Saturated Fat Finally Vindicated in Long Buried Study
By Dr. Mercola

In all likelihood your doctor and nearly every public health authority has told you to stay away from saturated fats, warning you it will raise your LDL cholesterol and clog your arteries, putting you at increased risk for heart disease.

The 2015 USDA dietary guidelines also still advise limiting saturated fats to a maximum of 10 percent of your daily calories, warning of similar dangers.

Such recommendations are in fact based on an unproven hypothesis, and a large number of studies that have reexamined the theory have shown that saturated fat do not increase your risk of heart disease.

Interestingly, the latest study to emerge showing conventional wisdom on saturated fat has been completely wrong was buried, and is actually four decades old. One of the original researchers was Ancel Keys—the man who initially proposed the link between saturated fat and heart disease—and it’s believed he was largely responsible for suppressing and not disclosing this damning study, as it doesn’t support his original hypothesis.

Failure to Publish Clinical Research Can Undermine Truth

Only parts of the trial’s results were ever published, leaving out the controversial finding that replacing saturated fats with vegetable oil had NO benefit on mortality. The study was unearthed by Christopher Ramsden, who discovered the missing research data among the possessions of a deceased scientist. As reported by STAT: “Ramsden, of the National Institutes of Health, unearthed raw data from a 40-year-old study, which challenges the dogma that eating vegetable fats instead of animal fats is good for the heart.

The study, the largest gold-standard experiment testing that idea, found the opposite, Ramsden and his colleagues reported...in BMJ... [H]is discovery and analysis of long-lost data underline how the failure to publish the results of clinical trials can undermine truth.”

Largest Most Rigorous Trial of Its Kind Finally Vindicates Saturated Fat

The study, conducted from 1968 to 1973, included 9,423 participants between the ages of 20 and 97, making it the largest trial of its kind. All participants were also residents of state mental hospitals and a nursing home in which all meals were prepared for them, making it one of the most rigorously detailed studies.

Many nutritional studies have the drawback of relying on self-reported consumption based on food questionnaires. Oftentimes people simply cannot remember what or how much they ate on any given day.

Here, the meals of every person were carefully logged. On the average, each patient was followed for about 15 months. Participants were randomly assigned to one of two groups, receiving either:

1. A then-standard diet containing 18.5 percent saturated fat from animal fats such as milk, cheese, beef and shortening, and 5 percent unsaturated fat, based on total calories
2. A diet in which 50 percent of the saturated fats were replaced with vegetable oil (a mainstay in today’s processed foods) and corn oil margarine (total 9 percent saturated fat and 13 percent unsaturated fat)

After analyzing the data, Ramsden and his team found that vegetable oils lowered total cholesterol levels by an average of 14 percent after one year. However, this lower cholesterol did NOT result in improved health and longevity, which is the conventional belief. Instead, the research showed that the lower the cholesterol, the higher the risk of dying.

For every 30 point drop in total cholesterol there was a 22 percent increased chance of death. In the 65 and older category, those who received vegetable oil experienced roughly 15 percent more deaths compared to seniors in the saturated fat group.
Vegetable Oil Nearly Doubled Rates of Heart Attack

The vegetable oil also did not result in fewer cases of atherosclerosis or heart attacks. On the contrary, autopsies revealed both groups had similar levels of arterial plaque, but 41 percent of the vegetable oil group showed signs of at least one heart attack compared to just 22 percent of those in the saturated fat group. According to the authors: “Available evidence from randomized controlled trials shows that replacement of saturated fat in the diet with linoleic acid [vegetable oil] effectively lowers serum cholesterol but does not support the hypothesis that this translates to a lower risk of death from coronary heart disease or all causes.”

Findings from the Minnesota Coronary Experiment add to growing evidence that incomplete publication has contributed to overestimation of the benefits of replacing saturated fat with vegetable oils rich in linoleic acid.”

Why Vegetable Oils Would Be Expected to Increase Disease

If you understand molecular biology, the reason why vegetable oils cause these kinds of observations are clear, and hold true even if they’re organically grown and pristinely processed. In fact it would be precisely what you’d expect.

Why? Because these omega-6 polyunsaturated fats, when taken in large amounts, cannot be burned for fuel. Instead, they’re incorporated into cellular and mitochondrial membranes where they are highly susceptible to oxidative damage, which damages the metabolic machinery.

And that’s in the BEST case scenario. The reality is far worse as most of these vegetable oils are highly processed and grown as GMO crops, loaded with toxic herbicide residues like Roundup. Most of these chemicals were not even invented when this BMJ study was done, so if it were repeated today with modern vegetable oils I’m highly confident the adverse effects of vegetable oils would be even more pronounced.

In addition, while your body does need some omega-6, most get far too much of it compared to omega-3, and this lopsided ratio can also have adverse health consequences.

As noted in the Huffington Post, “this nuance isn’t reflected in the most up-to-date nutritional advice in the federal dietary guidelines, which state simply we should eat less saturated fat and more polyunsaturated fat without mention of omega-6 acids.”

Thirdly, when heated, vegetable oils tend to oxidize. According to Dr. Fred Kummerow, who has researched lipids and heart disease for eight decades, oxidized cholesterol is the real culprit that causes heart disease. By triggering inflammation, they promote the clogging of arteries and associated cardiovascular problems, including heart attacks.

Four Similar Trials Fail to Show Benefit of Vegetable Oil

The researchers also analyzed four other trials looking at the effects of replacing saturated fats with vegetable oils. They too failed to show any benefit. In fact, replacing saturated fats with linoleic acid-rich vegetable oils increased mortality risk from all causes, including coronary heart disease and cardiovascular disease.

According to the authors: “An updated meta-analysis of linoleic acid intervention trials showed no evidence of cardiovascular benefit. These findings could have important implications for worldwide dietary advice to substitute omega 6 linoleic acid, or polyunsaturated fats in general, for saturated fats.”

In short, vegetable oils do not reduce your risk of dying from heart disease. Put another way, saturated fats do not increase your risk of dying from heart disease either. Moreover, reducing cholesterol is not necessarily a sign of improved health; it may actually raise your risk of death. As noted by Ramsden: “One would expect that the more you lowered cholesterol, the better the outcome. But in this case the opposite association was found. The greater degree of cholesterol-lowering was associated with a higher, rather than a lower, risk of death.”
Other Studies Debunking Saturated Fat Myth

Other studies discrediting the notion that cutting saturated fat will help you live longer include the following. All of these studies used “hard endpoints,” which are considered the most reliable measurements. While the benefits for cardiovascular mortality and risk-factor reduction were mixed, none of these trials showed that restricting saturated fats reduced total mortality.

- **The Oslo Study (1968):** A study of 412 men, aged 30-64 years, found eating a diet low in saturated fats and high in polyunsaturated fats had no influence on rates of sudden death.
- **L.A. Veterans Study (1969):** A study of 850 elderly men that lasted for six years and is widely used to support the diet-heart hypothesis. No significant difference was found in rates of sudden death or heart attack among men eating a mostly animal-foods diet and those eating a high-vegetable-oil diet. However, more non-cardiac deaths, including from cancer, were seen in the vegetable-oil group.
- **London Soybean Oil Trial (1968):** A study of nearly 400 men that lasted for two to seven years. No difference in heart attack rate was found between men following a diet low in saturated fats and high in soybean oil and those following an ordinary diet.
- **The U.S. Multiple Risk Factor Intervention Trial (MRFIT):** Sponsored by the National Heart, Lung and Blood Institute, this is another study that is highly misleading. It compared mortality rates and eating habits of over 12,000 men, and the finding that was widely publicized was that people who ate a low saturated fat and low-cholesterol diet had a marginal reduction in coronary heart disease. However, their mortality from all causes was higher.

Saturated Fats Provide Many Important Health Benefits and Few Risks

A 2015 meta-analysis published in the *British Medical Journal* also found no association between high levels of saturated fat in the diet and heart disease. Nor did they find an association between saturated fat consumption and other life-threatening diseases like stroke or type 2 diabetes. Yet another meta-analysis that pooled data from 21 studies and included nearly 348,000 adults found no difference in the risks of heart disease and stroke between people with the lowest and highest intakes of saturated fat. Indeed, far from posing a risk, it’s known that saturated fats provide a number of important health benefits, including the following:

| Providing building blocks for cell membranes, hormones, and hormone-like substances | Mineral absorption, such as calcium | Carriers for important fat-soluble vitamins A, D, E, and K |
| Conversion of carotene into vitamin A | Helping to lower cholesterol levels (palmitic and stearic acids) | Acts as antiviral agent (caprylic acid) |
| Optimal “clean” fuel for your brain and mitochondria | Provides satiety | Modulates genetic regulation and helps prevent cancer (butyric acid) |

Sugar, Not Fat, Is the Root of Ill Health

The fear of healthy dietary fat is actually part of why we’re currently struggling with obesity, diabetes, and heart disease of epidemic proportions. As noted by Dr. Mark Hyman, director of the Cleveland Clinic’s Center for Functional Medicine and author of “Eat Fat, Get Thin”: “For 35 years we’ve been told to eat low fat, but the result is that we’ve cut fat and eaten a ton of carbs and sugar,
which accounts for the corresponding surge in obesity, diabetes and other related ills over the same time period.

Indeed, to improve our health, we really need to change how we think about dietary fat, and stop treating it like an enemy. Journalist Nina Teicholz, author of “The Big Fat Surprise: Why Butter, Meat and Cheese Belong in a Healthy Diet,” has also stated that when researchers went back and analyzed some of the original data from Dr. Ancel Keys’ Seven Countries Study (which was the basis for the saturated fat phobia) they found that heart disease was most correlated with sugar intake, not saturated fat as Keys claimed.

How Saturated Fat May Offer Protection Against Heart Disease

Despite all this evidence, some still like to refer to studies showing that reducing saturated fat can lower your levels of LDL cholesterol (often referred to as “bad” cholesterol). However, confusion has crept in here as well. The terms LDL and HDL refer to lipoproteins, i.e. proteins that carry cholesterol. LDL stands for low-density lipoprotein while HDL stands for high-density lipoprotein, and more important than their overall level is the size of these particles.

- **HDL cholesterol** is actually linked to a lower risk of heart disease, which is why measurements of total cholesterol are useless when it comes to measuring such risk. If your total cholesterol is “high” because you have a lot of HDL, it’s no indication of increased heart risks; rather, it’s likely protective.
- **Large, fluffy LDL particles** do not contribute to heart disease, and eating saturated fat may actually change the small, dense LDL in your body into the healthier large, fluffy LDL, thereby providing a protective effect.
- **Small, dense LDL particles** are easily oxidized, which may trigger heart disease. People with high levels of small, dense LDL have triple the risk of heart disease as people with high levels of large, fluffy LDL. Besides harmful trans fats, small, dense LDL particles are increased by eating refined sugar and carbohydrates, such as bread, bagels and soda. Together, trans fats and refined carbs do far more harm to your body than saturated fat ever could.

In 2013, an editorial in the British Medical Journal described how the avoidance of saturated fat actually promotes poor health in a number of ways, including through their association with LDL cholesterol. As stated by the author Aseem Malhotra, an interventional cardiology specialist registrar at Croydon University Hospital in London: “The aspect of dietary saturated fat that is believed to have the greatest influence on cardiovascular risk is elevated concentrations of low density lipoprotein (LDL) cholesterol.

Yet the reduction in LDL cholesterol from reducing saturated fat intake seems to be specific to large, buoyant (type A) LDL particles, when in fact it is the small, dense (type B) particles (responsive to carbohydrate intake) that are implicated in cardiovascular disease. Indeed, recent prospective cohort studies have not supported any significant association between saturated fat intake and cardiovascular risk Instead, saturated fat has been found to be protective.”

Saturated Fats Are Important for Optimal Health

Dietary fat serves as fuel and is a foundational structural component of your biology. Moreover, if you're trying to lose weight, training your body to access your body fat is key (or else you cannot shed it), and supplying your body with dietary fat is an important part of this process. In order to make this conversion to allow your body to burn fat rather than sugar as its primary fuel, you need to:

1. Restrict net carbohydrates (total carbs minus fiber) to under 50 grams per day
2. Limit protein to 1 gram per kilo of lean body mass, and
3. Only consume high quality fat sources. Most Americans consume harmful fats like processed vegetable oils, which will invariably make your health worse.

So when we’re talking about healthy dietary fats, we’re referring to natural, unprocessed fat, found in real foods like raw grassfed dairy, meats, pastured eggs, seeds, nuts, butter, olives,
avocado, coconut oil and raw cacao (a phenomenal source of healthy saturated fats and many beneficial polyphenols).

So, in summary, saturated fats:
- Increase your LDL levels, but they increase the large fluffy particles that are NOT associated with an increased risk of heart disease.
- Increase your HDL levels, which also compensates for any increase in LDL.
- Do NOT cause heart disease as made clear in all the above referenced studies.
- Do not damage as easily as other fats because they do not have double bonds that can be damaged through oxidation.
- Serves as a “clean-burning fuel” for your brain and mitochondria, producing far less damaging free radicals than sugars and non-fiber carbs.