

Coconut Oil: A Potentially Dangerous Source of Fat

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In recent years, there has been a resurgence of interest in coconut oil as a health-promoting food and medicinal supplement. Some of the health benefits of coconut oil touted by various suppliers include stress relief; maintaining cholesterol levels; treatment of candida and pancreatitis; weight loss; increased immunity; proper digestion and metabolism; relief from kidney problems, heart diseases, high blood pressure, diabetes, cancer and even HIV; improved dental care; and bone strength. Unfortunately, none of these claims has been substantiated by human clinical trials and, in my view, are largely misleading. A bigger concern is the fact that the regular use of coconut oil may actually promote deleterious health effects, especially in regard to cardiovascular disease.

Coconut Oil and Cardiovascular Disease

Although there have been no formal coconut-oil loading studies in humans that address lipid changes, there is strong indirect evidence that regular use of coconut oil will raise blood cholesterol and increase risk of thrombotic conditions (e.g., deep vein thrombosis, myocardial infarction, ischemic stroke, transient ischemic attacks). The evidence is based upon documentation showing that lauric acid (C12) is a very strong promoter of elevated serum LDL and total cholesterol levels. Individuals using coconut oil often don't realize that more than half of coconut oil consists of the saturated fat lauric acid (see table). Coconut oil also contains other established cholesterol-raising saturated fats, including myristic acid (18 percent) and palmitic acid (8 percent). Of all the fatty acids in coconut oil, approximately 75 percent include saturated fats that are well-documented to increase serum levels of total and LDL cholesterol (lauric, myristic and palmitic acids).

FATTY ACID COMPOSITION OF COCONUT OIL*		
Common name	Composition	Mean %
Caproic acid	C 6:0	0.44
Caprylic acid	C 8:0	7.05
Capric acid	C 10:0	6.59
Lauric acid	C 12:0	50.63
Myristic acid	C 14:0	18.10
Palmitic acid	C 16:0	8.26
Stearic acid	C 18:0	3.07
Oleic acid	C 18:1	4.65
Linoleic acid	C 18:2	0.8
Other	C 18:3 C 24:1	0.31
* www.kokonutpacific.com.au/OilSales/OilCoconutoil/Oil_specs.html		

With regard to increasing platelet stickiness and promoting endothelial dysfunction (two important

events in thrombogenic diseases), the evidence from human and animal studies suggest very strongly that palmitic acid and stearic acid are the [strongest promoters of thrombogenesis](#) among the fatty acids in the human diet.¹ Nearly 12 percent of all the fatty acids in coconut oil are composed of these two saturated fats.

No Inherent Need for Saturated Fat

The human body has [no requirement for saturated fat](#).² Dr. William Castelli, the medical director of the [Framingham Heart Study](#), and Dr. Dean Ornish have provided [compelling evidence](#) that the lower one's total saturated fat intake (from all sources), the lower the risk of cardiovascular events, including heart attack, stroke and angina. [Dr. Ornish](#) has provided evidence to show that a virtually zero-saturated-fat diet, along with moderate exercise and meditation, can [reverse atherosclerosis](#), as demonstrated by angiography studies. I suggest if you are interested in learning more about the influence of fats on cardiovascular disease, you read the books and articles containing the research findings of Drs. Castelli and Ornish.

It may be of interest for the student of saturated fatty acids to know that the liver can synthesize saturated fat (primarily palmitic acid), as well as the monounsaturated fat oleic acid, from carbohydrates consumed in the human diet. After age 5, there is [no nutritional need](#) for dietary saturated fat or cholesterol. This is an established scientific fact. Up to age 5, the body requires saturated fat and cholesterol (which it can make upon saturated fat ingestion). I suggest coconut oil may be an acceptable and desirable source of saturated fatty acids for children under the age of 5.

Resources

1. Renaud S. [Thrombogenicity and atherogenicity of dietary fatty acids in rat](#). *Atherosclerosis*, 1967;8(4):625-36.
2. Kris-Etherton P, Daniels SR, Eckel RH, et al. [Summary of the Scientific Conference on Dietary Fatty Acids and Cardiovascular Health: conference summary from the Nutrition Committee of the American Heart Association](#). *Circulation*, 2001;103(7):1034-9.

APRIL 2009