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OPTIMAL NUTRITION PROGRAM FOR CHILDREN: DEVELOPMENT AND IMPLEMENTATION

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Developing an optimal nutrition program for children is of significant importance, and initially, attention must be paid to scientific foundations. When calculating children's energy and nutritional needs, factors such as age, gender, physical activity level, and health are considered. For example, the diet of preschool children should be based on the balance of key nutrients such as protein, fat, carbohydrates, vitamins, and minerals. According to hygienic standards, protein should make up 15% of daily energy intake, fat 30%, and carbohydrates 55%.

When determining the necessary nutrients for the healthy development of children's bodies, it is important to form the diet based on hygienic norms. These nutrients support the growth process, strengthen the immune system, and assist in intellectual development. For instance, proteins are necessary for muscle and tissue recovery and are provided through meat, eggs, dairy products, and legumes. Fats serve as an energy source and are obtained from butter, vegetable oils, and cream products. Carbohydrates, which also provide energy, are mainly supplied through cereal products, vegetables, and fruits.

When determining the daily meal plan and portion sizes, children's physical and mental activity levels are taken into account. By organizing three main meals and two light snacks throughout the day, children's energy needs must be met. The portion size for each meal should be adjusted according to the child's age. For example, children aged 3-4 should consume at least two servings of fruit and three servings of vegetables daily. Furthermore, the variety of food products is important to increase children's interest and ensure they receive the necessary micronutrients. The nutrition program developed based on these scientific foundations serves to ensure the healthy development of children, strengthen their health, and improve their overall quality of life. Ensuring strict hygiene requirements and enriching the diet with various nutrients should be a priority for educational institutions when developing the program.

The implementation of the nutrition program is an important step in supporting children's health. Standardized and hygienic nutrition programs developed for preschool institutions must be introduced. Each program should be adapted based on children's age, weight, activity level, and overall health. For example, meals prepared for preschool children should be based on an optimal balance of nutrients, vitamins, and minerals. Special attention should be given to meeting the different needs of children of various ages when implementing the nutrition program. For instance, the proportion of proteins, fats, and carbohydrates should be balanced for children aged 3-5, ensuring they receive enough energy and the necessary substances for growth. Reducing fatty and fried foods, while introducing steamed or boiled dishes, can ensure the hygienic safety of children's meals.

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The program pays special attention to diversifying the diet. This increases children's interest in food and provides the opportunity to supply various vitamins and minerals. Additionally, by including fruits, vegetables, and legumes in the daily diet, the children's immune system is strengthened. For example, products such as oranges, apples, carrots, or cabbage are not only beneficial for children's health but also satisfy their taste. When implementing the nutrition program, special attention must be given to the quality of the food and its preparation technology. Hygiene requirements must be followed by kitchen staff, and proper food preparation methods ensure the protection of children's health. Moreover, the naturalness, composition, and shelf life of the food products must be considered when selecting them.

Furthermore, continuous monitoring should be conducted to track and evaluate the adaptation of children to the nutrition program. This approach allows for analyzing the effectiveness of the program and updating it when necessary. This is the most effective way to ensure a safe and optimal nutrition system for children. A successfully implemented program contributes significantly to children's healthy development, improves their overall quality of life, and plays a vital role in shaping a sustainable society in the future.

The monitoring and evaluation system for children's nutrition is an essential tool in ensuring their healthy development. Regular monitoring and control are necessary to determine whether the diet meets hygienic requirements and physiological needs. This process must be organized while considering the individual characteristics of children. Additionally, it is important to apply modern technologies and scientifically based evaluation methods to ensure the effectiveness of monitoring.

The primary task of monitoring is to analyze children's daily diet and track their eating habits. The diet should consist of products rich in nutrients, vitamins, and minerals, and there should not be an excessive amount of sweets and fatty products. For example, the daily consumption of fruits and vegetables should meet hygienic standards. Attention is also given to balancing proteins and carbohydrates in the diet.

Laboratory analyses play a significant role in the evaluation process. The quality, composition, and hygienic safety of food products are examined, and substances that could harm the children's bodies are identified. These analyses allow for determining whether food products meet hygienic standards and whether the children's energy needs are being met. For example, the levels of iron, iodine, and vitamin D in the diet can be determined through laboratory tests, and if these are insufficient, measures can be taken to enrich the diet.

Based on the results of monitoring and evaluation, measures aimed at updating and improving the nutrition program are developed. For example, the diet can be reshaped based on hygienic requirements by increasing the intake of protein-rich products, encouraging the consumption of fruits and vegetables, and limiting high-calorie foods. Additionally, parents and educators should actively participate in the monitoring process. By increasing their knowledge of children's nutrition and their attention to their children,



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the monitoring system can be made more effective. Through mutual collaboration, children's eating habits can be improved, and their health strengthened.

The results of monitoring and evaluation provide a strong foundation for developing strategies aimed at improving children's health. This approach not only ensures healthy nutrition for children but also creates the possibility of establishing a sustainable nutrition system for them in the future. The results of monitoring should be continuously analyzed, and necessary changes should be made at each stage of the program. This is a key factor in creating a safe, balanced, and hygienic nutrition system for children.

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