

The Scourge of Soybean Oil

Analysis by [Sally Fallon Morell](#)

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STORY AT-A-GLANCE

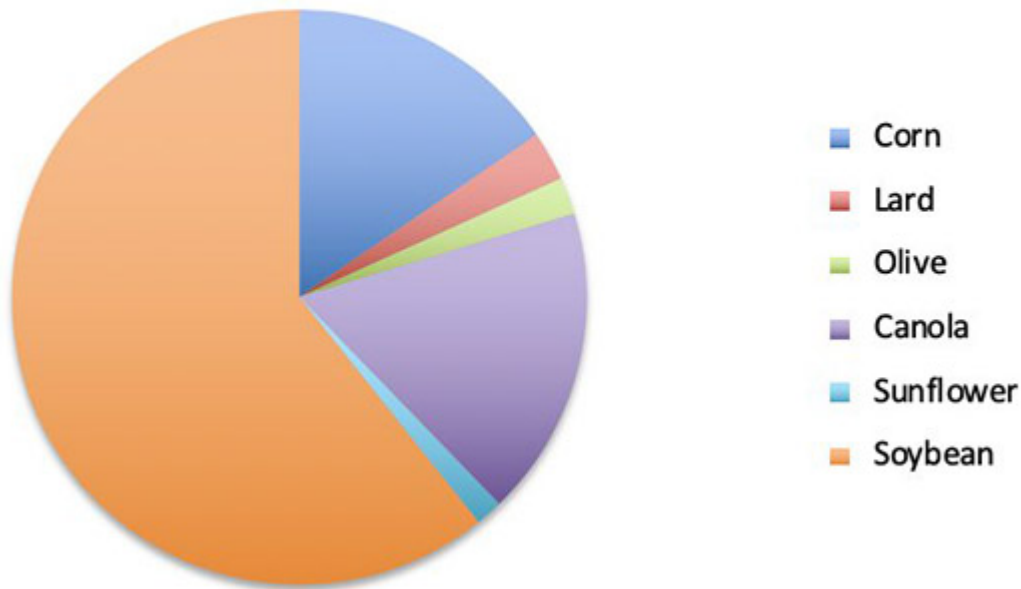
- › Soybean oil, the most commonly used oil in the U.S., contains high levels of omega-6 polyunsaturated fatty acids
- › Polyunsaturated fats in soybean oil break down into harmful free radicals and aldehydes during high-temperature processing
- › Studies associate high polyunsaturated oil consumption with cancer, while saturated fats may offer protection
- › Soybean oil affects the hypothalamus, disrupting over 100 genes, including those regulating body weight and hormone production. A 2015 study showed mice on a high soybean oil diet had increased weight gain, diabetes, and liver abnormalities
- › To avoid soybean oil, switch to traditional fats like butter, lard, coconut oil, and olive oil, and avoid processed foods

Southern Maryland, where I live, used to be a premier tobacco-growing region. Then in the 1980s, as the risks of tobacco smoking became clear, the state of Maryland instituted a tobacco buy-out program. Tobacco farmers received a large payment for ten years in a row to never plant tobacco again.

The problem is that what replaced the tobacco was mostly soybeans — a crop that is far more carcinogenic and dangerous than tobacco. Fields-of-lung-cancer became fields-of-every-kind-of-cancer.

Soybean Oil Can Fuel Cancer

Consumption (million pounds)



Edible fats and oils consumed in the U.S., 2017/18. Credit: USDA.

The most commonly used oil in the U.S. is soybean oil. Soybean oil is highly unsaturated, meaning that it contains mostly omega-6 polyunsaturated fatty acids along with about 10% omega-3 fatty acids. (Only canola oil contains such high levels of omega-3 fatty acids; other fats and oils contain only a small fraction.)

These types of fat molecules break down into highly reactive free radicals and aldehydes during high-temperature processing, and even further during high-temperature frying – the omega-6s certainly do but even more so the very fragile omega-3s.

It's a well-kept secret that many studies associate the consumption of high levels of polyunsaturated oils with cancer; other studies show that saturated fats, as in coconut oil, butter, lard and tallow – the kind of healthy fats that soybean oil replaced – protect us against cancer.

All industrially processed oils are carcinogenic, especially soybean oil. But there's a lot more that's wrong with this ubiquitous food ingredient. Soybean oil also messes with

your mind.

Health Effects of Soybean Oil Diets

In 2015, researchers at the University of California at Riverside compared mice on four different diets of equal calories: a diet high in coconut oil; a diet high in soybean oil; the coconut oil diet plus high-fructose corn syrup (HFCS); and the soybean oil diet plus HFCS.¹

Those mice who received diets high in soybean oil, with and without HFCS, had increases in weight gain, adiposity, diabetes, glucose intolerance and insulin resistance. They also developed abnormalities in the liver, including fatty liver. Those mice on diets high in coconut oil in general did not develop these problems.

Two years later the researchers repeated the study using soybean oil genetically modified to contain lower amounts of polyunsaturates.² This oil also induced obesity and other problems in the mice, but not as greatly as the original soybean oil.

These results point to polyunsaturates – and not high-fructose corn syrup – as the major culprit in the current epidemic of obesity and diabetes.

In January 2020, the research team published more bad news. Not only does soybean oil cause metabolic diseases like diabetes, but also contributes to genetic changes in the brain that could lead to conditions like anxiety and Alzheimer's disease – both the conventional soybean oil and the modified soybean oil had the same effect.³

Soybean Oil Has Pronounced Effect on Your Master Gland

Most seriously, the researchers found that soybean oil had a pronounced effect on the hypothalamus. The hypothalamus is the body's master gland; it regulates body weight, maintains body temperature, directs the formation of sex hormones, is critical for physical growth, and modulates our response to stress. Soybean oil caused the dysregulation of about one hundred genes in this organ.

For example, in soybean oil-fed mice, the levels of oxytocin in the hypothalamus went down. Oxytocin is the “love” or “cuddling” hormone that plays a role in **social bonding**, **sexual reproduction**, **childbirth** and the period after childbirth.

Oxytocin stimulates milk production and helps mothers bond with their babies. Apart from childbirth, oxytocin seems to play a role in reducing fear and anxiety in both sexes and even in protecting us from addictive behaviors.

I’ve often said that the hypothalamus is the seat of impulse control, and if there is anything that characterizes today’s generation of children, brought up on vegetable oils instead of butter and lard, it is lack of impulse control.

In addition, various structures in the hypothalamus appear to be related to gender expression, sexual orientation and gender confusion such as transsexuality.⁴

The formation of these structures begins in utero and continues through childhood and puberty. Is soybean oil a culprit in the tragic situation so many young people find themselves in today – feeling like they are the wrong sex for their body? If soybean oil affects the expression of dozens of genes in the hypothalamus, the likelihood is yes.

Soybean Oil Found in Most Processed Foods

There are a lot of harmful things in modern diets – refined sweeteners (sugar, high-fructose corn syrup), MSG and artificial flavors, pasteurized and homogenized milk, modified food starch, extruded grains (breakfast cereals), glyphosate and other agricultural chemicals, etc. – but by far the worst are the industrially processed seed oils, especially soybean oil.

And soybean oil is in everything! Margarine and spreads; Cool Whip, creamers and mayonnaise; salad dressings and dips; chips, crackers and snack foods; bread, donuts, cake (especially the icing) and pastries; French fries and fried chicken; and prepared foods like pizza.

The only way to avoid it is to avoid processed foods and return to the healthy fats of our ancestors – mostly animal fats (butter, lard, duck fat, tallow, etc.), plus traditional oils like coconut oil and olive oil.

Soybean Waste

By the way, what's left after pressing soybean oil out of the seed is a high-protein gunk, which food processors manipulate and refine in order to remove the protein – resulting in products like soy protein isolate and soy protein concentrate.

These waste products are then used in a myriad of highly processed foods such as soy protein smoothies, energy bars and fake meat like the Impossible Burger. Do not for a moment believe that the corporations selling these “plant-based” foods as good for your health and good for the planet have any other motive than making a profit off a cheap waste product.

How to Rid Your Diet of Soybean Oil

If you've been eating the standard American diet of processed foods, getting off the vegetable oil can be a daunting challenge. Here is a list of the changes you can make (some easy, some a little harder) as first steps in regaining your health. Even if you only do some of these changes, your body will thank you!

Standard American Diet	Do This
Instead of margarines and spreads	Use butter instead
Instead of cooking oils	Cook in lard and bacon fat
Instead of commercial salad dressings	Learn to make your own with olive oil and vinegar
Instead of Cool Whip	Use real whipped cream

Standard American Diet

Do This

Instead of non-dairy creamer	Use real cream or real half-and-half
Instead of commercial mayonnaise	Make your own or use a coconut oil-based mayo
Instead of commercial dips	Make your own using sour cream and other ingredients
Instead of chips	Crunch on plain pork cracklings
Instead of typical crackers	Find crackers made with palm oil or coconut oil
Instead of processed snacks	Enjoy cheese and salami
Instead of supermarket bread	Use the WAPF Shopping Guide to find natural sourdough bread without added oils
Instead of French fries	Make your own oven fries cooked in lard or duck fat
Instead of fast food fried chicken	Make your own, fried in lard
Pastries, cake, donuts	Minimize as best you can (drink a glass of raw milk instead!)
Pizza	Save for a special treat, not every day, and order thin crust pizza

The Weston A. Price Foundation has been warning the public about the dangers of industrial seed oils since its inception, twenty years ago. Your membership supports this important work.

About the Author

Sally Fallon Morell is author of the best-selling cookbook “Nourishing Traditions” and many other books on diet and health. She is the founding president of the Weston A. Price Foundation (westonaprice.org) and a founder of A Campaign for Real Milk (realmilk.com). Visit her blog at nourishingtraditions.com.

Sources and References

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