

ALL ABOUT PROTEINS

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Every day, we consume foods to sustain the needs of our bodies and continue living. These foods serve a lot of tasks in our bodies by the help of the stuff it contains. One of them is protein. Now, let us know, explore, and understand proteins more.

We can find proteins in various things that are surrounding us. They can be found in the vertebrate animals. It includes our hair, nails, cartilages, hooves, muscles, hormones, blood proteins, and even in numerous poisons like those found in the venoms of the rattlesnakes. We can also find the enzymes, which are the agents that are useful for organisms.

Proteins are treated as the most common organic compounds containing hydrogen, oxygen, carbon, and nitrogen. On the other hand, several proteins hold phosphorus and sulfur.

These proteins have numerous purposes in their existence. It helps repair and build your body's tissues, allows metabolic reactions to take place and coordinates bodily functions. In addition to providing your body with a structural framework, proteins also maintain proper pH and fluid balance.

The primary structural units of proteins are amino acids. They are made up of the carboxyl group (-COOH), and the amino groups (-NH₂). The groups mentioned can create a chain and very long chains of amino acids. They also make covalent bonds on each other. There are amino acids that are known, and they are compromising asparagine, arginine, aspartic acid, alanine, glutamic acid, cysteine, histidine, glutamine, glycine,

isoleucine, lysine, leucine, proline, phenylalanine, serine, methionine, threonine, tyrosine, valine, and tryptophan.

The amino acids mentioned vary in a region called the “R Group,” though they have a similarity when it comes to a chemical structure. These R groups are the ones that give the amino acids their characteristic since the group is ionically charged and sometimes, polar or sometimes non-polar. (Brazier, 2020)

In the end, we must gain the essential amino acids for us to survive. These are tryptophan, lysine, valine, leucine, histidine, phenylalanine, isoleucine, arginine, methionine, and threonine.

References:

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