# Coconut Oil

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## **Health Effects of Coconut Oil**



Coconut meat

Coconut oil comes from the meat of the matured coconuts harvested from the coconut palm. It is used in food, medicine and in the industry. Coconut oil is high in saturated fat, which contributes to its long self-life.

Coconut oil has a lot of medium chain fatty acids that bypass the normal fat metabolism and are metabolized immediately. Because of that, it can be useful for malabsorption conditions.

Some fatty acids in coconut oil have antibacterial, antiviral and antifungal properties, while others may help support the immune system due to their unique composition.

The fatty acids in coconut oil help to maintains coagulation factors and therefore do not seem to increase heart disease risk, and based on clinical studies, reduce cholesterol and triglyceride levels.

Best result (i.e. reducing heart disease risk) is obtained when coconut oil is combined with safflower, corn, or olive oil.

Coconut oil contains antioxi-

dants such as vitamin E, pro -vitamin A, polyphenols and phytosterols. The antioxidant nutrients also reduce the risk for heart disease.

Coconut oil is used in cooking because it has a higher burning point and can be used to cook foods that need high temperature without worrying about burning the oil. The oil does not become rancid as quickly as some other fats because it has mainly saturated fats. Coconut oil is solid at room temperature and can be used in cooking and baking, adding a nutty, vanilla-like flavor to foods. In certain cultures it is used as the main cooking oil.

### Special points of interest:

- COCONUT OIL HAS MANY PHYTOCHEMICALS AND ANTIOXIDANT VITAMINS.
- COCONUT OIL MAY HAVE ANTIVIRAL, ANTIBACTERIAL AND ANTIFUNGAL PROPER-TIES.
- COCONUT OIL DOES NOT INCREASE HEART DISEASE RISK DUE TO ITS UNIQUE FATTY ACID COMPOSITION.

# Role of fat in the body

Fat is an important component of the diet. It is used in the production of many hormones. It protects our nerves and internal organs as a thermal covering. It is essential for growth. Some fatty acids are essential; therefore, we must get them from the diet, and they are used to make important compounds for growth and in metabolism. Fat is also used for energy. There are three types of fatty acids. Short-chain, mediumchain, and long-chain fatty acids. Because of the various lengths of the fatty acids, they are digested and metabolized differently. Most vegetable oils have long chain fatty acids, however, coconut and palm oil have a lot of medium chain fatty acids. Fatty acids can also be saturated or unsaturated. Animal fats tend to be saturated fats while vegetable fats tend to be unsaturated fats.

The Dietary Guidelines for Americans (2010) recommends that we consume 30 percent of calories from fat with no more than 10 percent from saturated fats.



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## Fats explained

#### Saturated fatty acids

Saturated fats come mainly from animal sources such as dairy and dairy products, meat and meat products, butter, margarine, hydrogenated vegetable oils. Coconut oil and palm kernel oil are the only vegetable oils that contain saturated fats. Saturated fats make blood vessels less pliable and more rigid when incorporated into cell walls. They increase heart disease risk and blood pressure due to the decrease in pliability of blood vessels. They increase diabetes risk because the rigid cell walls don't allow insulin to pass alucose in and out of cells as easily, or many other cellular compounds that are constantly passed in and out of cells. Saturated fats increase LDL and triglyceride levels, while reducing HDL cholesterol. They increase inflammation by being formulated into molecules in the cells that are inflammatory.

# Unsaturated omega-6 fatty acids

Unsaturated omega-6 fatty acids come mainly from vegetable oils such as corn, soybean, and safflower. They tend to promote inflammation by producing molecules that increase the inflammatory state. They tend to promote some chronic diseases such as cancer, high blood pressure, and diabetes. They reduce LDL cholesterol, increase blood clotting, and cell growth. They also contain essential fatty acids needed by humans.

# Unsaturated omega-3 fatty acids

Unsaturated omega-3 fatty acids come from plants and seafood. They are the most heart healthy. They reduce blood pressure, LDL cholesterol, and triglycerides, while increasing HDL cholesterol. They also contribute essential fatty acids required for human health.

#### Medium chain fatty acids

Medium chain fatty acids are used as a source of fat in enteral formulas for individuals who have malabsorption conditions such as irritable bowel syndrome and ulcerative colitis, and in infant formulas. They are also used to increase the energy intake in cystic fibrosis patients. Medium chain fatty acids affect some hormones in the body. They inhibit bacterial and virus growth, reduce LDL and increase HDL cholesterol. They reduce abdominal fat and increase fat burning. Medium chain fatty acids are not stored in body fat deposits, and they decrease cholesterol synthesis by the liver. They do not provide essential fatty acids.

The recommended ratio of omega-6 to omega-3 fatty acids is around 1:1 to 5:1. Currently the typical American diet has a ratio of about 20:1 or more. The intake of medium chain fatty acids is very low on a normal diet and there are no recommendations currently for medium chain fatty acid intake. Since they are metabolized differently than long chain fatty acids, they seem not to confer the same risk for cardiovascular disease as long chain saturated fatty acids. It is recommended that one use caution in incorporating medium chain fatty acids in the diet until there is research to indicate otherwise.



Vegetable oil and vinegar.

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Heli J. Roy, PhD, MBA, RD School of Nutrition and Food Sciences Louisiana State University Pennington Biomedical Research Center August 2013 Pub No. 94

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