactical and theoretical training. The plan of sports training exercises is drawn up for various periods of educational training processes, which have their own specific tasks and goals. The most common types of planning are:

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1. Long-term (prospective) planning - usually planned for a period of 4 years.

This includes the period from one Olympiad to the next or from one Spartakiad to the next. This planning sets the goal of preparing talented athletes for the Olympics in a higher educational institution. This planning allows for orderly and consistent preparation for competitions. The main 3 goals of long-term planning are to develop special and general qualities in an athlete and raise them to sporting heights. 2. According to most physical education specialists, annual planning of sports training is of primary importance. In sports, depending on the tasks and goals set for the athlete for a year, as well as the level of sports training, annual planning is as follows: a) one-period planning of sports training exercises. Such planning has one preparatory, one competitive and one transitional period at the end of the period (year). Such planning is drawn up for athletes who plan to participate in 1-2 competitions per year, but these are held within a short period of time, up to the month before the competition. One-period planning has its advantages, in particular, the preparation period is long, it allows for the detailed development of each physical quality separately. In this case, a lot of time is allocated to the upbringing of each quality, and all means and methods are used to improve them. As mentioned above, one-period planning is mainly drawn up for athletes who are just starting to engage in sports and allows them to “not miss” some of the abilities of some talented young athletes that manifest themselves only after a long period; b) two-period planning and planning for a “double period”.

The difference between the planning of these two sports training is not so great: in two-period planning, there is a transition period at the end of each period. It is used when there are 2 or more periods between the planning and competitions (according to the calendar), while the “one-period plan” is one at the end of the year.

DISCUSSION AND RESULTS Signs and qualities of endurance require a lot of repetition of exercises, long periods of training. In endurance, breathing, holding the breath, and getting used to the muscles and all joints to perform heavy and light movements are paramount. Signs and qualities of endurance are most often found and determined in the following active movements. 1 In the processes of running short, medium and especially long distances (10-20 km. and more) in athletics, shortness of breath, fatigue, and weakness of the legs and arms occur. Especially the arms, shoulders, waist, and as a result, the above activities are easier to perform or tolerate. 2. It is natural to get tired to one degree or another in swimming, football (running, kicking a ball for 90 minutes) and other sports. To overcome and endure them, each participant needs to practice more. It is natural for students and young people to get tired and exhausted in physical education classes (track and field, gymnastics, wrestling, etc.). Because most young people do not have enough physical training and special training. For this reason, first of all, they need to have physical development and special physical training. The concept of physical qualities in socio-cultural living conditions, physical labor and sports is directly related to each other. That is, in everyday behavior, the educational process and physical labor, folk expressions such as “agile”, “light”, “agile”, “strong”, “valiant”, “endurance-endurance” are often found. In their content, expressions such as “endurance”, “strength”, “flexibility”, “agility” used in science are understood as physical qualities. These, in turn, are embodied in expressions and concepts such as “physical preparation”, “physical development”, “special physical preparation”, “sports skills”, “sports form”. It is possible to make some comments about their most important characteristics. Strength is the basis (father) of physical qualities. Because its application and implementation, characteristics, types are used in all practical motor activities, as well as in all types of sports in a specific way and their necessity and need arise.

In sports, strength is mainly used in weightlifting, wrestling, boxing, arm strength testing, and weightlifting. In the above-mentioned sports, muscle strength is achieved through pulling, stretching, pushing, hitting, holding (barbell), etc. movements. In this case, the characteristics of each sport, technical and tactical aspects of performing movements are slow, fast, and fast-force qualities. Muscle strength (dynamometry, stanometry)

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and movement speed (stopwatch, computer, etc.) are the main ones, which are measured using special devices. Movement speed (swimming, running, hitting the ball, kicking, etc.) can be related to strength. That is, when swimming, running, kicking the ball into the goal with force, technical and tactical movements, speed, and strength are interconnected.

CONCLUSION Strength and technique (technique) in pulling up on the horizontal bar are interrelated. That is, speed in raising the shoulders, neck and head, and slightly raising the legs forward while keeping them straight make it easier for the arms to pull. Therefore, to be strong, it is necessary to master the qualities of speed. In our socio-cultural living conditions, strength is often used, such as lifting a full sack (50-70 kg) onto or off a horse (horse, donkey, car). In addition, there must be strength in the arms, back, and legs. The technique of performing this activity can also be different. That is, lifting with two hands or carrying it by hugging; in rural conditions, in wrestling and multi-goat (ulok) games, the expressions “polvon” (strong) and chovondoz-polvon (light-strong) have been used since ancient times. To acquire this virtue and physical quality (strength), they practice for many years. Various means and methods are used in it.

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