



UNIT 1

IMPORTANT FUNCTIONS

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Carbohydrates have six major functions



- Providing energy and regulation of blood glucose.
- Sparing the use of proteins for energy.
- Breakdown of fatty acids and preventing ketosis.
- Biological recognition processes.
- Flavor and Sweeteners.
- Dietary fiber.



FUNCTIONS OF LIPIDS IN BODY



- Lipids function as **an energy reserve, regulate hormones, transmit nerve impulses, cushion vital organs, and transport fat-soluble nutrients**. Fat in food serves as an energy source with high caloric density, adds texture and taste, and contributes to satiety
- **Storing Energy**. The excess energy from the food we eat is digested and incorporated into adipose tissue, or fatty tissue. ...
- **Regulating and Signaling**. ...
- **Insulating and Protecting**. ...
- **Aiding Digestion and Increasing Bioavailability**.



Important functions of protein in our body



- Growth and Maintenance
- Acts as a Messenger
- Provides Structure
- Maintains Proper p H
- Balances Fluids
- Bolsters Immune Health
- Transports and Stores Nutrients



Important functions of nucleic acids

- Two main functions of nucleic acids:

(i) DNA is responsible for the transmission of inherent characters from one generation to the next. This process of transmission is called heredity.

(ii) Nucleic acids (both DNA and RNA) are responsible for protein synthesis in a cell.



Important functions of Enzymes

- Enzymes **help speed up chemical reactions in the human body.**
- Respiration
- Digesting food
- Muscle and nerve function etc.,, among thousands of other roles.
- Each cell in the human body contains thousands of enzymes. Enzymes provide help with facilitating chemical reactions within each cell



Function of chromosomes

- The main function of chromosomes is **to carry the DNA and transfer the genetic information from parents to offspring**. Chromosomes play an important role during cell division. They protect the DNA from getting tangled and damaged.

