

Concept 5.3

Lipids include fats and steroids.

Characteristics of Lipids:

Hydrophobic - “Water-fearing”

Lipids act as a boundary that surrounds and contains the aqueous contents of your cells.

Other lipids known as fats store energy in your body.

Fat - consist of a three-carbon backbone called glycerol attached to three fatty acids, which contain long hydrocarbon chains. In addition to storing energy fatty tissues cushion your organs and provide insulation.

Saturated fat - is a fat which all three fatty acid chains contain the maximum number of hydrogen atoms.

Unsaturated fat - contain less than the maximum number of hydrogen atoms in one or more of its fatty acid chains because some of its carbon atoms are double-bonded to each other.

Steroids - A lipid molecule in which the carbon skeleton forms four fused rings.

- have a core set of four rings and differ in the kinds and locations of functional groups attached to the rings.
- also classified as lipids because they are hydrophobic.

Cholesterol is an essential molecule found in the membranes that surround your cells. It is also the starting point from which your body produces other steroids.