# Lipids in Human Nutrition

Lipids are a heterogeneous group of compounds, including fats, oils, steroids, waxes, and related compounds. They are concentrated sources of energy as well as structural components of cell membranes. A certain amount of dietary fat is required for normal bodily functions.

**Fatty Acids (FA)** are described according to the number of double bonds present:

- **Saturated fatty acids** have no double bonds, for example (palmitic and stearic acid)

Saturated fats have a significant hypercholesterolemic effect (increase blood cholesterol levels). They are found predominantly in animal products (butter, cheese and meat).

- **Unsaturated fatty acids** may contain one or more double bond's e.g. Monosaturated fatty acids have one double bond (oleic acid). Polyunsaturated acids (linoleic, linolenic, arachidonic acids)

**Essential fatty acids** have to be provided by the diet, they play vital roles in cell membrane structure. They belong to N-3 and N-6 classes. Oil rich fish contain long chain N-3 FA. They decrease the risk of coronary heart disease.

## Links

### Related articles

- Lipids and Carbohydrates in Human Nutrition
- Minerals in Human Nutrition
- Trace Elements in Human Nutrition
- Food Contaminants

### External Links

- http://www.who.int/nutrition/topics/nutrecomm/en/index.html (http://www.who.int/nutrition/topics/nutrecomm/en/index.html)

### Bibliography


- BENCKO, Vladimir, et al. *Hygiene and epidemiology : selected chapters.* 2. edition. Prague. 2008. ISBN 80-246-0793-X.