MERCOLA
Take Control of Your Health

Why Butter and Coconut Oil Are Good for You

Analysis by Dr. Joseph Mercola ✔ Fact Checked | July 25, 2022

STORY AT-A-GLANCE

- Data show that higher levels of dairy fat biomarkers are associated with a lower risk of cardiovascular events and all-cause mortality. The link appears to be odd-chain saturated fats, like pentadecanoic acid (C15:0)
- People with higher levels of C15:0 had a lower incidence of heart disease risk in a linear dose-dependent manner. Data compared C15:0 against omega-3 and found broader health benefits
- Coconut oil is another healthy saturated fat that helps control Crohn's disease, support thyroid function and promote heart health; in places where coconut oil is routinely consumed, the populations have little vascular disease
- Conversely, vegetable oils, which are recommended by the American Heart Association, lead to a severe imbalance in omega-3 and omega-6, and increase your risk of several chronic and lethal diseases, including cancer and mitochondrial dysfunction leading to cell death
- A cyclical ketogenic diet improves your body's ability to burn fat and produce ketones, which optimizes your metabolic function, improves cellular efficiency and makes you more resilient against respiratory viruses like SARS-CoV-2

Dietary fats are a crucial component of a healthy diet. However, the type of fat you choose can make the difference between supporting optimal health or promoting disease. Replacing dangerous oils with healthy fats is one simple way to boost your health and reduce the risk of chronic disease.[1]

For example, I've often warned against the use of soybean oil.[2] Soybeans not only are typically genetically modified to withstand applications of herbicides such as Roundup,[3] but the oil is also partially hydrogenated and loaded with trans fat,[4] it's also a source of omega-6 fat called linoleic acid (LA). This is highly susceptible to oxygenation, which in turn damages your cells.

As your body digests soybean oil, it's broken down into harmful subcomponents called advanced lipid oxidation end products (ALEs)[5] and oxidized LA metabolites (OXLAMs).[6] These cause significant damage at the cellular level and may be at the root of many chronic metabolic and degenerative diseases.

This is because the oils trigger mitochondrial dysfunction that drives the disease process, which many studies have demonstrated.[7,8,9,10] Instead of vegetable oils, choose grass-fed organic butter. Data show[11] that biomarkers of dietary fat intake are linked to a reduction in cardiovascular disease and all-cause mortality.

Dairy Fat Intake Linked to Lower Heart Disease and Death

One study[12] published in September 2021 in PLOS Medicine looked at the association between serum biomarkers of dietary fat intake and the incidence of cardiovascular disease. The researchers measured pentadecanoic acid 15:0 (C15:0) in a Swedish study and reviewed 17 other studies that associated dairy fat biomarkers with heart disease outcomes or all-cause mortality.

Pentadecanoic acid is an essential fatty acid that we need to get through food or supplementation. Stephanie Venn-Watson is co-founder and CEO of Seraphina Therapeutics, which produces a C15:0 supplement. She explained:[13]

> *"Odd-chain saturated fats, like C15:0, are metabolized into propionic acid, which supports healthy metabolism and energy production. Conversely, even-chain saturated fats are metabolized into acetoacetic acid, which can promote a pro-diabetes and cardiovascular injury-prone state."*

In the Swedish study[14] there was a median follow-up of 16.6 years, during which 578 cardiovascular events and 676 deaths occurred in 4,150 adults. The data showed individuals with higher C15:0 had a lower incidence of heart disease risk in a linear dose dependent manner. There was also a lower non-linear risk of all-cause mortality.

The results of this study were added to 17 other studies in a systematic meta-analysis, during which the researchers found higher levels of 15:0 and 17:0 dairy fats were associated with a lower risk of heart disease.

In the meta-analysis, researchers did not find an association between dairy fat and all-cause mortality. This data supports past research that dairy fat is not associated with a higher risk of cardiovascular disease, but rather the opposite. The researcher concluded:[15]

> *"In a meta-analysis of 18 observational studies including our new cohort study, higher levels of 15:0 and 17:0 were associated with lower CVD risk. Our findings support the need for clinical and experimental studies to elucidate the causality of these relationships and relevant biological mechanisms."*

Best Life calls C15:0 the "first essential fatty acid discovered since omega-3 came on the scene more than 90 years ago."[16] This may be because whole dairy products have been vilified since the 1960s,[17] likely squashing research studies that could have identified the importance of this molecule decades earlier.[18]

Essential Pentadecanoic Acid and Omega-3 Fat

Omega-3 fats are important for your overall health for several reasons. Researchers have established they have a significant effect on your brain[19] and heart health.[20] Data published in 2020[21,22] also demonstrated how those who tested positive for glutamic acid decarboxylase (GAD65) antibody, which is a marker for Type 1 diabetes,[23] can significantly reduce the risk of adult-onset diabetes by eating omega-3 rich fatty fish.

The results were based on 11,247 cases of adult-onset diabetes and 14,288 diabetes-free controls from eight European countries.[24] As I've written before, it is crucial to be

careful with your seafood choices. Not all fish contain omega-3 fat. Only fatty, cold-water fish do, such as wild-caught Alaskan salmon, anchovies, sardines, mackerel and herring.

However, it is best to avoid farmed fish and especially farmed salmon as there's an exaggerated potential for contamination. Most farmed fish are fed genetically engineered corn and soy,[25] which is both an unnatural diet for marine life and loaded with omega-6 fat. Farmed salmon has more than 5.5 times the amount of omega-6 fat than wild-caught salmon.[26,27]

Omega-3 fats are also a predictor of all-cause mortality. In one study,[28] those in the highest quintile omega-3 index had a total mortality rate that was 34% lower than those in the lowest omega-3 quintile. Omega-3 also helps reduce inflammation,[29] optimizes muscle building[30] and bone strength,[31] improves metabolic syndrome[32,33] and improves mental health and behavior.[34]

An omega-3 deficiency leaves you vulnerable to several chronic diseases. The only way to know if you're eating enough food with omega-3 is to get an omega-3 index test.[35] This is a measure of omega-3 fats on the membrane of your red blood cells and has been validated as a stable, long-term marker of your omega-3 status.

An index over 8% is associated with the lowest risk of death from heart disease and an index below 4% places you at the highest risk of heart disease-related mortality. A study published in May 2022 in PLOS|One,[36] compared C15:0 to eicosapentaenoic acid (EPA), which is "a leading omega-3 fat." The researchers wrote:

> *"In summary, C15:0 had dose-dependent and clinically relevant activities across numerous human cell-based systems that were broader and safer than EPA, and C15:0 activities paralleled common therapeutics for mood disorders, microbial infections, and cancer. These studies further support the emerging role of C15:0 as an essential fatty acid."*

How Coconut Oil Promotes Health

Improving your body's ability to burn fat is another benefit of eating foods high in fat. There are several strategies you can use to promote your body's ability to burn fat for fuel, including eating a cyclical ketogenic diet and intermittent fasting.

Coconut oil is another healthy saturated fat that helps to control Crohn's disease,[37] supports your thyroid function[38] and promotes heart health.[39,40] Coconut oil is an excellent choice for cooking since it resists heat-induced damage and it can replace several pricey and potentially hazardous personal care products,[41] such as body scrub, toothpaste, moisturizers, and shaving lotion.

There have been over 2,500 studies[42] performed on coconut oil that have demonstrated the wide-ranging benefits it has to your health. Despite this long list of evidence, it continues to be vilified.

In places in the world where coconut oil is consumed as part of the standard diet, people appear to thrive. For example, the Polynesian populations of Pukapuka and Tokelau have a diet high in coconut and other saturated fats and low in cholesterol and sugar. In these populations, researchers found that "vascular disease is uncommon in both populations and there is no evidence of the high saturated fat intake having a harmful effect."[43]

Another study[44] focused on the Kitava people of Papua New Guinea. Besides fish, fruit and tubers, coconut is also a prominent staple. None of the indigenous people in this study reported stroke, sudden death, chest pain or discomfort due to coronary heart disease (CHD). In fact, the researchers concluded that stroke and CHD appeared to be absent in this population.

Why Vegetable Oils Are Hazardous to Your Health

Vegetable oils are a concentrated source of omega-6 linoleic acid, which has led to a severe imbalance between omega-6 and omega-3 fat in most people's diets. Historically, humans consumed omega-3 and omega-6 at a ratio of 1-to-1.[45] Today, most people get as much as 25 times more omega-6 than omega-3.[46] This imbalance has led to a rise in

heart disease, inflammatory conditions, gastrointestinal diseases and cancer, especially breast, prostate, colon and lung cancer.

The cancer connection was reviewed in a November 8, 2019, Medium article[47] written by Maria Cross, a nutritionist with a master of science degree. She points out that:

> *"... it's the balance between the two groups of PUFA that is out of kilter and wreaking havoc on our bodies. We evolved on, and are genetically adapted to, a diet that provides more or less equal amounts of omega-3 and omega-6[48] ... There can only be consequences, and indeed there are: experimental data[49] supports the theory that it is this skewed balance between the two PUFAs that influences the development of a tumor."*

The cancer connection is also reviewed in a 2016 paper,[50] "Role of Diets Rich in Omega-3 and Omega-6 in the Development of Cancer," which points out that "Omega-6 and omega-3 PUFAs often compete with one another for metabolism and act in an opposing manner."

Cancer is not the only disease process that vegetable oils influence. For example, Sanjoy Ghosh,[51] a biologist at the University of British Columbia, has shown your mitochondria cannot easily use PUFAs for fuel due to the fats' unique molecular structure. Other researchers have shown the PUFA linoleic acid can cause cell death in addition to hindering mitochondrial function.[52]

According to Frances Sladek,[53] Ph.D., a toxicologist and professor of cell biology at UC Riverside, PUFAs behave like a toxin that builds up in tissues because your body cannot easily rid itself of them. When vegetable oils like sunflower oil and corn oil are heated, cancer-causing chemicals like aldehydes are also produced.[54]

So, in summary, if your aim is better heart health, ignore the AHA's prejudiced advice on dietary fats and cooking oils because it will lead you in the complete opposite direction.

Fats Raise Ketones and Improve Metabolic Function

Eating a diet low in carbohydrates and high and fat helps make your body more metabolically flexible as it burns fat for fuel. Eating a ketogenic diet has been around for more than 100 years and has its roots in treating patients with intractable seizures.[55] Foods like grass-fed butter and coconut oil help raise ketones, which are water soluble fats that help aid in tissue healing.

In this interview with Dr. William Seeds, we discuss optimizing your metabolic function, improving cellular efficiency and making you more resilient against respiratory viruses by using ketones.

As Seeds discusses, they are helpful in supporting the body's defenses against viral infections as they reestablish cellular homeostasis, provide rapid energy, recharge your antioxidants and control oxidation within the cell.[56,57]

Ketones also increase nicotinamide adenine dinucleotide phosphate hydrogen (NADPH), a powerful metabolic co-factor that improves your body's ability to recharge antioxidants to their functional state by donating an important reducing electron.

NADPH, in my view, is probably one of the most important biomolecules in your body as it is the primary way your body recycles its antioxidants. It essentially transfers electrons to them to help reduce excessive oxidative stress. This is important because once those antioxidants are used, they no longer work. This explains why many studies that have attempted to show benefits from taking high-dose antioxidants fail.

When antioxidants are taken as supplements, they have the potential to suppress beneficial free radicals indiscriminately. But when you recharge antioxidants with NADPH, your body is able to selectively and wisely discriminate between the specific free radicals you want eliminated.

Ketones also suppress inflammatory pathways, which has a significant benefit against viral infections such as COVID-19. Strategies you can use to boost your endogenous ketone levels include a cyclical ketogenic diet and taking C8 (caprylic acid) MCT oil. While this takes a little more time and commitment, it is far less expensive since

supplemental ketone esters are typically about $1 per gram and a therapeutic dose can range from 5 to 25 grams.

Seeds has been able to work with hundreds of U.S. doctors through his peptide society, the SSRP society.[58] He describes how using these protocols with exogenous ketones in the early treatment of COVID-19 has significant benefits. In many cases, a patient's respiratory status can be improved within minutes.

I'm convinced that ketones are one of three interventions that can have nearly immediate benefit, including molecular hydrogen and nebulized hydrogen peroxide. During the interview, Seeds segues into a discussion about using baking soda or Alka-Seltzer Gold to lower excessive inflammation at the molecular level.

It's a powerful strategy and an inexpensive habit that can help improve your health. You can also read more in my article, "**Ketones Combat Inflammation and Improve Metabolic Function**."

Sources and References

- [1, 13, 16] Best Life, June 25, 2022
- [2] The Epoch Times, March 9, 2022
- [3] USDA Economic Research Service, September 25, 2020
- [4] Prostaglandins and Other Lipid Mediators, 2007;84(3)
- [5] Molecular Nutrition and Food Research, 2007;51(9)
- [6] Journal of Agriculture and Food Chemistry, 2017;65(9)
- [7] STAT April 19, 2017
- [8] BMJ 2016;353:i1246
- [9] Atherosclerosis, Thrombosis and Vascular Biology 2004;24:498–503
- [10] The Lancet August 29, 2017; 390(10107): 2050-2062
- [11, 12, 14, 15] PLOS Medicine, 2021; doi.org/10.1371/journal.pmed.1003763
- [17, 18] Journal of the History of Medicine and Allied Sciences, 2008;63(2)
- [19] Nutrients, 2018;10(8)
- [20] Circulation, 2015;132(22)
- [21] Diabetes Care 2020; dc201463
- [22, 24] Healio December 31, 2020
- [23] Drugs Future 2011 Nov; 36(11): 847
- [25] Organic Authority, October 22, 2018

- [26] Nutrition Data Wild Atlantic Salmon
- [27] Nutrition Data Farmed Atlantic Salmon
- [28] Journal of Clinical Lipidology May 1, 2018; 12(3):718-727.E6
- [29] Arthritis Foundation, Fish Oil
- [30] Cancer Research Vol 51 Issue 22 Pages 6089-6093 November 15, 1991
- [31] Progress in Lipid Research, 1997; 36(2-3):131-151
- [32] Journal of Pediatrics, 2010; 157(3):395-400
- [33] Acta Cardiologica 2009; 64(3):321-327
- [34] AHRQ Evidence Report Summaries, 2005 Intro last para
- [35] OmegaQuant, July 9, 2018
- [36] PLOS|One, 2022; doi.org/10.1371/journal.pone.0268778
- [37] The American Journal of Gastroenterology, 2018;113(12)
- [38] Positive Med, September 16, 2015
- [39] BMJ Open 2018 Mar 6;8(3):e020167
- [40] Lipids 2009 Jul;44(7):593-601
- [41] Environmental Working Group, Skin Deep Database
- [42] U.S. National Library of Medicine, PubMed Search Coconut Oil
- [43] American Journal of Clinical Nutrition 1981; 34(8): 1552
- [44] Journal of Internal Medicine 1993; 233(3): 269
- [45, 48] International Journal of Biological Chemistry 2016; 10(1-4): 1-6, Abstract
- [46] Mount Sinai Omega-6 Fatty Acids
- [47] Medium November 8, 2019
- [49] Biomedicine & Pharmacotherapy 2002; 56: 365-379 (PDF)
- [50] Boletin Medico Del Hospital Infantil de Mexico, 2016; 73(6): 445
- [51] University of British Columbia, Sanjoy Ghosh
- [52] Biochimica et Biophysica Acta September 10, 2002: 1555(1-3): 160-165
- [53] Scientia. Dr. Frances M. Sladek. Turning the Tables on 'Healthy' Fats. February 18, 2017
- [54] Telegraph November 7, 2015
- [55] Frontiers in Neuroscience, 2019;13
- [56] BitChute, November 6, 2020, Min 6:15
- [57] Building Resilience Against Viruses Through Ketones
- [58] SSRP Institute, Peptide Therapy: Revolutionizing Medicine