

# Fed a Lie – The Truth About Seed Oils

Analysis by [Dr. Joseph Mercola](#)

May 23, 2026

## STORY AT-A-GLANCE

- › Ultraprocessed vegetable oils have quietly become one of the most dominant and pernicious ingredients in the modern diet. They have driven a dramatic rise in linoleic acid (LA) intake over the past century
- › The documentary, “Fed a Lie: The Truth About Seed Oils,” reveals how marketing, subsidies, and flawed science replaced traditional animal fats with industrially produced oils made from soy, corn, cottonseed, and other crops
- › Clinical and epidemiological studies have linked seed oil consumption to increased oxidative stress, inflammation, mitochondrial damage, cancer risk, and cardiovascular dysfunction, despite being touted as “healthy” fats
- › Ancestral populations thrived on diets rich in saturated fat but free from processed seed oils. This allowed for low rates of chronic disease, even with widely varying macronutrient profiles
- › To reduce your exposure to seed oils and help counter the effects of excess LA, focus on avoiding processed foods, switching to traditional fats for cooking, and supporting your body’s natural defenses with nutrients like C15:0

Chronic illness has become a normal part of everyday life for many Americans. You likely know someone living with heart disease, diabetes, autoimmune issues, or ongoing mental health challenges. These problems are showing up earlier, lasting longer, and affecting more people than in the past. While many factors contribute to this trend, one of the most influential is what we eat every day.

Over the last century, the American diet has undergone a dramatic transformation. Home-cooked meals made from simple, whole ingredients have steadily given way to ultraprocessed products — foods engineered for convenience, mass production, and longer shelf life. These changes didn't happen all at once, and most people weren't aware they were even happening.

Today, many of the ingredients found in everyday packaged foods are far removed from anything found in a traditional kitchen. The featured documentary, "Fed a Lie: The Truth About Seed Oils," takes a closer look at one of the most impactful shifts in our diet — how industrial seed oils became a foundation of the modern food supply and what that means for long-term health.<sup>1</sup>

## The Rise of Seed Oils in the Modern Diet

The featured video lays out the historical pathway that caused the industrial seed oils to dominate the American food supply, drawing on historical records, government data, and expert interviews. These oils were later marketed as "vegetable oils" to make them sound healthy, but they are extracted from crops like soybeans, corn, and cottonseed. This change took place over the span of about a century, but its effects are still unfolding.<sup>2</sup>

- **From trace amounts to a daily staple** — In 1865, Americans consumed almost no seed oils. Fats came mostly from animals in the form of lard, tallow, and butter. By 2014, the average person was consuming about 65 grams of vegetable oils per day. As noted by Dr. Paul Saladino in "Fed a Lie":

*"The average American consumes 3 to 5 tablespoons of seed oils per day, and it's in almost all ultraprocessed food — salad dressings, it's in cookies, it's in cakes, it's in crackers, it's in breads, it's in plant milks.*

*To consume the equivalent of 3 to 5 tablespoons of corn oil, we would have to eat 60 to 70 ears of corn. To consume the equivalent of 3 to 5 tablespoons of soybean oil, we're looking at more than 2 pounds of*

*soybeans. Amounts that would never ever have encountered historically as human.*

*So, what we have here is a very striking discordance between what we have done for hundreds of thousands of years and what we're eating today in our diets – incredibly evolutionary and consistent consumption of seed oils, which are just easy to consume today.”<sup>3</sup>*

- **Seed oils are the single most processed food on the planet** – “Seeds, nuts, [and] beans can only be made into an oil in a factory. It needs to go through so many industrial steps in order to create the oil,” explains Nina Teicholz, Ph.D., the author of New York Times bestseller, “The Big Fat Surprise.”

Saladino adds that the process involves heating the oils to 500 degrees F, which causes them to become “rancid, oxidized, or rusted in the colloquial sense.” To make them palatable, they have to be deodorized before sale.

- **Seed oils are industrial products by design** – Cottonseed oil, which is the first of its kind, had originally been used as a lubricant for machinery during the Industrial Revolution. According to Teicholz:

*“After we had hunted all the whales out of the ocean – we hunted the whales mainly for their fat – when we lost that source of fat, it had to be replaced. Cottonseed oil came in to fill that need for all kinds of machinery, for making candles and soaps, and that was it. Then, Procter & Gamble came along and said, ‘Let’s try to sell this as a food stuff.’”<sup>4</sup>*

- **Crisco marked the beginning of industrial oils as food** – The first major shift came in 1911 with the release of Crisco, which was sold as fake lard but made entirely of vegetable oils, originally cottonseed oil. “Butter and lard, and even tallow, began to be replaced and supplanted, and this is what took off in the 20th century,” Dr. Chris Knobbe notes in the interview.

- **Crisco replaced traditional fats through marketing, not merit** – In 1913, two years after Crisco was introduced, a book titled "The Story of Crisco" was published to describe how quickly the product took over American kitchens. This book was written by the former vice president of the American Heart Association (AHA), with messaging that implied animal fats were harmful, despite being part of the human diet for generations.

*"And so, the nation's cookbook has been hauled out and is being revised. Upon thousands of pages the word lard and butter have been crossed out and the word Crisco written in their place," Teicholz says. "It was the earnest aim of the makers of Crisco to produce a strictly vegetable product without adding a hard and consequently indigestible animal fat."<sup>5</sup>*

- **Procter & Gamble's donation transformed the AHA overnight** – The American Heart Association was described as a small, struggling organization with little public presence and limited ability to influence health policy. Cardiologists were rare because heart disease was less common, and the group lacked the funding to operate on a national level.

That changed when Procter & Gamble gave the AHA \$1.7 million (equivalent to \$20 million today) in 1948. With that donation, the AHA quickly expanded its research programs and public messaging. The timing and scale of this gift marked a turning point, positioning the organization to promote dietary guidelines that aligned closely with the food industry's interests.

- **What started as an economic decision became a medical directive** – American housewives had already begun switching to seed oils because they were cheaper than animal fats. But once the AHA began promoting these oils as heart-healthy, the shift accelerated. What had been a matter of cost now carried the weight of medical authority, reinforcing the idea that vegetable oils were the responsible choice for families.

- **Government policy and subsidies helped entrench seed oils in the food system –** Starting in the 1970s, federal dietary guidelines warned against saturated fat and encouraged the use of polyunsaturated oils (PUFAs). At the same time, farm subsidies favored crops like soy and corn, making their industrial byproducts cheap and abundant.

Food companies adopted these oils across the board because they were inexpensive and easy to use in mass production. Once seed oils became standard in processed food and institutional cooking, they were almost impossible to avoid.

## **What Replacing Animal Fats with Seed Oils Really Did to Public Health**

The widespread adoption of vegetable oils is one of the most consequential dietary shifts in modern history, yet their impact on public health remains deeply controversial. For decades, experts have debated whether these oils are truly beneficial or if they have fueled the very diseases they were meant to prevent.<sup>6</sup>

- **The Ancel Keys Hypothesis featured flawed science and cherry-picked data –** One of the most influential studies supporting the diet-heart hypothesis was the Seven Countries Study, led by Ancel Keys in the 1950s,<sup>7</sup> which suggested a correlation between saturated fat intake and heart disease.

His findings laid the foundation for dietary guidelines that demonized animal fats and promoted vegetable oils as a healthier alternative. However, the study was purely observational and could not establish causation.

As explained in the documentary, Keys "cherry-picked his countries to get the desired results that he wanted." Countries like Switzerland, France, and Germany, where people consumed high levels of saturated fat but had low rates of heart disease, were excluded. Instead, Keys focused on countries that had been ravaged by war and were eating lower-fat diets at the time of data collection.

- **Early warnings ignored: The Rose Corn Oil Trial** – This is one of the earliest clinical trials to examine seed oil effects on heart health and was conducted in 1956. Participants were given 19 teaspoons of corn oil daily and followed for three years.

The study was stopped early because the group consuming corn oil experienced significantly more deaths. At the end of the study, the researchers concluded, "[U]nder the circumstances of this trial, corn oil cannot be recommended as a treatment of ischemic heart disease. It is most unlikely to be beneficial, and it is possibly harmful."

- **Clinical trials in the 1980s linked seed oils to cancer** – In the early 1980s, a series of high-quality clinical trials began to show a connection between seed oil consumption and cancer, particularly colon cancer.

The documentary notes that this was in a dozen clinical trials, and the results were strong enough to prompt high-level meetings at the National Institutes of Health (NIH). Top scientists involved could not agree on an explanation for the cancer findings, but they chose to overlook them, citing the perceived benefits of cholesterol reduction.

- **Toxicity concerns from animal studies were dismissed** – Teicholz shared that animal research linked seed oils to liver damage and the formation of toxic oxidation products. However, these findings, like the human data on cancer, were not integrated into official guidance. Instead, institutional decision-making prioritized cholesterol reduction above all else.
- **Lowering cholesterol showed no benefit** – Seed oils do lower low-density lipoprotein (LDL) and total cholesterol, but that reduction has not translated into better outcomes.

*"In large clinical trials, the most rigorous kind of evidence on 76,000 people, lowering your LDL cholesterol by consuming seed oils has never been shown to have any benefit for death from heart disease or death from any cause," Teicholz notes.<sup>8</sup>*

- **Calls for updated research go unanswered** – Despite these warning signs, high-quality studies comparing seed oils to saturated fats have not been funded. As Saladino states, "no pharmaceutical company will ever fund a study looking at saturated fat versus seed oils today." As a result, the public is left relying on outdated and incomplete data, while the known risks continue to be downplayed or ignored.

Together, these studies and years of misguided dietary guidelines point to a deeper issue – industry influence and poor-quality science have shaped public health advice in ways that have harmed long-term health. For a closer look at how vegetable oils affect the body, check out "[Vegetable Oils Wreck Your Gut](#)."

## How Does Excess LA Impact Your Health?

The shift toward industrial seed oils has caused a sharp increase in dietary LA, now the most abundant fat in the modern diet. Understanding what happens after LA enters the body reveals how this one ingredient quietly erodes your health over time.<sup>9,10,11</sup>

- **LA builds up in the body and drives oxidative damage** – Unlike other fats that are quickly metabolized or excreted, LA embeds itself in body fat and cell membranes. Its chemical structure makes it highly susceptible to oxidation, and once oxidized, it generates harmful byproducts. Knobbe explains:

*"These seed oil components, the omega-6 linoleic acid, accumulate in our bodies. It accumulates in our fat. It accumulates in our cell membranes. And this sets up this environment that is prooxidative, pro-inflammatory, toxic, and nutrient-deficient ...*

*Many people know that arsenic, for example, is a very damaging molecule. It's a very dangerous poison, and it's dangerous because it's a prooxidant, and if the dose is high enough, it'll kill you very fast. But if the dose is really*

*low, then it behaves just like vegetable oils. They're both prooxidative. So arsenic kills us through oxidation, vegetable oils ultimately maim and kill us mostly through oxidation."*<sup>12</sup>

- **LA stays in the body for years, not days** – I discussed this same issue in my reviews, published in the journal *Nutrients*<sup>13</sup> and *Advances in Redox Research*.<sup>14</sup> As explained in these papers, the half-life of LA in the body is about 680 days, meaning it takes up to six years to replace 95% of it. Because it gets stored in adipose tissue and incorporated into the lipid bilayers of cells, its presence is long-lasting and difficult to reverse.
- **Oxidized LA metabolites (OXLAMs) drive systemic oxidative stress** – When LA is heated, stored, or metabolized in excess, it forms OXLAMs, damaging breakdown products that are biologically active. OXLAMs like 4-hydroxynonenal (4-HNE) are generated during lipid peroxidation and damage DNA, proteins, mitochondria, and even stem cells. These oxidized byproducts have been linked to cardiovascular disease, cancer, and neurodegenerative conditions.
- **Stored LA contributes to mitochondrial injury** – Mitochondria use a special fat called cardiolipin to help generate energy. As LA dominates the diet, it becomes a major building block of cardiolipin, making it fragile and prone to oxidation. The result is impaired energy production, increased oxidative stress, and higher vulnerability to chronic disease. This damage shows up in high-energy organs like the heart and brain, contributing to widespread dysfunction.
- **Excess LA fuels chronic inflammation** – Once oxidized, LA and its metabolites act like molecular triggers for inflammation. My papers detail how these compounds damage cell membranes and trigger inflammatory cascades that affect the liver, cardiovascular system, and nervous system. Animal models show that dietary seed oils rich in LA promote liver injury, endothelial dysfunction, and oxidative damage in the brain.

- **Cardiovascular damage is amplified by LA oxidation** – The oxidation of LA in LDL particles is a key step in the formation of atherosclerotic plaque. The byproduct 4-HNE, for instance, is not only a mutagen and mitochondrial toxin but also a direct contributor to foam cell formation and endothelial dysfunction.

Reducing LA intake could be one of the most powerful steps you take for long-term cardiovascular and metabolic health. Learn more in "[Linoleic Acid – The Most Destructive Ingredient in Your Diet.](#)"

## Lessons We Can Learn from Ancestral Diets

Traditional societies consumed diets that were high in saturated animal fats yet showed no signs of chronic illness. The featured documentary emphasizes that populations around the world thrived on widely different diets, as long as the ingredients were traditional, minimally processed, and free from modern additives like seed oils.<sup>15</sup>

- **Ancestral diets were rich in saturated fat, yet people were free of chronic disease** – The Maasai of Kenya and Tanzania were documented in the 1970s as consuming a diet of milk, meat, and blood, with two-thirds of their calories coming from animal fat. In the South Pacific, the Tokelau population lived on a diet based heavily on coconut and fish, with saturated fat making up about 50% of their intake. Despite the high fat content, both groups had low rates of heart disease, diabetes, and obesity.
- **LA levels in body fat have changed dramatically** – The average level of LA in human adipose tissue was around 2.8% in people eating natural diets. But in the U.S., levels rose sharply to 9.1% in 1959 and climbed to 21.5% by 2008. These changes reflect how deeply industrial seed oils have altered the makeup of human tissue over just a few generations.
- **Bethany Hamilton's story highlights what's possible without seed oils** – In the documentary, professional surfer Bethany Hamilton describes the benefits she experienced after removing seed oils from her diet. She reported more consistent

energy, better sleep, and stronger athletic performance. Her fourth pregnancy, which followed the dietary shift, was her healthiest yet. She also observed that her children became more emotionally stable and resilient.

Take a deeper look at how traditional diets supported long-term health in "[The Ancestral Wisdom That Supported Better Health in the Past.](#)"

## How to Reduce Your LA Exposure and Mitigate Its Effects

Lowering your intake of industrial seed oils starts with knowing where they hide. Even people who avoid fried foods and fast food end up eating large amounts of LA simply because it's in so many packaged products, often where you'd least expect it. Below are key tips from the documentary, along with some of my own recommendations, to help you reduce your LA exposure and protect yourself from its damaging effects:<sup>16</sup>

- **Shop the perimeter, skip the processed center** — Avoid the central aisles of the grocery store where most processed and ultraprocessed products are shelved. Items like crackers, cookies, chips, salad dressings, and plant-based milks often contain soybean, canola, sunflower, or safflower oil, even when marketed as "heart-healthy." Instead, focus on unprocessed animal foods, fresh produce, and items that don't come with long ingredient lists.
- **Clean out your cooking oils** — Many homes still stock common seed oils like canola, sunflower, and safflower. Toss them out and replace them with traditional fats such as butter, ghee, and coconut oil for cooking. They're stable, naturally rich in fat-soluble vitamins, and don't contribute to oxidative stress the way seed oils do.
- **Skip ultraprocessed foods and restaurant meals** — Many restaurant meals are loaded with seed oils, as they're used in sauces, dressings, marinades, and other ingredients across nearly every item on the menu. Even meals that appear healthy often contain multiple sources of LA. Cooking at home gives you full control over your ingredients and makes it easier to avoid hidden oils.

The same goes for ultraprocessed meals. You don't have to overhaul your diet overnight. Start by swapping out one food or snack at a time. Focus on finding a few reliable products made without seed oils and rebuild your pantry from there. Once LA sources are out of your kitchen and off your plate, maintaining a cleaner, more nourishing way of eating becomes far more sustainable.

- **Track your LA intake with smart tools** – I recommend keeping your LA intake below 5 grams per day – 2 grams or less is even better. To monitor your intake, use an online nutrition tracker like my upcoming Health Coach app, which launches in early July.
- **Explore the benefits of C15:0** – This odd-chain saturated fat, found in full-fat dairy, is a metabolically protective compound. Early research suggests that C15:0 supports mitochondrial function, reduces inflammation, and helps counteract some of the cellular stress triggered by LA overload.<sup>17,18</sup> Take pure pentadecanoic acid or high-C15:0 butter or ghee concentrate. Split the dose between meals to maintain consistent plasma levels and minimize tissue uptake.

## Frequently Asked Questions (FAQs) About Seed Oils

**Q: What are seed oils, and why are they harmful?**

**A:** Seed oils (often marketed as "vegetable oils") include soybean, corn, canola, cottonseed, sunflower, and safflower oils. They are highly processed industrial products made through chemical extraction, deodorization, and high-heat refining. These oils are rich in linoleic acid (LA), an omega-6 polyunsaturated fat that accumulates in the body and drives oxidative stress, inflammation, and cellular damage.

**Q: How much LA is too much?**

**A:** Most people consume 15 to 20 grams of LA per day, largely without realizing it. I recommend keeping intake below 5 grams per day, and ideally under 2 grams. This requires avoiding processed foods, checking ingredient labels carefully, and cooking with traditional fats.

**Q: If seed oils are so harmful, why are they still used?**

**A:** Seed oils are cheap, shelf-stable, and widely available due to decades of government subsidies and outdated dietary guidelines. They're also profitable for food manufacturers. Most public health agencies continue to focus on cholesterol metrics rather than long-term clinical outcomes, which has delayed reform.

**Q: Can I reverse the effects of LA once it's stored in my body?**

**A:** LA has a half-life of about 680 days, meaning it can take up to six years to replace 95% of it. The sooner you reduce your intake, the sooner your body begins offloading stored LA. Supporting your metabolism with nutrient-dense whole foods and minimizing oxidative stress help mitigate the damage over time.

**Q: What fats should I use instead of seed oils?**

**A:** Stick to traditional, stable fats like butter, ghee, tallow, and coconut oil. These fats are less prone to oxidation and have been consumed safely for generations across cultures.

## Sources and References

---

- [1, 2, 3, 4, 5, 6, 8, 9, 12, 15, 16](#) YouTube, Heart & Soil, "The Truth About Seed Oils | FED A LIE | Full Documentary" November 23, 2024
- <sup>7</sup> [Proceedings of the Nutrition Society. 2022;81\(4\):279-287](#)
- <sup>10, 13</sup> [Nutrients 2023, 15\(14\), 3129](#)

- <sup>11, 14</sup> [Advances in Redox Research Volume 15, June 2025, 100128](#)
- <sup>17</sup> [Nature. 2011 Sep 25;478\(7367\):110–113](#)
- <sup>18</sup> [Nutrients. 2023 Oct 30;15\(21\):4607](#)