

## HYGIENIC ASSESSMENT OF THE ACTUAL NUTRITION OF CHILDREN ATHLETES PARTICIPATED IN CHESS

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### ABSTRACT

In the Republic of Uzbekistan, age norms have been developed, as well as average daily food sets and daily requirements for energy and basic nutrients for student athletes, however, these norms have not been developed for children and adolescents playing chess, which makes the problem of developing such norms with taking into account the actual nutrition of students - athletes involved in chess.

**Keywords:** actual nutrition of children and adolescents involved in chess.

Nutrition is a vital human need. The main tasks of nutrition are to provide the human body with energy, plastic substances and biologically active components. Any deviation from the adequate supply of nutrients to the body can cause significant damage to health, lead to a decrease in resistance to adverse environmental factors, deterioration of mental and physical performance.

A healthy child is the main problem of the near and distant future of any country, since all the potential (both economic and creative), all the prospects for social and economic development, a high standard of living, science and culture - all this is the result of the level of health achieved by children, their physical and intellectual performance.

Modern sport is a sport of high achievements, when a child is sent to sports sections from the age of 3-4, and he begins to endure excess loads in a completely unchildish way. The main task of parents and coaches in such realities of our time is to adequately adapt the child to this process, which cannot be done without proper healthy nutrition, taking into account age, health characteristics, type of sports activity, the period of training sessions and competitions, restorative rest, etc. However, not all coaches and athletes are familiar with the basics of nutrition science, and for this reason, athletes most often organize their nutrition incorrectly, often being carried away by a narrow circle of food. Excessive passion for any one type of food is not justified and cannot contribute to improving athletic performance.

There is a fairly large amount of data indicating that the actual nutrition of athletes during periods of training and competition does not always meet the elementary requirements of rational nutrition. When optimizing the nutrition of athletes, its phased organization seems to be the most appropriate. At the first stage, the nutrition of athletes should be streamlined within the framework of a balanced nutrition formula for a healthy person, taking into account the available data on the needs of athletes for energy and essential nutrients. Результаты исследования и их обсуждение. During the survey, attention was drawn to the fact that children, especially younger ones, are very poorly oriented in matters of the importance and rationality of nutrition. It should be noted that with increasing age in children and adolescents, knowledge on the consumption of basic foods becomes more complete.

An analysis of the provision of the studied children with basic food products showed that the actual nutrition of schoolchildren-athletes aged 7-10, 11-13 and 14-16 years old is not balanced and is deficient in some food products, due to the irrational hierarchy of food packages. According to the questionnaire survey, diets are characterized by the predominance of bakery, flour-grinding and confectionery products. In the daily diet, against the background of non-fulfillment of nutritional standards for fresh vegetables and fruits, the deficiency of dietary fiber in the diet was 90%.

When studying the consumption of bakery products, it was found that children and adolescents aged 7 to 10 years in the winter-spring period by 40%, and in the summer-autumn period

by 29% consumed them more than the norm. Similar increased rates were obtained for children aged 11-14 and 15-16 (42.5 and 28.3%). Widespread consumption by teenage boys aged 15-16 of various fast foods (hamburgers, hot dogs, french fries, etc.) was noted.

Girls at this age consumed confectionery and ice cream excessively.

Due to the insufficient amount of vegetables and fruits, a low level of minerals and vitamins was found in the diets of children. Chess players do not receive a number of essential ingredients (dietary fibers, essential trace elements and phospholipids) in the required amount.

Thus, the actual nutrition of children and adolescents in Uzbekistan involved in chess sports is irrational, deficient in almost all indicators; nutrition is poorly organized, there is a violation of the diet.

To ensure the harmonious development of children involved in chess, to increase their mental and physical performance, we have made a number of proposals that take into account both the identified shortcomings and the nutritional and biological value of the recommended products.

Protein is a particularly important component in the nutrition of a chess player, as it activates the release of adrenaline, which turns on the brain and increases the reaction rate. In this regard, it is recommended to increase the use of protein products as an animal (meat and meat products, eggs, fish products, chicken, rabbit, etc.) and plant origin (legumes).

Chess players - people engaged in intense mental work, it is advisable to eat meat, fish, cottage cheese, rye bread, peas and potatoes. These products contain B vitamins (B1, B2, B6 and B12) that are beneficial for the nervous system.

The diets of chess players should contain a lot of vegetables and fruits - sources of antioxidants, vitamins and minerals. This creates the best conditions for metabolism, increasing the body's resistance to infectious diseases, slowing down the development of atherosclerosis, normalizing the activity of the nervous system, increasing mental performance.

When organizing the daily nutrition of chess players, the following regimen and nature of nutrition is recommended: breakfast - a hot dish, a sandwich, a glass of tea or coffee; second breakfast (during a long break at school or at 12 o'clock at home); lunch should be after the school day and consist of at least three courses; at 15-16 hours, an afternoon snack is advisable (a bar of dark chocolate -30g, cookies, a cup of coffee or tea with sugar); dinner should be no later than 19-20 hours and consist of three courses.

Conclusion The conducted studies have shown that the nutrition of children and adolescents learning chess is carried out without taking into account the type of sport they play. The actual nutrition of these children and adolescents is unbalanced, not corresponding to their physiological needs, which is largely due to the failure to meet daily nutritional requirements - food consumption is generally lower by 12-13%. As a result, the content of protein, fat, minerals and vitamins in the diets of the examined children and adolescents does not meet age-related physiological norms, which requires a system of measures to optimize the nutrition of this group of students.

## REFERENCES

1. Topanova A.A. Evaluation of nutritional status and individual nutritional correction of young athletes. Abstract of Candidate of Diss.- St. Petersburg.- 2009.- 324p.
2. Khaitov Zh.B., Shaykhova G.I. Hygienic assessment of the actual nutrition of school-age children involved in chess. / Collection of proceedings of the scientific-practical conference (with international participation) "Modern achievements and prospects for the development of health care and the population" - Tashkent-2019.
3. Tutelyan, V.A., Nikityuk D.B., Pozdnyakov A.L. Optimization of nutrition of athletes: realities and prospects // Vopr. Nutrition. - 2010. - T. 79, No. 3
4. Azizbekyan G.A. Principles of optimal nutrition for athletes of various specializations // Problems of nutrition. -2010.- Vol. 79, No. 4.
5. Pshendin A.I., Dondukovskaya R.R. Features of nutrition of young athletes // Theory and practice of physical culture. - 2003. - No. 3.
6. Chemical composition of food products. Book. 1: Reference tables of the content of essential nutrients and the energy value of food products / Ed. I. M. Skurina, I. M. Volgareva. - 2nd ed., revised. and additional - M.: Agropromizdat, 1987.
7. Hygienic requirements for catering for students of sports schools of the Republic of Uzbekistan. SanPin RUz No. 0333-16.
8. Chemical composition of Russian food products. Edited. I.M. Skurikhin and V.A. Tutelyan. - M.: DeLi print. - 2002.
9. Average daily rational norms of food consumption by sex and age, professional groups of the population Uzbekistan, SanPin No. 0250-08.
- 10 Aulin K.P. Minerals: Calcium // Nutrition in Sport / Maughan R.M. (Ed).- Blackwell Science Ltd., 2000.