### RECENT SCIENTIFIC DISCOVERIES AND METHODOLOGICAL RESEARCH. International online conference.

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# PRACTICAL ASPECTS OF ORGANIZING NUTRITION BASED ON CHILDREN'S AGE CHARACTERISTICS

Saydullaeva Kamila

Head of the Department of Food Children and teeneger's hygiene Fergana Medical Institute of Public Health

Assistent

Paying attention to children's age characteristics in organizing their nutrition is one of the critical factors in ensuring healthy development. Age-appropriate nutrition not only meets children's physiological needs but also supports their physical, mental, and emotional growth. In practice, this process is organized based on the biological compatibility of the diet, meal schedules, and adherence to hygienic standards. Children's nutrition must be tailored to their age characteristics. At each stage of development, the quantity of nutrients required for the child's physiological needs, physical activity, and cognitive potential varies. Research indicates that age-inappropriate nutrition can lead to the development of chronic diseases, weakened immunity, and difficulties in academic performance. One of the main principles of age-appropriate nutrition is meeting energy

One of the main principles of age-appropriate nutrition is meeting energy requirements. Children's bodies derive daily energy from complex carbohydrates, proteins, and fats. Complex carbohydrates are the primary source of energy and play a crucial role in maintaining gastrointestinal stability. Proteins are essential for repairing cells and tissues, as well as for supporting immunity. Fats are vital for long-term energy storage, with plant-based oils and omega-3 fatty acids being particularly significant for a child's development.

The biological diversity of the diet ensures that children's nutritional needs are fully met. Fruits and vegetables, as key sources of vitamins and minerals, strengthen children's immune systems. Dairy products provide calcium and vitamin D, essential for strong bones and teeth. Meat and fish products supply iron and zinc, contributing positively to blood production and intellectual capacity. The alignment of meal schedules with children's biological clocks is essential. Properly organizing meals at different times of the day, such as breakfast, lunch, and dinner in a consistent routine, plays a crucial role in maintaining energy balance. Breakfast serves as the primary source of energy for the day, lunch meets a significant portion of nutritional needs, and dinner should consist of light and easily digestible foods.

Ensuring hygienic requirements is also a critical part of age-appropriate nutrition. Food products must meet hygiene and safety standards, the food preparation process must adhere to sanitary norms, and the cleanliness of children's dining areas must be ensured. Complying with these requirements helps prevent gastrointestinal diseases and supports overall health. In practice, improving the knowledge and skills of parents and educators, monitoring the quality of food products, and enhancing sanitation conditions in educational institutions are necessary measures. All these factors play a significant role in fostering



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healthy development and improving the physical and cognitive potential of children. Organizing age-appropriate nutrition not only enhances children's health but also lays a strong foundation for their future successful lives.

Children's bodies require a high level of energy during growth and development. This energy is essential for supporting their physical activities, cell growth, immune system, and intellectual functioning. Energy needs vary based on children's age, gender, physical activity levels, and overall health. Age-appropriate nutrition ensures the proper balance of primary energy sources, which is crucial for healthy development. Children derive energy primarily from three main nutrients: carbohydrates, proteins, and fats. Carbohydrates serve as a quick energy source and cover the majority of daily energy needs. Proteins are vital for cell repair and strengthening immunity, while fats play an important role in providing long-term energy reserves.

For preschool-aged children, the daily energy requirement is approximately 1,200-1,500 kilocalories, which increases to 1,800-2,000 kilocalories for primary school students. To meet this energy demand, the child's diet must include foods with high biological value. For instance, complex carbohydrates can be sourced from grains, potatoes, and vegetables; proteins from meat, eggs, and dairy products; and fats from plant-based and animal sources, which are essential for providing the fatty acids required for a child's development.

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