

Hygienic Approach To Individual Nutrition Of Young Athletes (Archery)

Raimbekova Flyura Andreevna Uzbekistan State University of physical education and sports Department "Theory and methodology of complex technical sports"

Proper nutrition is the most important factor in the health of a young athlete, affecting not only his feeling, but also the indicators of physical activity. In order to compensate for energy consumption, activate anabolic processes, restore performance, meet the needs of development and growth, as well as recover after physical and nervous - mental stress, young athletes need an optimal diet with a sufficient amount of proteins, fats, carbohydrates, minerals and vitamins. During periods of intense training and competitive stages, certain requirements are imposed on the order of nutrition and drinking water. Recommendations for the composition of nutrition for young athletes have been developed and are reflected in a number of guidelines, but research shows that the actual nutrition of athletes of the Tashkent City Department of the Archery Federation of Uzbekistan does not meet certain requirements of the recommended norms. The article examines modern approaches to organizing the nutrition of young athletes and gives recommendations for individual correction and support of nutrition, depending on the sports specialty, the nature of physical activity, the stage and individual characteristics of the training process.

Keywords:

Young Athlete, Archery, Need For Energy.

Introduction.

ABSTRACT

The work carried out in our country to increase the physical fitness of the young generation serves to make the sport more widespread. However, the achievement of high sporting results by young athletes will not be without high training and competition. At the same time, special attention is paid to the competent use of the arsenal of permitted tools, which quickly restores performance. As you know, one of the most important factors that affects the health of a young athlete, indicators of his well-being and physical activity is the adequate nutrition. [4]

The intense and uneven energy consumption typical of sports (up to 34-38% of total energy consumption per day), combined with neuropsychic stress, significantly increases the energy needs of young athletes.[3]

In athletes whose sports training is associated with intensive and long-term physical activity, high nutrient requirements lead to chronic overstrain of the digestive system, which causes an increase in the development of pathology of the gastrointestinal tract [2]. During physical exercise, blood flow to the abdominal organs decreases, and stress in the competitive period is accompanied by a violation of intestinal microbiocenosis: therefore, a kind of "scissors" appear between the limitation of the body's increased need to consume nutrients and the possibility of their assimilation, in this regard, it is necessary to correct the composition of the diet and the nutrition [3] When calculating a diet according to physical activity, many showed clear deviations in the consumption of basic nutrients and microelements [7]. Thus, some of the athletes had a deficit of more than 8% in the energy value of the diet. It has often been found that many athletes get insufficient intake of proteins, polyunsaturated fatty acids, calcium, while saturated fatty acids are superfluous. At the same time, research shows that teenage athletes, consume unsatisfactory food, that is, on the one hand is very important during the active training, on the other, corresponding to puberty. Analysis of the causes of malnutrition has shown that the main factors are an intensive training regimen, which makes it difficult to follow the necessary food intake regimen (in almost 100% of cases), or food preferences (67%), food allergies or food intolerance (in 22% of cases) [1,3].

The need of young athletes for nutrients and energy. The developed norms for the consumption of basic nutrients and energy for young people and adolescents of different ages are quite indicative, and in order to meet the needs of all athletes, training for sports schools, Olympic and Paralympic sports is designed to calculate nutrition in centers. To calculate the individual ration, it is necessary to pay attention to conversion of body mass to kilograms . So, if we follow the above sources, the intake of proteins for a girl 14-18 years old is 134 g, which corresponds to a body weight of 2.7 g / kg at a weight of 50 kg. This amount absolutely does not correspond to modern recommendations, although 15-20 years ago, the amount of such protein in the diet was considered appropriate. [5]

Features of the energy supply for physical labor. When organizing meals, it is also necessary to take into account the features of the energy supply for physical work:

• **Aerobic** energy production - the ability to perform muscle work in conditions of oxygen shortage is typical for sports that require endurance;

• **Anaerobic** energy production is mainly carried out in sports that require "Lightening quick" release of energy ;

• **Mixed anaerobic** - aerobic energy production is typical for sports with variable loads of different nature, such as Solo sports, game sports. [5]

At different stages of the training process, different types of physical activity can be used to increase sports results, which is also taken into account when setting up a diet.

Thus, the ratio of basic nutrients to total energy has some differences in food value between athletes of different specialties. [2,3]

Diet. The athlete's diet should provide optimal conditions for the assimilation of a significant amount of nutrients necessary to meet increasing needs, while creating a comfortable training environment. When planning a diet for athletes, the following principles must be observed:

• 4-5 times a day with an optimal feeding interval of 2.5-3.5 hours (if necessary, 6 meals a day); afternoon snack is allowed;

• you should not eat a lot of food right before the training, because with active digestion, blood circulation and the oxygen supply to working muscles deteriorate;

• there should be a break of at least 1-1. 5 hours between intensive muscle work, and the main meal After the practice, the main meal should not be earlier than 40-60 minutes;

• training on an empty stomach is not allowed, as they lead to a decrease in carbohydrate resources and a decrease in performance.

Eating before sports activities. Before exercising, the athlete's ration should only contain easily digestible foods. It is necessary to exclude from the ration animal fats and fried meat, which are difficult to digest in the stomach and stored for a long time, as well as foods with a large amount of fibers (beans, peas, etc.), which cause abdominal distension . [8]

Nutrition after sports training. In order to transfer the acid-base balance in the athlete's body to the alkaline side after intense physical exercises, the consumption of acidic valence products should be partially limited and increased products with alkalines. Products containing acidic valents include meat, fish, eggs, cheese, cereals, bread, nuts, pickled and pickled vegetables; from fruits - plums and cranberries. To increase alkaline valence, it is

necessary to eat fruits (apricots, pineapples, oranges, grapes, cherries, strawberries, lemons, raspberries, mangoes, Tangerines, olives, peaches, currants, apples), natural juices, vegetables (cabbage, onions, carrots, radishes, lettuce, beets, tomatoes, potatoes, herbs), mushrooms, legumes, algaes, milk and dairy products. [5,9]

The use of enriched products. Functional Nutrition concept developed over the past three decades involves awareness of the metabolic and pharmacological effects of food. Functional nutrition is a new look at food as a means of preventing and treating certain diseases, which implies the use of functional foods that contain Whole Foods, as well as foods enriched with nutritional components. In a narrow sense, the term" functional nutrition " is more common in relation to products that include Pro-and prebiotics that help normalize the microbiocenosis of the gastrointestinal tract, improve digestion and thus maintain the health of the entire human body. [6]

Research objective. Assessment of the actual nutrition of athletes of the Archery Federation (from 7 to 17 years old) using a survey and computer program in the Tashkent City Department of the Archery Federation of Uzbekistan.

Research materials, methods and results.

We conducted a study to control the effectiveness of special sports products for young athletes in the Tashkent City Department of the Archery Federation of Uzbekistan. The study involved 35 healthy young athletes, aged 10 to 17, of the Tashkent City Department of the Archery Federation of Uzbekistan. In 21 days, in the main group, children followed a test product, in the comparison group - a diet without the use of specialized products. The study was conducted simultaneously in both groups. Depending on the age and sex of the child, taking one serving of the product (200 ml) covered 6 to 10% of the protein requirement and 5 to 14% of the need for vitamins, essential microelements. Eating 2 servings of the product (400 ml) covered the need for protein by 12-20%. and the need for vitamins and microelements - by 10-28%.

Assessment of the state of nutrition. Control of the effectiveness of nutrition can be carried out both on the results of anthropometric indicators and on the data of deeper - bioimpedance analysis and psychophysiological indicators.

Bioimpedance analysis of body composition. Modern methods of morphological and functional diagnostics in sports medicine. A distinctive feature of this research method is the possibility of operational verification of athletes during a separate training in dynamics, as well as during the stages of the training cycle.

In the presence of 90 athletes aged 8-18 years, characteristics of the the body mass composition indicators characteristic of young athletes were determined. In most of the athletes tested (68%), lean mass indicators fell on normal values $(39.3 \pm 0.8\%)$; as a rule, such data is usually associated with normosthenic physics. However, in 31% of observations, these indicators were lower than age and sex standards, in 1% - exceeded them. It should be noted that an increase in lean body mass is necessary to improve physical condition and overall health. The highest indicators of lean mass (closer to the upper limit of the age and gender norm) are found in young female athletes. The bioimpedance analysis method also allows you to assess the body's water balance and control the body's fluid loss, which is very important to ensure high efficiency.

Conclusion. Young athletes with a modern intensive training regimen associated with high stresses on the cardiovascular and respiratory system, musculoskeletal system, digestive organs, as well as repeated damage to bones, joints, damage to muscles, ligaments, tendons, need to organize adequate nutrition and control the fulfillment of hygienic requirements imposed on them. Accordingly, any violations in the ration of young athletes affect not only a decrease in sports performance, but also in health.

- **1.** Bibliography:
- Baranov A.A., Korneeva I.T., Makarova S.G. I dr. Nutritivnaya podderjka i lechebno-vosstanovitelnie meropriyatia v detsko-yunosheskom sporte. — M.: Pediatrician; 2015. — 163 P.

- Golberg N.D., Dondukovskaya R.R. Pitanie yunix sportsmenov. — M.: Sovetsky sport; 2007. — 240 P.
- Makarova S.G., Borovik T.E., Chumbadze T.R. I dr. Pitanie detey-sportsmenov. Vzglyad s posisiy teorii advatnogo pitaniya // fizkultura v prophylatike, lechenii, rehabilitasii. — 2010. - No. 1-S. 21-25.
- Makarova S.G., Borovik T.E., Kodensova V.M. I dr. Pitanie detey-sportsmenov. Sovremennie podhodi / SB.: Pitanie osnova obraza jizni I zdorovya v usloviyakh Severa. - Yakutsk;2012. - S. 165-169.
- Polyaev B.A., Makarova G.A., Tsedov R.A. I dr. Pitanie sportsmenov: otechestvenniy I zarubezhny opit. — M.: FMBA;2010. — 98 p.
- 7. Udalov Yu.F. Osnovi pitaniya sportsmenov. - Malakhovka: MGAFK; 1997.
- Shaternikov V.A., Volgarev M.N., Korovnikov K.A. Fizicheskaya aktivnost I potrebnost cheloveka v energii I pitshevix vetshestvax // theory I Praktika fizicheskoy culture. — 1982. -№5 — S. 22-26.
- 9. Phillips sm. Protein demand and supplementsuch sports. Nutrition. 2004;20(7-8):689-695. doi: 10.1016 / j.nuts.2004.04.009.
- 10. Tipton KD, Vitard OS. Protein requirements and recommendations for exporters: relevance of ivory tower arguments for practical recommendations.