**Робота з перекладу тексту**

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**Proper nutrition**

**Introduction to nutrition**

**Definition of nutrition:**

Nutrition is the process of providing the body with the necessary substances through the consumption of various products. This process involves absorption and digesting food to obtain the nutrients needed to maintain life and health.

Importance of nutrition:

* ***Energy supply:*** Nutrition is the main source of energy for the body. The nutrients derived from food are converted into the energy required to perform all physiological processes.
* **Development and growth:** Especially important for children and adolescents, nutrition provides the necessary building materials for the growth, development and proper function of all tissues and organs.
* ***Health support:*** Proper nutrition contributes to strengthening immunity, maintains optimal cholesterol and blood pressure levels, reduces the risk of heart disease and other chronic diseases.
* ***Support for organ function:*** Nutrition affects the work of all body systems, providing the correct function of the heart, kidneys, liver and other important organs.
* ***Weight control:*** Rational nutrition helps to maintain a healthy body weight, which affects the overall condition of the body and reduces the risk of obesity and related problems.

**Distinction between macro and microelements**

**Macro elements:**

* Calcium:
  + *Role:* Construction and strengthening of bones and teeth, regulation of blood clotting, muscle functioning.
* Magnesium:
  + *Role:* Participation in the synthesis of proteins, muscle and nervous system, regulation of blood sugar.
* Potassium:
  + *Role:* electrolyte balance retention, blood pressure regulation, participation in the transmission of impulses in the nerves.
* Phosphorus:
  + *Role:* Construction of bones and teeth, energy exchange, synthesis of nucleic acids.
* Sodium:
  + *Role:* Regulation of equilibrium of liquids in the body, participation in the transmission of nerve impulses.

**Micronutrients:**

* Iron:
  + *Role:* Transport of oxygen in the blood, participation in the synthesis of hemoglobin, support immunity.
* Zinc:
  + *Role:* Participation in growth and development, immune system function, retention of sensory functions of the skin.
* Copper:
  + *Role:* Participation in the synthesis of collagen, energy metabolism, iron transport.
* Selenium:
  + *Role:* antioxidant function, thyroid support, cell protection from damage.
* Iodine:
  + *Role:* synthesis of thyroid hormones, normalization of metabolism.

**Distinction between macro- and microelements:**

* *Quantity: Macroelements are needed in larger quantities, while trace elements are needed in small quantities.*
* *Role: Macroelements mainly provide structural components, while microelements mostly perform regulatory functions in biochemical processes.*
* *Distribution: Macronutrients are present in the body in significant quantities, while trace elements are present in trace amounts.*

These elements are important for maintaining optimal health and functioning of the body, and their proper consumption is important for preventing deficiencies and maintaining diverse biological processes.

**Identify foods that contain the necessary nutrients.**

Proteins:

* ***Meat:*** The largest source of protein is meat products such as chicken, beef and pork.
* ***Fish:*** Fish, especially salmon, tuna and sardines, is rich in high-quality proteins and Omega-3 fatty acids.
* ***Eggs:*** Eggs are an important source of protein and other nutrients.
* ***Soy products:*** Tofu and other soy products constitute a vegetarian alternative to proteins.

**Fats:**

* ***Olive oil:*** Monounsaturated fats in olive oil contribute to heart health.
* ***Avocado:*** Contains healthy saturated fats and polyunsaturated fatty acids.
* ***Nuts:*** Nuts, especially walnuts and almonds, are rich in polyunsaturated fatty acids.

**Carbohydrates:**

* ***Vegetables:*** Broccoli, carrots and other vegetables contain complex carbohydrates and important vitamins.
* ***Whole grain products:*** Yachminka, buckwheat and other whole grain products contain useful carbohydrates and many fibers.
* ***Fruits:*** Apples, bananas and berries are sources of natural sugars and vitamins.

**Vitamins and minerals:**

* ***Vegetables and fruits:*** Rich in vitamins A, C, K and folic acid.
* *Dairy products:* Provide calcium to strengthen bones and teeth.
* *Meat and fish:* Sources of iron and zinc, important for hematopoiesis and immunity.

**Recommendations for the consumption of carbohydrates**

* It is important that carbohydrates provide 50-60% of the daily need for food energy. The amount of energy obtained with added sugar should not exceed 10% of daily food energy.
* The body, especially the brain, needs a constant supply of glucose for effective and effective work. Lack of carbohydrates can lead to the synthesis of glucose from the body's own proteins, which can affect the protective functions of the body.
* Carbohydrates are classified into simple and complex.
* Simple carbohydrates are quickly absorbed by the body and are the optimal source of energy, especially after training or to overcome hunger. For example: Sugar, honey, fruits, vegetables, juices and drinks are sources of simple carbohydrates. However, excessive consumption of sugar-containing products should be avoided, since they do not contain other useful substances.
* Foods containing complex carbohydrates are absorbed more slowly and provide a feeling of satiety for a long time. Starch, which is a common complex carbohydrate, is found in wheat, potatoes, rice, corn and is the traditional basis of diets of different cultures.
* Fiber, also known as dietary fiber, plays a special role among complex carbohydrates. The body almost does not absorb fiber, but it is necessary for the normal process of digestion.