

The Truth about Coconut Oil

Is It Really Healthy?

The science..... By [Becky Hand, Licensed and Registered Dietitian](#)

Conduct a quick Google search, and you'll find miraculous claims about a tropical fat that has become increasingly popular among health-conscious consumers in recent years: coconut oil. Health claims about the oil's ability to help you burn fat, boost your memory, improve your heart health—and even prevent sunburn—abound. Many trusted talk-show hosts and "wellness experts" have touted coconut oil as nature's "miracle" food.

In contrast, many other health and nutrition experts disagree. Coconut oil has long been on the [list of "unhealthy" fats](#) due to its high saturated fat content.

So, whom should you believe?

Before you twist off the lid on a new jar, here are the real, unbiased—and research-supported—facts about coconut oil.

In a (Coco)nut Shell: The Condensed Story of Coconut Oil

People make a lot of claims about coconut oil, but there is no well-designed, peer-reviewed, credible scientific evidence to show that coconut oil speeds metabolism, promotes weight loss, cures Alzheimer's disease, improves brain function, or improves heart health. In addition, no evidence exists to prove that "virgin" coconut oil is any less damaging to your heart than other varieties.

Nutritionally speaking, coconut oil contains 9 calories per gram, as do all other fats, making it a calorie-dense food. Dietary fat from all sources should make up no more than [35% of your daily calorie intake](#). Probably more importantly—and where the controversy lies—is that more than 90% of the fat in coconut oil is saturated fat. Decades of research have determined that saturated fat is detrimental to the health of your heart and blood vessels (more on that later). That's why healthy adults are advised to consume no more than 10% of their calories in the form of saturated fats. (For people with heart disease--or at high risk for developing it--that amount is even lower: Less than 7% of their calories should come from saturated fat each day.)

Keep an eye on your total calories, fat—and saturated fat—intake to make sure all are within your recommended ranges.

Coconut Oil Can Be Confusing If you're Not a Chemist

When we consume plant and animal sources of fat, we also eat their fatty acids, all of which are structurally different. For example, some of the fatty acids in butter and milk fat have a short chain length of 4-6 carbons. Coconut oil contains fats with 12-14 carbons, animal fats have some longer carbon chains with 16-20 carbons, and peanut oil has 20-22 carbons in

some of its fatty acid chains. While there is no exact definition as to the number of carbons needed to be classified as a short-, medium- or long-chain fatty acid, most researchers define "medium-chain" as somewhere between 6 and 14 carbons.

We know that fats with medium chains (called medium-chain triglycerides or "MCTs") are metabolized much differently than fats with shorter and longer carbon chains. When consumed, MCTs are transported directly from your intestines to the liver, where they are more likely to be burned as fuel, as opposed to shorter and longer chains, which typically get stored as fat in the body. MCTs require fewer enzymes and bile acids for digestion, too.

So, where can you get these amazing MCTs?

Many people claim they're found in coconut oil, but that is only a half-truth. No source of food is "purely" any single type of fat. Even olive oil, touted for its heart-healthy monounsaturated fat content, also contains *small amounts* of saturated fat, for example; it's just that *most of the fat is the healthy kind*. Similarly, foods contain a blend of short-, medium- and long-chain fats. No single source of MCT is available—it's only manufactured and used in medical or research settings.

Many people who make positive health claims about coconut oil are actually using research on medical-grade MCT oil, which is not available as a dominant source of fat in any food.

It's true that MCT can be *distilled from* coconut oil, but it is not the same thing as the coconut oil you buy in a jar at the store. Chemically speaking, these two oils are very different.

MCT oil comprises caprylic acid (8 carbons) and capric acid (10 carbons). Therefore 99.9% of MCT oil composition comes from medium chain fats. On the other hand, coconut oil only contains about 10%-15% of these MCTs (caprylic acid and capric acid). Lauric acid (a 12-carbon chain) makes up 45%-50% of coconut oil. The remaining fatty acids in coconut oil include caproic acid (6 carbons), myristic acid (14 carbons), palmitic acid (16 carbons), and stearic acid (18 carbons).

The Research on MCT

Some research done on humans shows that substituting the distilled MCT oil for long-chain fats found in meats, fish oils, and vegetable oils can result in a short-term increase in metabolic rate and increased satiety for the calories consumed. This is one factor that could result in weight loss. So, MCT oil does appear to be slimming when used with other weight-loss interventions.

However, to imply that the research data from a study on MCT also applies to coconut oil is erroneous and a misinterpretation of the data. The carbon chain make-up of MCT oil and coconut oil is entirely different, as shown in the chemistry lesson above. Caprylic acid and capric acid make up 99.9% of MCT oil, and only 10%-15% of coconut oil.

Also, coconut oil's main fatty acid is lauric acid. This fatty acid, along with coconut oil's myristic and palmitic acids, have been shown to markedly raise LDL ("bad") cholesterol.

A Word on Saturated Fat

More and more people are questioning what we once thought about saturated fat: that all saturated fat is bad for you. It's true that nutrition science is ever-evolving; the research and knowledge regarding saturated fat has really grown in recent years. So, who is right?

We now know that different types of saturated fat can affect the body differently. Previously, all saturated fats were considered the same, but *research now shows that the saturated fats in coconut oil are somewhat different from the saturated fats in meat and butter, and might therefore affect the body differently.* Until we know for certain, it is still best to be cautious and keep your total saturated fat intake at or below 10% of your daily calories.

What about Populations That Eat Diets High in Coconut Oil?

One study conducted many years ago on two Polynesian islands (Pukapuka Islands and Tokelau Islands) found that the consumption of coconuts was remarkably high, making up 34%-63% of the total calories of the populations. Since coconut oil is highly saturated, it is not surprising that the blood cholesterol levels in the islanders were elevated. Yet, the researchers noted that cardiovascular disease was uncommon.

However, this claim was based on a single electrocardiogram (ECG) test, not on death or autopsy. And it is important to note that the ECG is not considered a reliable way to assess cardiovascular health.

Also realize that these populations had a low intake of sugar, cholesterol and salt in their diets, and consumed far more fiber, [plant sterols](#), and [omega-3 fatty acids](#) from fish. They also had a more active lifestyle and used little tobacco.

This study is often used to promote the use of coconut oil, but the study is very limited in its actual application, and it was not a well-controlled study. Plus, as we all remember from sixth-grade science: *Correlation does not prove causation.* If these islanders were, in fact, healthier and at low risk of heart disease (which wasn't necessarily proven, remember), there is no possible way an uncontrolled study like this can attribute that result to their consumption of coconut oil. A myriad of other diet and health behaviours that impact heart health were not isolated and controlled for in this observational study.

Other Coconut Products

Coconut oil isn't the only source of saturated fat. As the popularity of coconut oil increases as the result of "paleo" or "caveman" diet trends, we're seeing more and more coconut products on grocery shelves, too. You'll need to keep a handle on other coconut products, too, as many are also high in saturated fat.

- **Coconut milk**, which contains the meat and liquid of coconuts and often comes canned, is rich in calories and fat. A 1/2-cup serving contains 223 calories and 24 grams of fat, 21 of which are saturated—well over one's typical upper limit for saturated fat.

- **Raw, shredded coconut meat**, which can be purchased as-is or cut up from a whole coconut, is often used in tropical fruit salads. A small 1/4-cup serving contains 71 calories and 7 grams of fat (6 of which are saturated).
- **Dried, shredded coconut** is most often found in the baking aisle or in bulk at natural foods stores. Often used in baking, smoothies or desserts, a 1/4-cup serving contains 150 calories, 15 grams of fat and 13 grams of saturated fat. You'll most often find dried and sweetened coconut at conventional grocers. Sweetened coconut is actually lower in calories and fat, since some of the fat is displaced by sweeteners. A 1/4-cup serving contains 116 calories and 8 grams of fat (7 of which are saturated).
- **Coconut water**, on the other hand, does not use the "meat" of the coconut—only the watery liquid inside. Therefore, it does not contain the calories and fat found in coconut oil or shredded coconut meat. Many athletes and fitness enthusiasts are [using coconut water to rehydrate the body](#) during exercise and endurance events. A 1-cup serving of coconut water contains 46 calories, 0.5 grams of fat, 0.4 grams of saturated fat, 600 milligrams of potassium and 252 milligrams of sodium, according to data from the USDA. But beware: **[Recent reports are saying that coconut water is no better than plain old water when it comes to hydration.](#)**

The Bottom Line

There is not yet any credible research data that proves that coconut aids in weight loss, brain function, or heart health.

Remember: A little coconut oil can go a long way in adding the flavour and texture you desire to certain foods you're your best to keep your total fat and saturated fat intake within the [healthy range recommendations](#) that are based on decades of research. This is the case for heart-healthy olive oil just as much as it would be for coconut oil.

Like many things in nutrition, moderation is key. Even if coconut oil were as healthy as people claim it to be, you can have too much of a good thing. This is the case for fats, proteins, fibre, water—pretty much anything you eat or drink. It's all about balance.