

# How Different Types of Fat Change Your Body

By Dr. Mercola

An enlightening report recently emerged revealing that the linolenic acid (LA) concentration of fat tissue in American adults has skyrocketed by about 136 percent over the last decade. It's not so much that people are eating more fats but that the "bad fat" is taking over.

You might be wondering why America seems to be fatter and sicker than ever before, when so much focus is on losing weight and eating a "healthier" diet. Part of the problem is that one person's idea of "healthy" is vastly different from another's and, often, vastly different from reality.

Is it true that eating "fat free" or "low fat" foods helps you lose weight? How come it's not working? And why do the U.S. Dietary Guidelines,<sup>1</sup> the American Heart Association and many doctors maintain that vegetable and seed oils are better for your heart when there's so much evidence to the contrary?

## Getting to the Bottom of Real and Fake Fat

*Adipose tissue*, the technical term for fat, is actually a crucial part of your body, as it contains the blood vessels and nerve cells necessary for storing energy and releasing hormones. Fat also insulates your body.

Linoleic acid, concentrated in seed or vegetable oils like corn and canola oil, is the polyunsaturated fat that's most prevalent in foods today, but its *modus operandi* — the way it accumulates in fat tissue — is what concerns researchers today.

Neurobiologist and obesity research Stephan Guyenet, who studied the disturbing trend, pooled resources with co-researcher Susan Carlson, a University of Kansas nutrition researcher, to produce a paper revealing that over the last 50 years, the linolenic acid concentration of *fat tissue in American adults has shot upward by a shocking 136 percent*.

Their research captured criteria from 37 studies between 1960 and 2010, which underscored the steady and consistent trajectory over those five decades and continues today. They also found a "strong correlation" between the linolenic acid we eat and the linolenic acid in our fat tissue.

Besides [soybean oil](#) and canola oil (from rapeseeds), the oils that contain linolenic acid include:

- [Corn oil](#)
- [Sunflower oil](#)
- [Safflower oil](#)
- [Cottonseed oil](#)
- [Peanut oil](#)

Note that seeds like sunflower seeds are good for you because they are in whole form and haven't been subject to the chemical processing used to extract their oils.

## What's so Bad About Vegetable Oils?

The irony is that vegetable oils are often referred to as "heart healthy," but science doesn't support it. The whole idea was based on shelf life and economics. Vegetable oils remain fluid at room temperature, which adds to its convenience and shelf life, which is good for manufacturers and retailers.

The hydrogenation process, another problem that has emerged with the processing of seed oils to create the more solid oil forms for margarine and shortening, is another topic, but related to the health problems stemming from the ways vegetable oils are produced.

With the adoption of polyunsaturated oils, the natural fats such as [butter](#) that our forebears were raised on were cast aside. As America turned to vegetable oils, which are a concentrated source of linolenic acid, LA in body fat climbed at a remarkably similar rate. Handpicked Nation reported:

*"Before 1920 coronary heart disease was rare in America. But during the next forty years, the incidence rose dramatically and by the mid-1950s heart disease was the leading cause of death among Americans. What happened?"*

*During 1910–1970 the proportion of traditional animal fat in the American diet declined from 83% to 62% and butter consumption plummeted from 18 pounds per person per year to four."<sup>2</sup>*

During the same period, the so-called "healthier" use of margarines, shortenings and refined oils rose in popularity by about 400 percent! (Simultaneously, both sugar and processed food consumption increased by about 60 percent.)

It's interesting that in comparison the LA content of fat tissue among Europeans is not only lower than that of most Americans, but also today theirs is about where ours was in 1970.<sup>3</sup>

## You Are What You Eat. No, Really.

An article in Online Today, "Healthy Animal Fats"<sup>4</sup> expounds on what you get when you choose refined vegetable oils, which require intense processing, both mechanically and chemically.

The procedure as well as the materials used should be a harbinger of what's to come to your health when you ingest virtually anything that's undergone this process:

*"The seed pulp and oil are put through a hexane solvent bath, which is produced by the refining of crude petroleum oil.*

*Impurities are removed by treating the oil with caustic soda (sodium hydroxide) or soda ash (sodium carbonate). Finally, bleaching and deodorizing are done to remove impurities and volatile compounds. All this chemical concoction renders a product that has been linked to widespread inflammation within the body, elevated blood triglycerides, and an impaired insulin response."*

## Omega-3 and Omega-6 Fats: What's the Difference?

Over decades, changes have taken place correlating to the amounts of [omega-3 fats](#) (EPA and DHA) and the omega-6 fats we eat. Research indicates our hunter-gatherer ancestors consumed a balanced mix of

omega-3 and omega-6 fats and were largely free of modern diseases like heart disease, cancer and diabetes.<sup>5</sup>

Then the industrial revolution in the mid-1800s generated a shift toward omega-6 fats and the manufacture of vegetable oils that rose with every decade. Today, studies show that the ratio is as high as 25:1 in favor of omega-6 fats.<sup>6</sup>

To define polyunsaturated omega-6 and omega-3 fats, "poly" means many, which references multiple bonds. Because our bodies can't produce them, we need to obtain them via our diets. That's why they're called "essential," and they have critical roles in our bodies, from clotting blood to fighting inflammation.

### **This Is Your Body on the Wrong Fats: What 'Fake' Oils Do**

Research shows that before 1920, heart disease was a rarity. In 2012, The Atlantic cited a chart published by The New England Journal of Medicine, which lays out the top 10 causes of death from 1900 to 2010.

Two things are remarkable: Mortality dropped dramatically overall, but heart disease and cancer soared to the No. 1 and 2 spots.<sup>7</sup> The Atlantic credited part of the increase in these diseases to sedentary lifestyles.

But increased omega-6 fat consumption and the neglect of omega-3s has taken a toll, especially in terms of inflammation and heart disease. While "Big Pharma" and doctors are well aware that patients could simply be encouraged to reduce their omega-6 intake, they instead recommend and prescribe drugs and over-the-counter remedies.

The breakdown is fairly straightforward: Cancer and heart disease combined sent 18 percent of the population to their graves. In 2010, that number jumped to 63 percent. Another way to put it is that out of every 100,000 people, then and now, the ratio of deaths tips from 201 to 380.

The American Journal of Clinical Nutrition<sup>8</sup> focused on this imbalance of fatty acids in a study that offered a harrowing list of increased inflammatory diseases as a direct result, including:

Obesity	<a href="#">Type 2 diabetes</a>	Irritable bowel syndrome
Inflammatory bowel disease	<a href="#">Rheumatoid arthritis</a>	Cancer
Cardiovascular disease	Metabolic syndrome	Asthma
Macular degeneration	Psychiatric disorders	Autoimmune diseases

## Poison Plus Nutrition Does Not Equal a Balanced Diet

Omega-3 and omega-6 fats have different functions, particularly when it comes to inflammation. As one study termed it, omega-6s can cause inflammation, while omega-3s fight it.<sup>9</sup> However:

*"Inflammation is essential for our survival. It helps protect our bodies from infection and injury, but it can also cause severe damage and contribute to disease when the inflammatory response is inappropriate or excessive."*<sup>10</sup>

So how can you keep from eating something that's bad for you, especially when the U.S Food and Drug Administration (FDA) is often so quick to defend foods that have been proven to be clearly misrepresented? One way is to be aware of the ingredients in the processed foods you eat—and to avoid processed foods altogether if you can.

Guyenet's research on how the wrong fats change our bodies is compounded by the fact that vegetable oil (which weighs in on the omega-6 side) is found in so many foods, and not just margarine and shortening. It's in crackers, packaged snacks, coffee creamers, fried foods, pre-made baked goods and ready-to-use dough and pie shells.

Besides vegetable oil, there are many other pitfalls that can throw off the balance your body needs in the world of nutrition. [Sugar and soda](#) are two of the biggest problems, but there are other things that can sideline a good nutrition plan. That's why arming yourself with the information you and your family need to prevent disease and maintain health and wellness is so important. Here are some things you can do now to take control of your health and enjoy life:

- Increase your intake of omega-3 fats from sources such as sardines, anchovies, wild-caught Alaskan salmon and [high-quality krill oil](#).
- Use first-pressed virgin olive oil and butter and, for cooking, coconut oil is great because it doesn't burn quickly, and contains multiple health advantages.
- Read labels carefully. Bone up on terms like "hydrogenation," "trans fats," "high fructose corn syrup" and [Red 40 food dye](#).
- Avoid processed foods, including processed vegetable oils.
- Eat [real food](#), not processed and not fake. "Real" foods include organically grown vegetables, fruits in moderation, sprouts, pastured meat and eggs, herbs, and wild-caught Alaskan salmon, for a start.
- Look for and use organic fruits, vegetables, meats, eggs and other foods as often as possible.

Source:

[http://articles.mercola.com/sites/articles/archive/2016/05/18/vegetable-oils-fats.aspx?utm\\_source=dnl&utm\\_medium=email&utm\\_content=art2&utm\\_campaign=20160518Z1&et\\_cid=DM105777&et\\_rid=1488982375](http://articles.mercola.com/sites/articles/archive/2016/05/18/vegetable-oils-fats.aspx?utm_source=dnl&utm_medium=email&utm_content=art2&utm_campaign=20160518Z1&et_cid=DM105777&et_rid=1488982375)