

# Fat

Fat by any other name would be called “Lipids”. This is the chemical name for fat. *Lipids* are in food and are made in our body. Lipids are substances which do not dissolve in water and can be solid, called “Fat” or can be liquid, called “Oils”.

Fat is an essential nutrient. Yup, you can die without eating fat. Actually the essential parts are called **Essential Fatty Acids (EFA)** without which you will develop an Essential Fatty Acid Deficiency, although this is extremely rare. There are two specific fatty acids that are truly essential, meaning the body cannot make these: linolenic and linoleic fatty acids.

Fat is widespread in our food and most food contains at least a trace of fat. Many flavors and odors that we experience in food are actually in the fat part of the food. Fat is the most concentrated source of energy. That is because it contains 9 calories per gram of fat food whereas carbohydrate and protein provide 4 calories per gram. This means that the same amount of food if it is fat will give you more than twice the calories as carbohydrate or protein food of the same size. This is bad news to most healthy people but it comes in handy when you need to eat a small amount of food and yet get enough energy (calories). For instance, in people who have lost their appetite due to disease, age or medications like chemotherapy, this is one of the ways they can get enough calories without eating loads of food. Fat is also found in structures that help control blood pressure and control hormones and are part of cell membranes.

The kind of fat that is most widespread in our food AND in our body is called Triglycerides. This is made up of a substance called glycerol with up to three fatty acids attached. There are three kind of fatty acids: saturated (SFA), monounsaturated (MUFA) and polyunsaturated (PUFA). All these have different chemistry BUT the most important things to know are about how they affect our health.

**Triglycerides** in our blood can be raised by when we eat excess amounts of food high in sugar or alcohol. The healthy or ‘normal’ amount in our blood should be less than 150 mg/dL. Elevated blood triglycerides increase your risk for cardiovascular disease. [Click her for more info on how to lower Triglycerides with diet.](#)

**Saturated fats** in food are usually solid at room temperature. They are mostly found in foods from animal sources like meat, poultry, dairy products and eggs. Saturated fats are also found in coconut and palm oils.

**Monounsaturated and polyunsaturated fats** are liquid at room temperature. They are most often found in oils from vegetables and grains. Good sources of monounsaturated fats (MUFA) are olive, canola, and peanut oil. Good sources of polyunsaturated fats (PUFA) are corn, soybean (also has significant MUFA), safflower, and sunflower oils.

Omega fatty acids are a specific kind of fatty acid. Foods high in **Omega-3** fatty acids help to lower heart disease risk, control blood pressure and reduce inflammation. These foods include fish which are high in fat like: salmon, tuna, mackerel, herring, swordfish, and halibut as well as walnuts and flax seeds.



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**Trans** fats are not naturally occurring in food. They are made during food processing when oils are made into solid fats such as in the production of margarine. This process is called “hydrogenation”. When you see the term “partially hydrogenated” in an ingredient list there are *trans* fats present. These *trans* fats in food will increase LDL levels in the blood and increase the risk of heart disease as well as cancer.

**Cholesterol** is a sterol or ring shaped lipid substance which the body needs to make hormones, bile, and cell membranes. The body makes sufficient amounts of cholesterol. The normal level of *Total Cholesterol* in our blood should be less than 200 mg/dL. We also eat cholesterol in animal foods like meat, the fat portion of dairy products and eggs.

Fat in our food becomes a health problem when we eat too much fat. **Total fat** in our diet is the **highest dietary risk factor** for heart disease. Yes, it is important to lower cholesterol and saturated fat intake for heart health while switching to mono- and polyunsaturated rich foods, but the total amount of fat that we eat is the most likely to raise blood lipids. High blood lipids increase our risk of heart disease. [For definitions of heart disease factors, click here.](#)

We only need small amount of fat each day. The average American eats three times the amount of fat that our body needs. So for improved overall health reduce the amount of fat that you eat and switch to heart healthy fats. Choose lean meats and cut off visible fat. Remove skin on poultry and the fat along with it. Substitute fish for meat or poultry at least twice a week. Choose vegetarian options which are low in fat. Choose low fat dairy products. Limit fast food and processed food. Use baking, broiling, or boiling instead of frying. Cut down on sauces and gravies all of which, unless prepared as low fat, are high in fat. Cut portion sizes of high fat foods. Choose snacks which are fat free and eat more fruits and vegetables which are free of fat.

Most of all enjoy healthy food for a healthy heart!



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