

Lauric Acid (C12) and Coconut Oil

Lauric acid, or dodecanoic acid, is a saturated fatty acid with the molecular formula $\text{CH}_3(\text{CH}_2)_{10}\text{COOH}$. It is the main acid in coconut oil and in palm kernel oil, and is believed to have antimicrobial properties. It is also found in human milk (5.8% of total fat), cow's milk (2.2%), and goat milk (4.5%).

Much research on the nutritional and medicinal benefits on coconut oil has surfaced in recent years. Much of that research has been done by Dr. Mary Enig. Dr. Enig has classified coconuts as a "functional food," which provides health benefits over and beyond the basic nutrients. She has specifically identified lauric acid, C12, as a key ingredient in coconut products:

"Approximately 50% of the fatty acids in coconut fat are lauric acid. Lauric acid is a medium chain fatty acid (MCFA), which has the additional beneficial function of being formed into monolaurin in the human or animal body. Monolaurin is the antiviral, antibacterial, and antiprotozoal monoglyceride used by the human or animal to destroy lipid coated viruses such as HIV, herpes, cytomegalovirus, influenza, various pathogenic bacteria including listeria monocytogenes and heliobacter pylori, and protozoa such as giardia lamblia. Some studies have also shown some antimicrobial effects of the free lauric acid."

As a "functional food," coconut oil is now being recognized by the medical community as a powerful tool against immune diseases. Several studies have been done on its effectiveness, and much research is currently being done on the incredible nutritional value of pure coconut oil. The references for the research can be found in "The Healing Miracles of Coconut Oil" by Dr. Bruce Fife, ND.