

Proper Nutrition

Introduction to Nutrition

Definition of nutrition:

Nutrition is the process of providing the body with essential nutrients through the consumption of a variety of foods. This process involves the digestion and assimilation of food to obtain the nutrients needed to maintain life and health.

Importance of Nutrition:

Providing energy: Food is the body's primary source of energy. The nutrients obtained from food are converted into the energy needed to perform all physiological processes.

Development and growth: Especially important for children and adolescents, nutrition provides the necessary building blocks for the growth, development and proper function of all tissues and organs.

Maintaining health: Proper nutrition helps to strengthen the immune system, maintains optimal cholesterol and blood pressure levels, and reduces the risk of developing heart disease and other chronic conditions.

Support for organ function: Nutrition affects the functioning of all body systems, ensuring the proper functioning of the heart, kidneys, liver and other important organs.

Controlling body weight: A healthy diet helps to maintain a healthy body weight, which affects the overall health of the body and reduces the risk of developing obesity and related problems.

Distinguishing between macro- and micronutrients

Macronutrients:

Calcium:

Role: Building and strengthening of bones and teeth, regulation of blood clotting, muscle function.

Magnesium:

Role: Participation in protein synthesis, muscle and nervous system function

Potassium:

Role: Maintenance of electrolyte balance, regulation of blood pressure, participation in the transmission of impulses in the nerves.

Phosphorus:

Role: Building bones and teeth, energy metabolism, synthesis of nucleic acids.

Sodium:

Role: Regulation of the balance of body fluids, participation in the transmission of nerve impulses.

Trace elements:

Iron:

Role: Transport of oxygen in the blood, participation in the synthesis of hemoglobin, support of immunity.

Zinc:

Role: Participation in growth and development, immune system functions, maintenance of skin sensory functions.

Copper:

Role: Participation in collagen synthesis, energy metabolism, iron transport.

Selenium:

Role: Antioxidant function, thyroid support, protection of cells from damage.

Iodine:

Role: Synthesis of thyroid hormones, normalization of metabolism.

Distinguishing between macro- and microelements:

Quantity: Macronutrients are needed in larger amounts, while micronutrients are needed in small amounts.

Role: Macronutrients mainly provide structural components, while micronutrients mostly have regulatory functions in biochemical processes.

Distribution: Macronutrients are present in the body in significant amounts, while trace amounts of micronutrients are present in the body.

These elements are essential for maintaining optimal health and functioning of the body, and their proper intake is important to prevent deficiencies and support various 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 sausages, are rich in high quality proteins and omega-3 fatty acids.

Eggs: Eggs are an important source of complete proteins and other nutrients.

Soy products: Tofu and other soy products provide a vegetarian alternative to protein.

Fats:

Olive oil: The monounsaturated fats in olive oil promote 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 grains: Barley, buckwheat, and other whole grains contain healthy carbohydrates and lots of fiber.

Fruits: Apples, bananas and berries are sources of natural sugars and vitamins.