

SUMMARY

Proteins are the macromolecules composed of carbon, hydrogen, oxygen, nitrogen & sulphur. They are made up of amino acids linked together by peptide bonds. Their molecular weight ranges from 10,000 to more than 10,00,000. Proteins are needed for growth, maintenance & repair of body tissue. They regulate key processes in the body & any excess proteins from the diet can be used as source of energy. Dietary protein is found in meats, dairy products, legumes, nuts & grains. In general, animal foods contain higher quality protein than plant foods. Protein needs are highest when growth is rapid, such as infancy, childhood & adolescence. Protein deficiency is most common in developing countries & often results in marasmus & kwashiorkor. Excess protein is also harmful & may affect risk for heart diseases & cancer.

Proteins are the most abundant macromolecules in living cells and constitute 50% or more of their dry weight. They are composed of carbon (50-55%), hydrogen (6-7%), nitrogen (15-19%), oxygen (19-24%), Sulphur (0-4%) & phosphorus & molecular weight ranges from 10,000 to more than 10,00,000. Proteins are needed for growth, maintenance & repair of body tissue. They regulate key processes in the body & any excess proteins from the diet can be used as source of energy.

About 50% of protein is present in muscle, 20% in bone, 10% in skin & the rest is present in other parts of the body.