

## **THE IMPACT OF HEALTHY NUTRITION ON THE HUMAN ORGANISM**

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**Annotation:** Rational nutrition is a scientifically based nutrition system aimed at maintaining human health and efficiency, which ensures a balanced intake of nutrients necessary for the body. This principle helps to meet the physiological needs of the body, prevent diseases and extend life expectancy. Rational nutrition is based on the consumption of proteins, fats, carbohydrates, vitamins and minerals in the correct ratio and is an important factor in a healthy lifestyle.

**Keywords:** rational nutrition, healthy nutrition, balanced diet, nutrients, vitamins, minerals, eating habits, healthy lifestyle, metabolism, energy balance.

**Introduction.** Rational nutrition is important for maintaining human health, ensuring normal development of the body and high working capacity. Proper nutrition helps not only to live a long life, but also to prevent various diseases. This article discusses the basic principles of rational nutrition, useful and harmful products, as well as the importance of proper nutrition. The concept of rational nutrition is a diet that fully satisfies the physiological needs of the body and contains a balanced amount of necessary nutrients.

It is known that proper nutrition plays a major role in the overall health of people. Full compliance with the rules of rational nutrition ensures the proper assimilation of nutrients received from the external environment by the body in tissues and cells. Eating and digestion are complex biochemical and physiological processes, in which organic and inorganic substances received by the body undergo various changes with the help of digestive enzymes. The digestion process is mainly carried out in the digestive tract, and in connection with this, the principles of quantity, quality and order of nutrition are formed. Therefore, it is considered one of the systems that connect the body with the external environment since the emergence of living beings.

There are specific concepts and principles of rational nutrition, and one of the most important of these is the principles of rational nutrition. These are mainly the principles of quantity, quality and order.

As is known, rational nutrition is understood as satisfying the daily needs of the body for essential or basic nutrients - proteins, fats, carbohydrates and additional nutrients, in accordance with the age, gender, physical and mental activity of a person, weather conditions, living environment, health, etc. These principles of rational nutrition are inextricably linked, and it is useful for each person to pay special attention to them in their daily diet.

In other words, if any of these principles is not followed sufficiently, for example, if the food eaten is not in the appropriate quantity depending on the person's age, gender, etc., or if the quality of the food consumed is not sufficient, it cannot but affect the physiological processes taking place in the body. At the same time, if these two principles are fully followed and the third is not paid attention to, or if food is eaten haphazardly, at irregular times, the principle of rational nutrition is violated and the corresponding negative consequences are observed possible [3].

In this regard, it is of particular importance for each person to be aware of these dietary rules and to always follow them in order to maintain their health and protect themselves from various diseases. According to the results of studies on the specific nutrition of students, their nutrition is disturbed by a number of components, namely, the amount of animal proteins, vegetable oils, calcium, ascorbic acid and thiamine in the diet is below the norm.

The following violations of the diet are observed among students: 25-47 percent do not eat breakfast, 17-30 percent eat twice, about 40 percent do not have lunch, 22 percent do not eat dinner. In addition, they rarely eat hot food, and dinner is eaten very late [2,4].

According to physiological recommendations, the daily energy requirement of students is 2585 kcal for boys and 2434.5 kcal for girls. 12% of the energy value of the diet should be proteins, and 60% of the total protein should be animal proteins. Fulfilling this requirement guarantees the full supply of the body with all essential amino acids and their correct ratio in the diet. Fats should account for approximately 30% of the total energy value of the student's diet. At the same time, 30% of the waxy fats should be from vegetable oils. The daily requirement of students for basic minerals is provided by the intake of 800 mg of calcium, 1600 mg of phosphorus, 500 mg of magnesium, 2500-5000 mg of potassium, and 10 mg of iron [1].

In order to implement the principle of balanced nutrition in students, it is necessary to strive to fully match the energy and quality composition of diets with their energy and nutrient requirements.

Conclusion. Other food components can be spices, insects, microbes and minerals. Usually these are not the main components of food in terms of quantity, but they are also important. For example, salt is necessary for a healthy diet, but only in limited quantities. Some types of this product may contain sodium, chloride, potassium, iodine, bromine and other elements that have a certain effect on human health [5]. Insects as food are quite exotic subjects, but the high content of easily digestible proteins makes them potentially good food sources. Finally, spices. In terms of quantity, they occupy one of the last places among food products. They significantly affect the taste of food and play a role as a disinfectant in food. In addition, they can act as regulators of appetite, intestinal peristalsis, and other functions. However, it is important to note that there is no one food that is good for everyone. For example, radishes are considered a healthy food, but they can be dangerous for people with stomach problems. Berries are generally delicious and have health benefits due to their vitamins and antioxidants, but they may not be good for people with diabetes regulation problems. Therefore, a healthy diet must be individualized.

## References

1. Tarasova N. S., Lavrenchuk A. A. Proper nutrition as a guarantee of health and longevity // Pedagogics, psychology, medical-biological problems of physical training and sports. - 2008. - No. 4. - P. 120-123.
2. Rolf Unsorg. Encyclopedia of health. Healthy nutrition - M.: "Christina i K", 1994 - P. 21 - 30.
3. Drozhzhina N. A. Features of the formation of eating behavior in the student environment / Drozhzhina N. A., Maksimenko L. V. // Questions of dietology. - 2012. - V. 2. - No. 2. - P. 27.
4. Kremneva V. N., Solodovnik E. M. Modern proper nutrition - a fashionable trend or benefit // E-Scio. – 2020. – No. 1 (40). – pp. 221-226.
5. Efroim Gurman, B. Zaripov. Integral nutritional guide. The encyclopedia of the ideas about nutrition. // Xlibris - USA. – 2023 y. P 148.