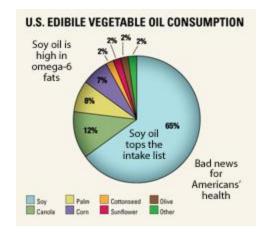


## Soy Oil Mistaken as Healthful

Consumers believe soybean oil is healthful ... a misapprehension rooted in general ignorance of a dire "omega-imbalance" in the standard American diet by Craig Weatherby

We've written many times about the unhealthful effects of imbalanced intakes of omega-3 and omega-6

fatty acids ... a key feature of the standard American diet.



In short, Americans have raised their intake of omega-6 fatty acids radically ... thanks to far greater use of vegetable oils in processed foods and in home, takeout, and restaurant foods.

Omega-6 fatty acids predominate in the most commonly used vegetable oils ... corn, soy, safflower, cottonseed, and sunflower.

The only common exceptions are olive oil, macadamia nut oil, canola oil, and "hi-oleic" sunflower or safflower oils.

The available evidence indicates that people will thrive best – and reduce their risk of most major diseases – on diets providing about three parts omega-6 fats to one part omega-3 fats.

But Americans' relative intakes of omega-6s to omega-3s shifted dramatically in favor of omega-6 fats over the past 100 years ... a trend that accelerates sharply starting in the late 1960's.

As a consequence, the average American's diet now provides 20 or more parts omega-6s to one part omega-3s ... a whopping seven times or more higher than the three-to-one intake ratio shown to deter major diseases and promote optimal health.

Dozens of human clinical and epidemiological studies – and many more cell and animal studies – link the omega-imbalance typical of most American's diets to higher disease risks.

For an overview of this serious health issue, see "America's Sickening 'Omega Imbalance'", "Using our Omega 3/6 Balance Scores", and the Omega-3 / Omega-6 Balance section of our news archive.

Last year, a team led by renowned National Institutes of Health psychiatrist and omega-3 expert Joseph Hibbeln, M.D., published a study revealed several disturbing trends (Blasbalg TL et al. 2012):

The estimated per capita consumption of soybean oil increased more than 1,000-fold throughout the 20th century.

As a result, the amount of the omega-6 fatty acid called LA (mostly from vegetable oils) more than tripled, and the amount of omega-3 ALA (from soy and canola oils) doubled\*.

The total intake of omega-3 fatty acids increased slightly, mostly due to increased ALA intake.

This huge increase in dietary omega-6 LA likely decreased Americans' omega-3 EPA and DHA blood and cell levels over the 20th century.

Why would a big increase in omega-6 intake reduce Americans' omega-3 EPA and DHA levels?

The body cannot use omega-3 ALA for the essential brain, metabolic, and immune functions performed by omega-3 EPA and DHA.

Humans convert just one to five percent of dietary omega-3 ALA into omega-3 EPA ... a very small percent of which the body can convert to omega-3 DHA. (Pregnant women may convert as much as 10 percent of ALA to EPA.)

Those very low conversion rates are further reduced when the diet is high in omega-6 LA from vegetable oils ... a perfect description of American eating patterns.

So it is dismaying to see these results from the 2012 Consumer Attitudes About Nutrition survey – an online poll of 1,000 adults conducted by the United Soybean Board (USB 2012):

- Almost half considered vegetable oil to be healthier after learning that most of it is made from soybeans.
- If vegetable oil were re-labeled to say 100% soybean oil, about one-third said they would be more likely to buy it.
- Four out of five consumers believe soy products are healthy overall, while more than a quarter report they consume soy foods or soy beverages at least once a week.

The report contains this true but highly misleading statement: "Soybean oil is one of the few non-fish sources of omega-3s, and is the principal source in the U.S. diet."

But the omega-3 ALA in soy oil is not remotely equivalent to the omega-3 EPA and DHA in fish fat, and soy oil contains far more competing omega-6 LA than omega-3 ALA.

And as the study by Dr. Hibbeln's team reveals, soy oil is anything but healthful in the context of American diets that already suffer from an extreme overload of omega-6 fatty acids.

The soy industry has done a great job of giving soy foods – soy milk, tofu, and fake meats made from highly processed soy protein – an overly healthful image, despite a notable lack of evidence.

Sadly, most people apply that unearned perception of healthfulness to soy oil ... to the detriment of their health.

## Sources

- Blasbalg TL, Hibbeln JR, Ramsden CE, Majchrzak SF, Rawlings RR. Changes in consumption of omega-3 and omega-6 fatty acids in the United States during the 20th century. Am J Clin Nutr. 2011 May;93(5):950-62. Epub 2011 Mar 2.
- United Soybean Board (USB). 2012 National Report: Consumer Attitudes about Nutrition.

  Accessed at http://www.soyconnection.com/health\_nutrition/pdf/ConsumerAttitudes2012.pdf