

PROTEIN IMPORTANCE (ВАЖЛИВІСТЬ БІЛКА)

Колобова А.О., гр. ПТ-18

Наукові керівники: канд. техн. наук, доц. **А.О. Колесник**,
доц. **О.О. Мануєнкова**

Харківський державний університет харчування та торгівлі

Protein is one of the three macronutrients, along with carbs and fat.

It performs the following roles:

- Repair and maintenance: protein is the main component of your muscles, bones, skin and hair. These tissues are continuously repaired and replaced with new protein.
- Hormones: chemical messenger proteins allow cells and organs in your body to communicate with each other.
- Enzymes: most enzymes are proteins, and the thousands of chemical reactions that take place throughout your body are driven by them.
- Transportation and storage: some proteins help deliver important molecules where they're needed. For example, the protein hemoglobin carries oxygen to your body's cells.

Protein is made up of smaller units known as amino acids. Of the 22 amino acids, 9 are considered «essential» meaning they must be consumed in food because body can't make them. Importantly, some foods provide better protein than others based on their amino acid profile.

Generally speaking, animal products are considered «complete protein» because they contain all the essential amino acids in the optimal amounts which body needs. These include eggs, dairy, meat, fish and poultry.

Vegetable proteins don't provide adequate amounts of every essential amino acid but can be combined with other plant sources to make complete protein. Beans, legumes, grains, soy, nuts and seeds are examples of high-protein plant foods.

Many researchers believe that the current protein recommendations may be too low to stay truly healthy in the long term.

Protein serves a number of important functions. It is made up of individual amino acids, including many that body cannot create on its own.

Protein intake increasing may have impressive effects on appetite, metabolic rate, weight and body composition. The ability of high-protein diets to decrease hunger, increase feelings of fullness, boost metabolic rate and protect muscle makes them effective for losing weight and improving body composition.