

# THE IMPORTANCE OF IMPROVING PHYSICAL FITNESS AND MOVEMENT OPPORTUNITIES OF YOUNG VOLLEYBALL ATHLETES

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## Abstract:

In this article, the role of physical qualities such as strength, quickness, endurance, agility, dexterity, flexibility and agility in the physical, technical and tactical training and general and special training of athletes in the sport of volleyball, and to what extent these physical qualities increase the level of the player's movement capabilities and has been discussed.

**Keywords:** Volleyball, sport, special training, technical training, tactical training, flexibility, athletes, agility, endurance.

## Introduction

It is no secret to any of us that sport has become a symbol of health. In addition, no field can raise the country quickly on the world level. In particular, volleyball is one of the most popular sports, and it is one of the most popular and, therefore, the most convenient means of physical development of young athletes and strengthening their health. It is a truly folk game that is suitable for both adults and teenagers. Along with the rules of the game, physical, technical and tactical training of athletes is also important in volleyball.

Sports qualities such as strength, quickness, endurance, agility, dexterity, flexibility and agility play a key role in the general and special training of volleyball athletes. It is these physical qualities that represent the level of movement possibilities of volleyball players.

Training strength in volleyball athletes is one of the most important physical qualities of a player in the current practice of sports training. Because power determines to a certain extent the speed of movement of a volleyball player on the court, the height of the high jump. Strength, in turn, can be absolute strength, relative strength, "explosive" and "sports".

Absolute strength is the force that occurs when the muscle is contracted, regardless of the original weight of the muscle.

Relative strength is the amount of the player's body weight per kilogram.

"Explosive strength" refers to the ability to produce a large amount of force in the shortest possible time during exercise or play. Volleyball players use this power to jump, break quickly, and pass the ball over long distances.



Quickness in volleyball players depends on the player's ability to perform the most actions in a given situation and in a short period of time. At this point, quickness is demonstrated in the volleyball sport in the following ways:

- the speed of the thinking process is the speed of simple and complex reactions in response to any external influence;
- the speed of performing a single action, the speed of actions should be suitable for the activity of the central nervous system coordinating actions.

Agility is the ability of a volleyball player to coordinate important movements and their accuracy directly to the culmination of power and speed. One of the most important conditions for a volleyball player is the excellent development of coordinated movements performed without support, the ability to maintain balance and maintain a given distance.

The quality of endurance is determined by the state of the central nervous system, readiness to perform tasks, physical qualities, athletes' ability to withstand the exhaustion of movement skills, and mental stability. the exercises you do are the same as during competitions or more, and these exercises should be used continuously.

Training flexibility in volleyball players is the ability of volleyball players to perform the movements encountered in the game in a large amplitude. The mobility of the joints depends on the elasticity of the muscles and tendons. Therefore, first of all, special attention should be paid to increasing the mobility of all joints. Flexibility exercises should be included in your daily morning workout and solo workout. In volleyball players, stretching exercises and initial physical activity, massage, hot baths, warm showers and relaxation exercises help develop muscle and tendon tension.

During the game, technical preparation is determined by the number of technical types that each player has at his disposal, knows how to perform well, and needs to solve game tasks. These situations are inextricably linked with the volleyball player's sports training process and the regular improvement of volleyball game technique.

Ways to improve the technical skills of volleyball players are considered based on theoretical and practical aspects and are carried out along with the improvement of tactics, movement and development of moral and will qualities. Technique is the basis of this game. Knowing how to master it and apply it in various game conditions is a guarantee of achieving high sports skills.

A very important and complex part of training in the process of improving the physical qualities of volleyball players is tactical training. In addition to physical and technical training, it is important to be able to use one's own abilities correctly and skillfully in order to win over the opponent's team. To improve the tactical skills of volleyball players, repetition of mastered and learned exercises many times is the main method of education and training in tactics.

Mental and physical preparation of volleyball athletes includes general mental preparation and preparation for the upcoming competition. Cultivation of mental and volitional qualities is the main task of general mental training. The coach must constantly instill in young athletes the desire to win during training. The most effective way of such aspiration is a sense of social duty and responsibility to the community. It is very important to assign special tasks to individual volleyball players, groups and the whole team.



Every athlete should have highly developed willpower. Courage, determination, initiative, discipline are the main volitional qualities of volleyball players. These feelings are nurtured by the master trainer during training sessions.

Preparation for the tasks given by the coach is the basis of the volleyball player's body and physical preparation. The level of such opportunities is clearly reflected in the performance of their supporting muscle system. For training changes to be lasting, a player on a team must be able to perform a specific task over a long period of time.

Due to the unique movement activity in volleyball, training can be performed at different speeds, alternating between short, long, slow and active rest. Due to the fact that the description of movements in volleyball training is somewhat more intensive, it is required to increase the breathing process to the greatest extent. Special tools are used to increase the readiness of volleyball players to perform tasks.

While proteins, fats and carbohydrates are oxidized in the body, the energy that is hidden in them is released, they also serve as plastic (construction, restoration) material. Vitamins perform a coordinating, adapting function in the body. Research into metabolism, energy production and digestion can serve as a basis for developing nutritional standards.

Hygiene determines the best diets and diet, based on the results of the above studies, as well as on general social patterns of nutrition, taking into account the age of people, their professional activities, living and climatic conditions. The task of hygiene also includes developing requirements for food storage and food processing from a culinary point of view. It is necessary to ensure that the activities carried out ensure high quality of the dish, its taste, taste characteristics, good digestibility and taste.

Ovqat va ovqatlanishga nisbatan gigienik talablar quyidagilardan iborat:

- consumption in quantities that provide full compensation for the energy expended by the body;
- and have the nutrients necessary for the normal functioning of tissues and organs, as well as for the normal course of physiological processes;
- low size, providing a dark grip;
- be light and easily digestible;
- aromatic, aromatic and beautiful to look at, as well as stimulating the appetite;
- have an appropriate temperature;
- can be different, consist of various products of animal and plant origin;
- food must be tasty and of good quality.

It is necessary that meals be taken in a certain order, in accordance with the characteristics of a person's work, living conditions and the climate of the place. To do this, it is necessary to develop certain routines that, to a certain extent, will correspond to everyday habits, images of the population and will ensure rational nutrition throughout the day. We have established optimal physiological norms for nutritional needs. These standards are higher than those accepted in most other countries.

The initial nutritional requirement is that it must provide an energy value from feed rations that fully covers the energy expended overnight. The quantitative aspect of sports nutrition is becoming increasingly important.



Because regular exercise significantly increases energy expenditure, and this requires more and better nutrition. Energy expenditure is measured in large calories (kcal). The required amount of food is also expressed in this unit.

After the oxidation of proteins, fats and carbohydrates in the body, energy is released from 1 g of nutrient in the amount of 4.1, 9.3 and 4.1 kcal, respectively.

These calorie coefficients are calculated by Rubner relative to the digestible portion of nutrients and express net calorie content, that is, directly digestible calories.

The total energy expended per night includes basal metabolism, which is the energy consumed by the body in its calm, completely restful state, as well as additional energy expenditure associated with feeding, as well as with work activities.

The amount of basal metabolic rate will depend on body weight, as the body gets larger, the metabolism also becomes average.

In this case, it is important what the size of the body surface is relative to the mass. The greater the surface area per kg of body weight, the higher the basal metabolic rate.

Mental work has very little effect on metabolism and increases it in huge quantities; only 2-5% of the total energy metabolism occurs in the nervous system. Even very small muscle activity, for example, sitting increases energy metabolism by 12-15%, standing by 20%, walking increases energy metabolism by 80-100%, running by 400%.

The increase in energy metabolism during physical activity is mainly associated with increased oxidative processes in working muscles.

When measuring energy consumption, the method of curvilinear calorimetry (determining gas exchange) is mainly used. Based on a huge amount of scientific research, tables have been compiled showing how much energy is spent when performing various types of physical and mental labor.

In the first days after the start of sports training, body weight decreases by 1-3% due to water loss, fat accumulation, and also due to unproductive, wasted energy due to excessive effort. kg.ga reduces. Then, depending on the degree of advancement towards the chin, the mass also stabilizes and even increases slightly due to muscle development. Body weight is 2-5 kg, if training is excessive, it is reduced to (S.P. Letunov, N.D. Graevskoy).

Take, for example, the Broca index: cm of a person. kg of a person, if you subtract the number 100 from the ring of his height, measured in lar. You get the normal mass, expressed in decimal fractions. This bill is 155-165 cm tall. designed for those who have. The height of the individual is 165-175 cm. Having the number 105, the height is 175-185 cm. If so, then the weight is normally determined by subtracting the number -110.

The importance of proteins for the life and functioning of the body is extremely great. They are part of the cells of the body and form the material substrate on which basic life processes occur. As shown above, the role of proteins is of greater plastic importance; they are building materials for the formation of new tissues, as well as for filling the structure of dead cells. Proteins are part of hormones, enzymes, red blood cells and are used to form antibodies. Thus, proteins are involved in various physiological processes occurring in the body

Among all nutrients, protein is of particular importance. They are essential amino acids and a special source of nitrogen. They are involved in protein biosynthesis. The supply of proteins to



the body has an impact on the level of health, physical development, ability to perform physical labor, and mental development of young children. Adequate supply of protein to the body and its good quality have an impact on the high quality of the internal environment of the body, on growth, development, normal human functioning, and performance. Proteins consist of amino acids, which contain carbon, oxygen, hydrogen, phosphorus, sulfur, and nitrogen. Proteins vary depending on the arrangement of amino acids. Proteins are divided into plant and animal proteins depending on the organism from which they are obtained. In proteins, compared to fats and hydrocarbons, in addition to carbon, hydrogen, oxygen, there is also nitrogen, which makes up 16%. The source of proteins in the human diet are nutrients of plant and animal origin. In the human body, proteins are the building blocks; proteins make up 45% of the dry matter of the human body. Proteins have a high degree of activity and are part of hormones, red blood cells, and some antibodies.

The main role of fats is to provide energy. Every 1g. oil 1g. releases 2.2 times more energy than proteins and carbohydrates. The bulk of fat accumulates in the so-called fat deposits, in the subcutaneous tissue, in the mucous membrane, in the mesentery and on the mucous membranes of various organs. This is a reserve, that is, a store of fat that is used when there is not enough fat in food, but it is primarily used when carbohydrate resources are depleted.

The relevance of this topic lies in the fact that the use of volleyball to attract students to useful pastime, learning to use mastered types of physical exercises for active recreation and useful leisure, independent physical education and sports to improve physical fitness. Together, all these factors ensure harmonious development, provide positive development to a person's psychological health, and also reduce stress and prevent the development of depression.

The novelty of the topic lies in the fact that in the additional educational program great importance is given to technical, physical, and tactical classes. Science has proven that such activities contribute to the proper development of children.

Volleyball helps to develop a sense of collectivism, perseverance, determination, and commitment; attention and quick thinking; the ability to manage your emotions; improvement of basic physical qualities.

At the first general preparatory stage, the volume and intensity of training loads gradually increases. In this case, the degree of increase in volume outpaces the increase in intensity. At the second stage, the special preparatory stage, the volume of loads is gradually reduced and their intensity increases. At the competitive stage, a wide variety of physical training competitions are held: relay races, running, all kinds of "links".

In the studies, children were divided into three groups based on genetic factors. It is known that the basis of heredity is genetic information that is transmitted from parents to children. It largely determines the growth and formation of the organism, its basic adaptive reactions to external influences, and the pace of progressive development at various stages of ontogenesis. The hereditary factor largely determines physical development, the formation of motor qualities, aerobic and anaerobic performance of the body, and the magnitude of the increase in functional capabilities during sports training.

This approach to forming groups based on focus has fully justified itself. Thus, we can state that at the initial training stage it is necessary to orient young athletes towards a specific sport.



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