

FAQs:

Q1. What are the problems associated with eating a high protein diet?

Ans: High intake of proteins creates extra load on the body due to disposal of nitrogen especially for kidneys and liver. Dehydration can occur because of disposal of nitrogen, which may affect workout. It is, therefore important to have adequate water when consuming increased level of proteins.

Q2. What are the roles of water in our body?

Ans: Water is a remarkable nutrient. Without water, death occurs within days. It serves as the body's transport and reactive medium; diffusion of gases always takes place across surfaces moistened by water. Nutrients and gases are transported in aqueous solution; waste products leave the body through the water in urine and feces. Water has tremendous heat-stabilizing qualities because it can absorb considerable heat with only a small change in temperature. Water lubricates joints.

Q3. Explain what are macronutrients and micronutrients.

Ans: Carbohydrates, fats, and proteins are the principal compounds that make up our food and provide energy for our bodies. They form the main bulk of food so they are called macronutrients. Vitamins and minerals are called micronutrients because they are required in small amounts which may vary from a fraction of a milligram to several grams.

Q4. What are the important functions of carbohydrates related to energy metabolism and exercise performance?

Ans: Carbohydrates serve four important functions related to energy metabolism and exercise performance.

1. Energy source: - the main function of carbohydrate is to serve as an energy fuel, particularly during exercise.
2. Protein sparing: - adequate carbohydrate intake helps to preserve tissue proteins.
3. Metabolic primer: - carbohydrates serve as a "primer" for lipid metabolism.
4. Fuel for the CNS: - carbohydrate is essential for the proper functioning of the central nervous system.

Q5. What are non essential amino acid?

Ans: The human body needs approximately 20 amino acids for the synthesis of its proteins. The body can make only 11 of the amino acids that are known as the non-essential proteins or amino acids. Nonessential meaning that our body can synthesize them, and they do not need to be consumed in the diet. They are essential but we do not have to get them from food we eat.

Q6. What are essential amino acid?

Ans: Eight amino acids (nine in children and certain older adults) cannot be synthesized by the body and therefore must be provided preformed in foods. Thus they are called **essential proteins or amino acids**.

Q7. State the difference between complete and incomplete protein?

Ans: Complete protein: - If the protein of a food supplied is enough of the essential amino acids it is called a complete protein food.

Incomplete protein: - if the protein of a food does not supply all the essential amino acids, it is called an incomplete protein food.