

# Top 13 Reasons to Replace Dangerous Oils With Healthy Fats

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✓ Fact Checked

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## STORY AT-A-GLANCE

- › Replacing dangerous oils with healthy fats is one simple way to boost your health and reduce your risk of chronic disease
- › While partially hydrogenated vegetable oils are now recognized as harmful due to their trans fat content, and are being largely eliminated, trans fat-free vegetable oils still have the worrisome problem of degrading into toxic oxidation products when heated
- › Vegetable oils are also a concentrated source of omega-6 linoleic acid, which has led to a severe imbalance between the omega-6 to omega-3 ratio in most people's diets, and many commonly used vegetable oils are genetically engineered
- › Maintaining a healthy ratio of omega-6 to omega-3 is important for optimal health. Ideally, you want to maintain a 4-to-1 ratio of omega-6 and omega-3 fats or less
- › Black seed oil has at least 20 different pharmacological actions, and has been shown to be useful for a wide variety of ailments, including Type 2 diabetes, asthma, cognitive decline, stress and rheumatoid arthritis

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Dietary fats are a crucial component of a healthy diet, but the devil's in the details, and the type of fats you choose can make a world of difference. While the notion that

saturated fats cause heart disease is a fallacy, some fats do cause cardiovascular problems and need to be avoided.

Replacing dangerous oils with healthy fats is one simple way to boost your health and reduce your risk of chronic disease. Here, I'll review some of the key points to remember when adding more fat into your diet.

## **Trans Fat – A Hidden Culprit in Heart Disease for Decades**

Before 1900, American housewives used lard and butter for cooking. It wasn't until 1911 that our diets experienced a dramatic change with the introduction of trans fat in the form of Crisco, the first hydrogenated vegetable oil product to hit the market.

Hydrogenated vegetable oils and margarine quickly became the backbone of the food industry. In my book "[Superfuel: Ketogenic Keys to Unlock the Secrets of Good Fats, Bad Fats, and Great Health](#)," cowritten with James DiNicolantonio, Pharm.D, we take a deep dive into this topic. In fact, our book reveals how the consumption of soybean oil has increased over a thousand percent from 1909 to 1999.

Trans fats became a staple dietary fat with the introduction of processed foods, and could be found in everything from cookies and crackers to french fries and frozen food. Unfortunately, it would take more than a century for the truth about trans fat to be fully recognized.

The U.S. Food and Drug Administration (FDA) didn't remove partially hydrogenated oils from the generally recognized as safe (GRAS) list until 2015,<sup>1</sup> based on evidence suggesting their removal could prevent thousands of heart attacks and deaths each year.

In reality, research by trans fat scientist Fred Kummerow, dating back to 1957, showed that trans fat interferes with the basic functioning of cellular membranes. Even small amounts of manufactured trans fat have been shown to have adverse effects on your heart, insulin sensitivity and neurological system.

# Processed Vegetable Oils Do More Harm Than Good

In response to research and public opinion, many restaurants have since turned from partially hydrogenated oils to 100% vegetable oil. However, while these oils do not have trans fats, they're just as bad, if not worse. There are three significant reasons for this:

1. When heated, vegetable oils degrade to extremely toxic oxidation products, including cyclic aldehydes,<sup>2</sup> which have been linked to neurodegenerative diseases and certain types of cancer. In her book, Teicholz cites research showing that aldehydes cause toxic shock in animals through gastric damage.
2. Vegetable oils are a concentrated source of omega-6 linoleic acid, which has led to a severe imbalance between the [omega-6 to omega-3 ratio](#) in most people's diets.
3. Many of the vegetable oils produced today – especially corn and soy – are products of genetic engineering (GE) and a significant source of glyphosate exposure, and glyphosate has also been linked to gut damage and other health problems.

In addition, processed vegetable oils (polyunsaturated fat) harm health by:

4. Creating high amounts of oxidation products when used in cooking (as they are very susceptible to heat), including aldehydes, which are what cause oxidized low-density lipoprotein (LDL) associated with heart disease. Aldehydes also crosslink tau protein and create neurofibrillary tangles, thereby contributing to the development of neurodegenerative diseases.
5. Damaging the endothelium (the cells lining your blood vessels) and causing an increase in penetration of LDL and very low-density lipoprotein (VLDL) particles into the subendothelium. In other words, these oils get integrated in your cell and mitochondrial membranes, and once these membranes are impaired, it sets the stage for all sorts of health problems.
6. Damaging your mitochondria and DNA by making your cell membranes more permeable, allowing things to enter that shouldn't.

7. Making the cell membrane less fluid, which impacts hormone transporters in the cell membrane and slows your metabolic rate.
8. Inhibiting cardiolipin, an important component of the inner membrane of your mitochondria that needs to be saturated in DHA in order for it to function properly.

Cardiolipin can be likened to a cellular alarm system that triggers apoptosis (cell death) by signaling caspase-3 when something goes wrong with the cell. If the cardiolipin is not saturated with DHA, it cannot signal caspase-3, and hence apoptosis does not occur. As a result, dysfunctional cells are allowed to continue to grow, which can turn into a cancerous cell.

9. Inhibiting the removal of senescent cells, i.e., aged, damaged or crippled cells that have lost the ability to reproduce and produce inflammatory cytokines that rapidly accelerate disease and aging.
10. Stripping your liver of glutathione (which produces antioxidant enzymes), thereby lowering your antioxidant defenses.<sup>3</sup>
11. Inhibiting delta-6 desaturase (delta-6), an enzyme involved in the conversion of short-chained omega-3s to longer chained omega-3s in your liver.<sup>4</sup>
12. Exposing you to toxic 4-hydroxynonenal (4HNE), which forms during the processing of most vegetable oils, even if the oil is obtained from organic crops. 4HNE is highly toxic, especially to your gut bacteria, and consumption of 4HNE has been correlated with having an obesogenic balance of gut flora. It also causes DNA damage and instigates free radical cascades that damage your mitochondrial membranes.<sup>5</sup>
13. Exposing you to glyphosate residues, as most vegetable oils are made with genetically engineered crops. Glyphosate has been shown to disrupt the tight junctions in your gut and increase penetration of foreign invaders, especially heated proteins, which can cause allergies.

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# Address Your Omega-6 to Omega-3 Ratio to Protect Your Health

Marine-based omega-3 is one of the most important fats in the human diet, as docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) are actually key structural elements of cells, including your brain cells, and not just simple fuel. If you don't have enough DHA and EPA, your body's ability to repair and maintain healthy cell structures is seriously impaired.

Unfortunately, in the past 100 years, our omega-6 intake has nearly tripled while our intake of omega-3 has decreased 10fold, and this imbalance has also likely played a significant role in our skyrocketing disease rates.

Eating too much damaged omega-6 fat – found in abundance in processed vegetable oils – and too little animal-based omega-3 sets the stage for diabetes, cardiovascular disease, rheumatoid arthritis, cancer, depression and Alzheimer's, just to name a few.

Now, omega-6 fat in and of itself is not the problem. The problem is that most people get far too much of it, and insufficient amounts of omega-3, and that most of the omega-6 people eat has been damaged and oxidized through processing. Evidence implicating excessive consumption of omega-6-rich vegetable oils as a direct cause of heart disease include but is not limited to:<sup>6</sup>

The amount of linoleic acid in adipose tissue and platelets is positively associated with coronary artery disease, and studies<sup>7</sup> measuring changes in linoleic acid concentrations in adipose tissue in Americans show concentrations increased from 9.1% in 1959 to 21.5% in 2008. This increase also paralleled increases in the prevalence of obesity, diabetes and asthma.

Conversely, the long-chained omega-3s docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA) have been shown to protect against coronary artery disease, which is why maintaining a healthy balance between omega-3 and omega-6 is so important.

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Patients with atherosclerosis have higher amounts of linoleic acid oxidation products in their plasma, low-density lipoprotein (LDL) and atherosclerotic plaques.

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Oxidation of linoleic acid begins before any clinical signs of atherosclerosis become apparent.

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When the endothelium (the interior lining of your blood vessels) is exposed to linoleic acid, LDL transfer across the endothelium is increased and this is an essential step in the atherosclerotic process.

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Low linoleic acid diets reduce LDL oxidation.

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A meta-analysis of randomized controlled trials in humans showed that when saturated fat and trans fat are replaced with omega-6 PUFAs, all-cause mortality, ischemic heart disease mortality and cardiovascular mortality increase.

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Oxidation products of linoleic acid are found in infarcted tissue.

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The linoleic acid metabolite 9-HODE is a strong promoter of inflammation, and may be both a marker for and inducer of atherosclerosis.

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## Healthiest Fats for Cooking

Getting back to cooking oils, if vegetable oils are "out," what should you use to cook with? Healthy alternatives include:

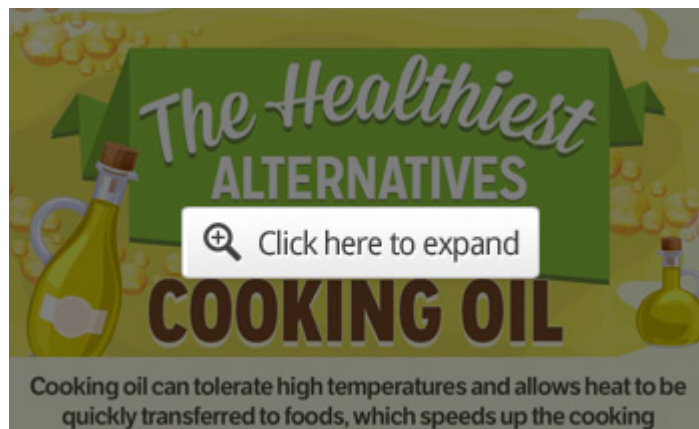
- **Coconut oil** – This is what I believe is the best cooking oil. It has a number of valuable health benefits, including a positive effect on your heart and antimicrobial properties. It's also a great source of energy, thanks to its medium-chain fatty acids (MCFAs). When consumed, the MCFAs are digested and converted by your liver into energy that you can immediately use. Coconut oil also helps stimulate your metabolism to encourage a healthy weight profile.

- **Grass fed butter** – Raw, organic butter made from healthy grass fed cows' milk contains many valuable nutrients, including vitamins A, D, E and K2. Furthermore, it contains various minerals and antioxidants that support good health.
- **Organic ghee**, which has been used for cooking for thousands of years, is another good choice.
- **Olive oil** – This oil contains healthy fatty acids that can help lower your risk of heart disease. While the standard recommendation has been to avoid using olive oil for cooking and to only use it cold, research<sup>8</sup> in which 10 popular cooking oils were compared, contradicts this advice, showing extra-virgin olive oil actually scored best for both oxidative stability and lack of harmful compounds produced when heated.

A word of caution is warranted, however. Fake olive oil abounds, so it's important to take the time to investigate your sources. Tests reveal anywhere from 60 to 90% of the olive oils sold in American grocery stores and restaurants are adulterated with cheap vegetable oils or nonhuman-grade olive oils, which are harmful to health in a number of ways.<sup>9</sup>

For tips on how to assess the quality of your olive oil, see the short video below. For more information, see "[Is Your Olive Oil Fake?](#)" where I cover this topic in-depth.

Peanut oil and sesame oil are two other healthy options. While both are high in omega-6, peanut oil is high in antioxidants, and sesame oil has been shown to benefit diabetics. The caveat with these two oils is that you need to consume them unheated and in moderation, so as not to throw off your omega-6 to omega-3 ratio.



## Black Seed Oil – The Forgotten Gem

**Black seed (*Nigella Sativa*) oil** is another exceptional fat with a long history of use in traditional systems of medicine, including Ayurveda and Siddha. The most abundant active plant chemical in black seed is thymoquinone; other bioactive compounds include  $\alpha$ -hederin, alkaloids, flavonoids, antioxidants and fatty acids.

As for its antioxidant activity, black cumin seed has been found to be far more potent than vitamin C.<sup>10</sup> In modern times, researchers have confirmed *Nigella Sativa* may be helpful for:

**Type 2 diabetes** – In one study, *Nigella sativa* improved glucose tolerance as efficiently as metformin.<sup>11</sup> It's also been shown to improve the performance of antidiabetic medication<sup>12</sup>

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**Reducing asthma symptoms** – In one study,<sup>13</sup> thymoquinone was found to be instrumental, by reducing two inflammatory mediators of asthma and other inflammatory processes.

Another study<sup>14</sup> found black cumin seed also acts as a relaxant, and displays both anticholinergic (reducing spasms in smooth muscle) and antihistaminic (blocking allergic reactions) effects. Here, thymoquinone was found to be superior to the asthma drug fluticasone (a synthetic glucocorticoid)

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**Enhancing memory and reducing stress** – The results showed black cumin seed inhibited stress-induced biochemical changes in a dose-dependent manner. Memory and cognition was also dose-dependent<sup>15</sup>

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**Reducing damage caused by cadmium poisoning**<sup>16</sup> – May also serve as prophylactic against chemical warfare agents

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**Protecting against and attenuating aflatoxicosis**<sup>17</sup>

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**Alleviating symptoms of allergic rhinitis**<sup>18</sup>

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**Candidiasis**<sup>19</sup>

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**Rheumatoid arthritis**<sup>20</sup>

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**Cancer**<sup>21,22,23</sup>

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Black seed oil has at least 20 different pharmacological actions, which helps explain how it can be useful for so many different and varying ailments, including:<sup>24</sup>

Antidiabetic	Anti-cancer
Immunomodulatory	Analgesic (pain relief)
Antimicrobial	Anti-inflammatory
Spasmolytic	Bronchodilator <sup>25</sup>
Hepatoprotective	Renal protective
Gastroprotective	Antioxidant

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## How to Use Black Seed Oil

Black seed oil is a highly undervalued and oft-forgotten kitchen staple. When used in cooking, it imparts a warm, slightly bitter flavor that tastes something like a blend of thyme, oregano and nutmeg.

A mixture of black seed oil, honey and garlic also makes for a powerful tonic that can help soothe coughs and boost immunity, especially during cold and flu season or if you feel like you're coming down with an infection.<sup>26</sup>

Like all seeds, black seed oil is high in polyunsaturated fats. So, when taken in excess, it could make your mitochondrial membranes more susceptible to oxidation.

For this reason, I suggest limiting your daily intake to 1 to 2 tablespoons or less. A simple way to get a small amount of black seed oil into your diet on a regular basis is to use it in your homemade dressing. Here are a few suggestions:

- Mix apple cider vinegar, black seed oil, fresh lemon juice, cilantro and tahini. Experiment with the ratios to enhance the flavor you enjoy the most
- A simple and yummy dressing that goes particularly well with broccoli, asparagus or salad greens includes: 1 tablespoon apple cider vinegar, 1 tablespoon lemon juice, one-half teaspoon minced garlic, a dash of ground black pepper and a few fresh basil leaves, chopped
- Alternatively, you can use apple cider vinegar and/or black seed oil as substitutes for other oils and vinegars in whatever dressing recipe you're already using. Keep in mind that the black seed oil does have a spicy kick to it, so substituting the full amount may make it too spicy. Start by adding just a small amount, and experiment to find the ratio of vinegar, olive oil and black seed oil you enjoy

## **Optimize Your Health by Selecting the Right Fats**

The list below, obtained from Dr. Cate Shanahan, author of "Deep Nutrition: Why Your Genes Need Traditional Food," summarizes some of the best and worst fats found in our modern diet. Replacing the bad fats in your diet with ones from the "good" list is a simple way to safeguard your health without making any radical changes.

To learn more about the ins and outs of dietary fats, pick up a copy of my book, "[Superfuel: Ketogenic Keys to Unlock the Secrets of Good Fats, Bad Fats, and Great Health](#)," cowritten with James DiNicolantonio, Pharm.D, which gives more in-depth specifics on how to discriminate between healthy and harmful dietary fats.

Good Fats		Ok, but not great	Bad Fats	
Traditionally used fats and oils Not highly processed		Refined traditional fats Label says "refined"	Polyunsaturated Refined, Bleached, Deodorized	Trans Label says "hydrogenated"
All Purpose	Caution with heat	Limited use	Don't Eat	
Olive oil	Walnut oil	Refined peanut	Soy oil	Fake whip cream
Avocado oil	Flax oil	Refined Avocado	Sunflower oil	Fake butter spreads
Peanut oil	Sesame	Refined Coconut	Safflower oil	Store-bought pastries
Butter/Ghee	Walnuts		Canola oil	Chicken nuggets
Tallow & Lard	Seeds		Corn oil	Margarine
Cocoa butter	Fatty fish		Cottonseed oil	Shortening
Mac nut oil	Artisanal grapeseed		Hydrogenated oil	Restaurant fried foods
Coconut oil			Refined palm	Most chips & crackers
Almond oil				Most protein bars
			<b>Mostly in restaurants:</b>	Most salad dressings
			Grapeseed oil	Most granola & cereal
			Ricebran oil	

*Drate*

## Sources and References

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