

Instructions

Read the following information on lipids, then answer the questions that follow.

What are Lipids?

Lipids are a group of organic compounds that are insoluble in water but soluble in organic solvents. They include fats, oils, waxes, and steroids. Lipids play important roles in energy storage, cellular structure, and signaling.

Types of Lipids

- **Triglycerides:** These are the main constituents of body fat in humans and animals, as well as vegetable fat. They are composed of glycerol and three fatty acids.
- **Phospholipids:** These are a major component of all cell membranes, as they can form lipid bilayers.
- **Steroids:** These lipids have a structure of four fused carbon rings. Cholesterol is an important steroid in cell membranes.

Functions of Lipids

Lipids serve several functions in the body including:

- Energy storage
- Insulation and protection of organs
- Forms cell membranes
- Hormone production

Questions

1. What are lipids and why are they important in biology?

2. Name three types of lipids and provide a brief description of each.

3. Explain two functions of lipids in the body.

4. What role do phospholipids play in cell membranes? Why is this important?

5. After researching further, describe any current advancements or topics of interest related to lipids.