

## Just One Fatty Meal Can Hurt Your Heart

For years, people have been advised to avoid saturated fats because they raise blood levels of harmful low-density lipoprotein (LDL) cholesterol, which promotes the development of atherosclerotic plaques.

It's been thought that the harmful effects from saturated fats occur over many years. Now, a small but intriguing study from Australia has shown that harm can result from just one meal rich in saturated fats.

The study examined the effects of two different "meals," each consisting of a slice of carrot cake and a milk shake, in 14 healthy adults. Both meals contained equal amounts of calories but one meal was made with mostly saturated fats (coconut oil) and the other with mostly polyunsaturated fats (safflower oil).

Tests done after the meal showed that, in the people who dined on the saturated-fat version, high-density lipoprotein (HDL) cholesterol was less effective in protecting arteries from cells that cause inflammation and can lead to atherosclerosis.

The saturated fat meal also impaired the ability of large arteries to widen and diminished blood flow to the arm. But these effects were not observed after the meal in people who ate the polyunsaturated-fat version.

These results suggest that people can be harmed each time they eat a meal containing large amounts of saturated fats. However, people rarely eat such large amounts of coconut oil at a single meal. It will be interesting to see if a larger study using other saturated fats yields similar results.

Nevertheless, the results do reinforce the conclusion that the risk of atherosclerosis is increased by saturated fats and diminished when polyunsaturated (especially monounsaturated) fats replace saturated ones.

Good sources of polyunsaturated fats include safflower, sunflower, and corn oils; soybeans; and many nuts and seeds. Foods rich in monounsaturated fats include canola and olive oils and avocados.

Saturated fats are found in red meats; dairy products; coconut, palm, and palm kernel oils; and cocoa butter.

Credit – Simon Margolis, M.D., Ph.D.