

## Exploring the benefits and functions of vitamins and proteins in the human body

Teng LIJJA\*

*Department of Food Science, Northeast Agricultural University, Heilongjiang, China.*

**Received:** 20-Feb-2023, Manuscript No. CNHD-23-93449; **Editor assigned:** 23-Feb-2023, PreQC No. CNHD-23-93449 (PQ); **Reviewed:** 09-Mar-2023, QC No. CNHD-23-93449; **Revised:** 16-Mar-2023, Manuscript No. CNHD-23-93449 (R); **Published:** 23-Mar-2023, DOI: 10.12873/0211-6057.23.01.197.

### DESCRIPTION

Vitamins and proteins are essential nutrients required for the proper functioning of the human body. Vitamins are organic compounds that the body needs in small quantities to maintain normal metabolism and growth, while proteins are complex molecules made up of amino acids that are essential for the growth and repair of tissues in the body.

#### **Vitamins**

Vitamins fall into two categories, water-soluble and fat-soluble. Water-soluble vitamins include vitamin C and vitamin B complexes such as thiamine, riboflavin, niacin, pantothenic acid, pyridoxine, biotin, folic acid, and cobalamin. These vitamins are not stored in the body and excess amounts are excreted in the urine. Fat-soluble vitamins include vitamins A, D, E, and K. These vitamins are stored in the body's liver and adipose tissue, and excess amounts can build up to toxic levels.

The best sources of vitamins are fresh fruits and vegetables, whole grains, dairy products, and lean meats. Vitamin C is found in citrus fruits, strawberries, kiwi, mangoes, and broccoli. B-complex vitamins are found in whole grains, leafy green vegetables, dairy products, meat, fish, and poultry. Vitamin A is found in liver, eggs, dairy products, and orange and yellow vegetables. Vitamin D is synthesized in the body with the help of sunlight, but it is also found in fatty fish, liver, and egg yolks. Vitamin E is found in nuts, seeds, and vegetable oils.

---

#### **Correspondence:**

Teng LIJJA, tengli@jja.edu.cn

Vitamin K is found in leafy green vegetables, liver, and egg yolks.

Vitamins have various functions in the body. Vitamin A is important for vision, immune function and skin health. Vitamin D is important for the absorption of calcium and phosphorus, which are necessary for bone health. Vitamin E is a powerful antioxidant that protects cells from free radical damage. Vitamin K is required for blood clotting. Vitamin C and vitamin B complex are essential for energy production, immune function and nervous system health.

#### **Proteins**

Proteins are made up of long chains of amino acids, which are linked together by peptide bonds. There are 20 different amino acids, and the body can synthesize some of them, while others must be obtained through the diet. Proteins are necessary for the growth and repair of tissues in the body, and they also play a role in enzyme function, hormone synthesis, and immune function.

Protein is found in a wide range of foods, including meat, fish, poultry, dairy products, legumes, nuts, and seeds. Animal sources of protein are considered complete proteins, as they contain all the essential amino acids in the correct proportions. Plant sources of protein are generally incomplete, as they lack one or more essential amino acids. However, by combining different plant-based protein sources, such as beans and rice, it is possible to obtain all the essential amino acids.

Proteins perform a wide range of functions in the body. They are essential for the growth and repair of tissues, including muscle, bone, and skin. They also play a role in enzyme function, hormone synthesis, and immune func-

tion. Additionally, proteins are used as a source of energy when carbohydrates and fats are not available.

Vitamins and proteins are essential nutrients required for

the proper functioning of the human body. Vitamins are organic compounds that the body needs in small quantities to maintain normal metabolism and growth, while proteins are complex molecules made up amino acids.