

# Trans Fat and Heart Disease

**Trans fat, also known as trans fatty acids, is produced when hydrogen is added to a liquid fat to make it solid at room temperature. It can be found lurking in the ingredient labels of processed foods under the terms “hydrogenated” or “partially hydrogenated.”**

Trans fat has been found to be more damaging to arteries than saturated fat because it both raises LDL, (aka “lousy”) cholesterol levels and lowers HDL, (aka “healthful”) cholesterol.

**In the early 90s, the Institute of Medicine suggested that Americans reduce trans fat**, but at the time, more research was advised and a safe level was not decided.

The suggestion to the FDA to add trans fat to the food label came from the Center for Science in the Public Interest in 1994. The FDA originally agreed, but five years passed until the Institute of Medicine report was considered. Initially, the FDA suggested that trans fat be added to the same line as saturated fat on the food label, but the Grocery Manufacturers of American petitioned to have it added to a separate line to prevent consumer confusion. **It was finally added to the food label in 2006**, with the caveat that foods containing 0.5 grams of trans fat or less per serving may be labeled as containing “no trans fat.”

So what were the effects? Let's look at an example in New York. From 2007 to 2011, some counties in New York banned trans fat from fast food restaurants, bakeries, and concessions at parks and other public areas where food may be served, while others did not. To test the health effects of the ban, researchers compared nine counties that restricted trans fat with eight that had not.

## **The ban made a difference.**

While cardiovascular disease nationwide had already seen a decline, the drop was more dramatic in counties where trans fat was outlawed. Three years after the restriction was initiated, an additional 6.2% decline in admissions to the hospital for heart attacks and strokes was observed in the counties that banned trans fat versus those that had not. Age and other demographic factors were considered in the study published in JAMA.

The lead author of the study, Dr. Eric J. Brandt of Yale, was pleased with the results. He states, **“The most important message from these data is that they confirm what we predicted -- benefit in the reduction of heart attacks and strokes.”**

Perhaps the eight counties in NY that had not restricted trans fat as well as other states in the US will follow this important lead sooner than later. **A nationwide restriction is planned by the USDA by the end of 2018.**

Other dietary changes to reduce risk of heart attack and stroke include weight reduction, blood pressure and blood sugar control, and reduction in red meat, processed meat, heavy desserts and full-fat dairy consumption. Plant-based meals including beans, lentils, whole grains, fruits, vegetables, nuts, seeds and fish are also beneficial.