

TYPES OF FAT STRUCTURES

Unsaturated Fats

Polyunsaturated Fat

The main sources of polyunsaturated fats are seeds, nuts, grains, and vegetables. Polyunsaturated fat is usually in a liquid state at room temperature and also when chilled. It lowers the overall cholesterol level, but it also reduces HDL or good cholesterol. Recommended daily allowances of polyunsaturated fats should be part of a balanced diet, but some tests have shown that high consumption may actually be damaging to the digestion and nervous systems, so moderation is the key for a balanced and healthy diet.

Omega-3 fatty acid is a type of polyunsaturated fat that is especially healthy. Omega-3 fatty acids help to reduce the risk of heart disease, lower blood pressure, guard against plaque buildup in the arteries, and aid in brain development. It is found in some plant oils and in the tissues of all sea creatures. Among the plant oils rich in omega-3 fatty acids are flax seed, canola, and soybean oil. Fish that are particularly high in omega-3 are sardines, herring, tuna, and salmon.

Monounsaturated Fat

Most animal and vegetable fats contain monounsaturated fat, but in varying quantities. It is usually in liquid form at room temperature, but it may begin to solidify if it is chilled. Monounsaturated fat is the most desirable type of fat in the diet because it helps to decrease the LDL (bad) cholesterol in the blood and helps to increase the HDL (good) cholesterol. Good sources of monounsaturated fat are olive oil, canola oil, peanut oil, and most nuts. Olive oil has the highest percentage (about 77%) of monounsaturated fat of any edible oil.

Saturated Fats

Saturated Fat

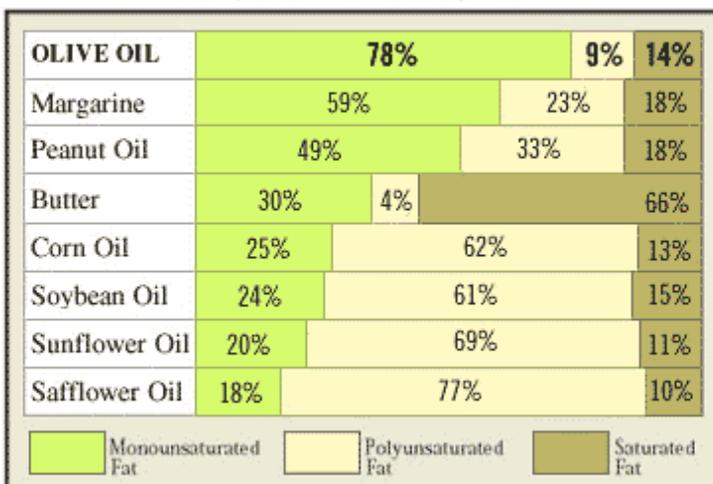
Animal meats, butter, whole milk, and some tropical plant oils, such as palm and coconut, are the main sources of saturated fat, which is the least healthy type of fat. Saturated fat raises the level of LDL (bad) cholesterol, which causes numerous health problems if consumed in large quantities. Most saturated fats are solid at room temperature.

Hydrogenated Oils

Trans-fatty acid, also known as trans-fat, is formed when hydrogen is added to vegetable oil in order to change the liquid oil into a solid at room temperature. This process is known as hydrogenation, which also transforms the unsaturated fats of the liquid oils into saturated fat. Like saturated fat, trans-fat may raise blood cholesterol levels and increase the risk of heart related diseases. Many shortenings, margarine, and commercially baked goods are high in trans-fatty acids.

One advantage that hydrogenated or partially hydrogenated fats have is that they are less likely to turn rancid, which is very beneficial to the commercial food industry in creating foods with a longer shelf life. As with any type of food containing saturated fat, foods containing hydrogenated or partially hydrogenated fat should be enjoyed in moderation in order to maintain a balanced and healthy diet.

Comparison of Dietary Fats



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