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Тези

**75-ї наукової конференції професорів,
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перенесли травму або операцію СНЩС; особи, які тривало приймають кортикостероїди; пацієнти, які зловживають алкоголем; особи з різними видами анемії; пацієнти, які мають патологію системи згортання крові; хворі, які отримували радіаційну або хіміотерапію, а також з гострим та хронічним панкреатитом.

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NUTRITIONAL SUPPORT FOR YOUNG ATHLETES

The current level of development of sports requires the achievement of high results already in childhood and adolescence, which is carried out due to great physical and neuropsychic stress. Adequate nutrition is the most important factor in the health of the child, affecting both his well-being and indicators of physical activity.

To compensate for energy costs, activate anabolic processes, restore working capacity in the practice of children's and youth sports, it is necessary to supply the body with an adequate amount of energy and nutrients, such as proteins, fats, carbohydrates – the so-called macronutrients, as well as micronutrients - minerals, vitamins and other biologically necessary active food factors to adequately ensure the natural processes of growth and development of a child or adolescent who is actively involved in sports.

At the present stage of development of sports nutraceuticals, it is relevant to substantiate approaches to the nutrition and drinking regimen of athletes at all stages of the training process, including the creation and use of specialized products with specific properties that have a high specific energy value, high digestibility and enriched with a complex of essential vitamins and minerals, development of a methodological framework for individual selection of nutrition, as well as conducting evidence-based studies to evaluate the effectiveness of dietary measures.

A special role in the nutrition of children and adolescents involved in sports is assigned to proteins. The balance between protein synthesis and breakdown is the metabolic basis for the adaptation of exercising muscles. Protein is a plastic substrate that provides muscle work and recovery after exercise. The recommended protein intake for athletes is 1.2-1.6g/kg/day. Lack of protein in the diet not only affects athletic performance, but can also lead to growth retardation, reduced resistance to infectious diseases. An excess of protein in the diet does not increase adaptation to physical activity (Phillips S. M., 2004).

However, to reduce body weight in sports that require retention or weight loss, high-protein diets in sports are used – protein intake up to 2-2.3g/kg/day.

Sports loads require changes in the intake of animal and plant proteins. In the diet of young athletes, the proportion of proteins of animal origin should be at least 60%. The remaining 40% should come from plant proteins. During the period of training aimed at the development of speed-strength qualities, as well as with an increase in muscle mass, the performance of long and intense training loads, the proportion of animal proteins can be 80%.

Assessment of nutritional status and control of the effectiveness of dietary measures can be carried out both based on the results of anthropometric indicators, and in more depth – according to bio-impedance analysis, which allows you to compare the parameters of the body composition, evaluate the nutritional status, water balance of the body, control fluid loss by the body, which It is necessary for the individual selection of the diet, as well as the use of specialized foods and drinks in children and adolescents involved in sports, which is extremely important for ensuring high performance. Since bioimpedance analysis of body composition allows us to quickly examine athletes in dynamics (during a separate training session and at all stages of the training cycle), we use this method to evaluate the effectiveness of dietary correction and nutritional support for athletes. Achieving high results in children's and youth sports is associated with significant physical and neuropsychic stresses that fall on the growing body of the child.

Conclusion. Due to the relative functional immaturity of the system of neuroendocrine regulation, other organs and systems, the high activity of metabolic processes, a growing organism quickly responds to a lack or excess in the nutrition of certain nutrients by changing the most important functions - a violation of physical and mental development, a disorder in the function of organs that carry the main functional load to ensure homeostasis, reduced immunity, therefore, the basis for improving sports results and, most importantly, for ensuring the natural processes of growth and development, maintaining health, and preventing diseases of young athletes is a combination of an adequate balanced diet and a rationally planned training process.

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