

Until recently, consumers had no way of knowing precisely how much trans fat lurked in their favorite foods. But now, a new food-labeling regulation gives us all a better shot at eliminating this danger from our diets.

Trans fat is finally on the map. Or, rather, on our food labels. In January, after more than a decade of studies, public input and bureaucratic wrangling, the U.S. Food and Drug Administration (FDA) is requiring food manufacturers to list trans-fat levels on all packaged food — right beneath the listing for saturated fat.

Adding a line for trans fat is the first significant change to the Nutrition Facts panel since its 1994 debut. And it's a move that many health activists have been eagerly awaiting.

"It's been a long struggle," says Michael Jacobson, PhD, executive director of the Center for Science in the Public Interest, the consumer group that first petitioned the FDA in 1994 to require trans fat (or "trans fatty acids") to be included on food labels. And although Jacobson and other health advocates wish the new labeling regulation were stronger (Jacobson thinks trans fat is so harmful that it should be banned), they're pleased to see it implemented at last.

"Now people will be able to determine — at least in the packaged products that they buy — how much trans fatty acid is in their food," says Alice H. Lichtenstein, DSc, professor of nutrition at the Friedman School of Nutrition Science and Policy at Tufts University and vice-chair of the American Heart Association's Nutrition Committee.

That's a good thing, because knowing if your favorite frozen pizza or potato chips are laden with trans fat — arguably the most dangerous and definitely the most unnatural form of fat — just might save your life. The FDA estimates that within the next three years, the new trans-fat labels will prevent up to 500 deaths from heart disease by encouraging people to cut back on their trans-fat consumption.

Which makes one wonder: What if we managed to avoid trans fat altogether? Harvard researchers have projected that if trans fat were eliminated entirely from the American diet (and the new labels can help people do just that), as many as 100,000 lives could be saved each year.

Hydrogen Bomb

So what is this trans fat stuff anyway? Why is it so bad for your heart and other organs? How much is too much? How can you avoid it? And how much will the new labeling really help?

Let's start with what trans fat is: a solid fat that's created artificially by adding hydrogen atoms to liquid vegetable oil. This process, called hydrogenation, not only makes it possible to solidify vegetable oil into tubs of shortening and sticks of margarine, it also stabilizes the flavor, giving food products (everything from crackers and cookies to salad dressings and ice cream) a much longer shelf life. For those reasons, and because trans fat is also cheaper than other traditional fats, such as butter and lard, many industrial food manufacturers prefer it.

Invented in the early 20th century, trans fat has since moved into the mainstream: By the 1990s, about 40 percent of the food on grocery shelves contained it. Trans fat is popular among restaurant owners and chefs, too, in part because it has a higher smoking point than other oils, which makes it easier to deep-fry foods, such as French fries. In New York City recently, health officials estimated that 30 percent of restaurants serve foods baked with or fried in trans fat.

For a long time, trans fat was considered safer than saturated fat (the fat found in red meats, butter, lard and certain tropical oils). In fact, for a while there, hydrogenated and partially hydrogenated margarines became touted as healthful alternatives to butter. But there were never any good studies to back up the positive claims for trans fat, and scientists now know the opposite is true: Trans fat has an even more unsavory effect on the heart than saturated fat.

"Trans fat is clearly the nastiest fat in the food supply," Jacobson says.

Body Breaker

Once in the body, trans fats raise bad cholesterol (low-density lipoprotein, or LDL) and lower good cholesterol (high-density lipoprotein, or HDL). That makes it a major health enemy.

Some scientists believe trans fat is twice as harmful as saturated fat in its effect on the ratio of good-to-bad cholesterol. As a result, trans fat has been fingered as a major contributor to the deadly epidemic of heart disease that has gripped the United States in recent decades. (Heart disease claims as many American lives each year — more than 1.4 million — as the next five causes of death combined. So scathing are the studies on trans fat these days that one leading expert, Walter C. Willett, MD, a professor of epidemiology at the Harvard School of Public Health and coauthor of *Eat, Drink, and Be Healthy* (Free Press, 2005), has called the introduction of trans fat into the food supply the "biggest food-processing disaster in U.S. history."

Those may seem like strong words. But Willett and other trans-fat critics note that there's plenty of evidence to back up such statements. Some of the most persuasive data has come from the Harvard Nurses' Health Study, an ongoing, decades-long research project involving more than 80,000 women. In that study, women who devoured the most trans fat over a 14-year period were found to be 53 percent more likely to develop heart disease than those who ate the least trans fat.

Results from another Harvard study involving both men and women were equally blunt: People whose diets were loaded most heavily with trans fat were twice as likely to have heart attacks as those who ate lesser amounts of the stuff.

And how much trans fat were the people in those studies' most-at-risk groups eating? Surprisingly little. In the second study, for example, men and women with the trans-fattiest daily diets consumed 6.7 and 6.8 grams, respectively. That's less than the 8 grams of trans fat found in a single medium order of fast-food French fries cooked in partially hydrogenated oil.

Heart disease is not the only serious health problem associated with trans fat. The Nurses' Health Study dropped another bomb on processed-foods-loving consumers when it linked the consumption of trans fat (but, surprisingly, not of saturated fat) with an increased risk of developing type 2 diabetes. The reasons for this increased risk are unclear, but trans fat appears to reduce the body's sensitivity to insulin — an early warning sign that indicates a person is about to become diabetic.

In addition, researchers at the University of Kentucky Medical Center reported last summer that men who gobble down lots of trans-fat-rich foods have a 23 percent higher risk of gallstone disease than men who consume very low amounts of the fat.

Iffy intake

No one's quite sure how much trans fat the typical American consumes each day. Estimates range from 2.6 grams to 12.8 grams. But for many Americans, those figures may be gross underestimates. Consider that, on average, 1 tablespoon of stick margarine has 3 grams of trans fat; 1 slice of commercial pound cake, 4.5 grams; and 1 doughnut, 5 grams.

A small amount of trans fat can occur naturally in meat and dairy products, but we get the vast majority of the stuff from processed foods. Restaurants, particularly the fast-food kind, are a major source. (Single orders of many fast-food and midpriced restaurant favorites, from onion rings to chicken fingers, have been found to weigh in with 6 to 10 grams of trans fat.)

The National Academy of Sciences (NAS) has declared that there is no safe amount of trans fat and recommends that people eat as little of it as possible. They stopped short, however, of calling for a trans-fat ban. (The government of Denmark, in contrast, did impose a ban on trans fat in 2003, and Canada is currently considering doing so.)

Former Health and Human Services Secretary Tommy Thompson told reporters early in 2005 that the FDA may recommend that people limit their daily intake of trans fat to less than 2 grams, or perhaps to even less than 1 gram. Essentially, that would mean cutting out all foods that contain hydrogenated and partially hydrogenated oils.

Reading the Label

Even before trans-fat labeling became mandatory, the new labels were making it easier for consumers to cut back on their trans-fat consumption. "It has really forced food companies to reassess what kinds of fats they use in their products," Lichtenstein says.

Many companies have already removed trans fat from their products: Frito-Lay chips, Pepperidge Farm goldfish crackers and Gorton's fish sticks are among the items that no longer contain trans fat. Crisco has even launched a new no-trans-fat shortening made with a patented mixture of sunflower, soy and cottonseed oils. At least two grocery chains, Whole Foods and Wild Oats, have declared their stores trans-fat-free zones.

Still, many of the tens of thousands of packaged foods that make their way into American homes remain loaded with trans fat. Although the new labels will help you spot these products more easily, you're still going to need a discerning eye. Here are a few key things to pay attention to as you scrutinize the new labels:

- **Amounts are listed in grams.** Be aware, however, that this number represents the grams of trans fat in each serving. Sometimes the "recommended serving" amounts are ridiculously small. Check how many servings the manufacturer says are in the package. A serving might be a single, bite-sized cookie, for example. So, if the product lists trans fat as "2 g," you'll be consuming 2 grams of fat with each cookie you scarf down.
- **"0 grams" doesn't mean zero trans fat.** Food manufacturers are permitted to list a product's trans-fat amount as "0 g" if each serving of the food contains less than half a gram of the fat per serving. This means, of course, that you could still consume significant amounts of trans fat from such a product — especially if its serving size is small and your appetite is big. To make sure "0 g" truly means what it implies, check the ingredients list. Look for the following stealth synonyms for trans fat: shortening, hydrogenated vegetable oil and partially hydrogenated vegetable oil.
- **Watch for fractionated.** Until more is known about them, it's wise to shy away from "fractionated" tropical oils. It isn't known if fractionated coconut and palm oils (which contain more artificially separated saturated solids) are any less dangerous for you than hydrogenated fats.
- **No "% Daily Value."** The "% Daily Value" (DV) on food labels gives consumers a reference point to determine how much of a recommended daily value of a particular nutrient is in each serving. The DV is based on what most people on a 2,000-calorie-a-day diet need for good health. Sometimes, as with saturated fat, the DV is an upper limit; other times, as with calcium and iron, it's a minimum. The FDA says it doesn't currently have enough information to determine the DV for trans fat, so it has left that space blank on the label. How can you know if you've gone over your DV of trans fat? You can't. But keep in mind the NAS recommendation: Eat as little trans fat as possible.

Keep Out

So what's the take-home message about trans fat? In short: You're better off not taking it home at all. Read the new food labels carefully. Keep products with trans fat out of your grocery cart, off your dinner plate, and out of your pantry and freezer. As often as possible, cook from scratch, using fresh fruits and vegetables, whole grains, fish, healthy dairy products, and lean meats. Emphasize fresh, natural, minimally processed oils from whole-food sources. Avoid restaurants that cook with trans fat.

Educate yourself about the various types of fat (watch for a feature article in EL later this year). Learn to prepare foods using "good" oils, such as olive, grape seed, rice bran, canola, corn and safflower oil. Olive, grape seed and rice bran oil, for example, are great for salads, sautés and dips; canola oil, for baking, sautéing and dressing salads; and both corn and safflower are appropriate for baking and salads.

Remember: While moderate amounts of healthy fats are critical to your body's function, trans fat is nothing but trouble. You can live — and live longer — without it. "Trans fats are bad fats," concluded former Secretary Thompson when he announced the FDA's trans-fat-labeling mandate in 2003. "The less trans fat people eat, the healthier they will be."

Susan Perry, author of Taking Charge of High Blood Pressure: Start-Today Strategies for Combating the Silent Killer (Reader's Digest, 2003) writes about health and science.

SIDEBAR: Taking Trans Fat Off the Menu

It's not just at the grocery store that you need to be concerned about trans fat. If you're like the average American, you consume about 38 percent of your fats in restaurants, coffee shops and other places where food is served — and where food labels are not required.

This past summer, the New York City Department of Health created a huge hubbub when it became the first major American city to ask restaurants to eliminate trans fat from their menus. But many restaurants, eager to please health-conscious customers, had already made the change — or so some said. Early last year, McDonald's settled an \$8.5 million lawsuit with BanTransFats.com after admitting that it hadn't (as it had ballyhooed two years earlier) switched to a cooking oil with less trans fat.

What can you do to limit trans fat when you're eating out? Here are some tips:

- **Request that your food** be cooked in olive oil or another natural vegetable oil, not hydrogenated or partially hydrogenated oil. If your waiter doesn't know what oils are being used in the kitchen, ask to speak with the chef.
- **Avoid fried foods**, particularly at fast-food and midpriced restaurants, where most foods are fried in hunks of trans-fatty shortening.
- **At Asian restaurants**, choose lower-fat entrées that are steamed or lightly stir-fried in peanut oil. Avoid selections with deep-fried ingredients.
- **Some pizza and pie crusts** are made with trans fat. So are some salad dressings. Ask for oil and vinegar, and dress your salad on your own.
- **Beware the coffee cart.** Nondairy creamers (liquid and powdered) are common sources of trans fat. So are candy bars, pastries and desserts. Doughnuts? Don't even think about it.