

THE GOOD, THE BAD AND THE UGLY FAT FACTS

If you enjoy a drizzle of extra-virgin olive oil on a crisp green salad or can't wait to savor a salmon steak hot off the grill, then you are part of a happy and healthy nationwide nutrition trend. According to results of the 2007 Food and Health Survey recently released by the International Food Information Council, 72 percent of Americans indicated that they are concerned with both the amount and types of fats they consume, compared with 66 percent last year.

So, fat isn't just associated with being "fattening" anymore. More people are learning that some fats can be good for their health. For instance, the polyunsaturated and mono-unsaturated fatty acids in foods like salmon, walnuts, olive oil and canola oil are linked to preventing heart disease, certain cancers and even depression and Alzheimer's disease.

Meanwhile, other fats are in the headlines because of their role in causing disease. Saturated fats found in meats and dairy foods should be limited to 7% percent of total calories because they can raise blood cholesterol levels, increasing your risk of heart disease. And beware the Darth Vader of the food world — trans fats— now on the nutrition hit list of ingredients to avoid entirely if you can.

If you find this good-fat vs. bad-fat information hard to digest, you're not alone. Many Americans are a bit foggy on the dietary details. The food council survey found that while 75 percent of people correctly said they should be eating less trans fat and saturated fats, a troubling 42 percent incorrectly thought they were supposed to eat less polyunsaturated fat, too.

To help you identify the fats to hire or fire from your diet, here are some fat facts. Please note that all types of fat — I repeat, *all* types of fat — provide the same 9 calories per gram. So while olive oil may be good for your heart and bacon fat may be bad, either one can make you fat if you eat too much.

Fats: The Good, The Bad and The Ugly Compare Saturated, Monounsaturated, Polyunsaturated and Trans Fatty Acids

THERE ARE 4 TYPES OF FAT FOUND IN THE DIET:

- Monounsaturated fat
- Saturated fat
- Polyunsaturated fat
- Trans fat

MEDICAL GUIDELINES FOR DAILY FAT INTAKE (AVERAGE ADULT) ^{1,2}

20% TO 35% OF THE CALORIES IN YOUR DIET

NO MORE THAN 7% SATURATED FATS

NO MORE THAN 1% TRANS FAT

1. Position of the American Dietetic Association and Dietitians of Canada. Dietary fatty acids. J Am Diet Assoc. 2007;107:1599-1611.
2. Lichtenstein AH, Appel LJ, Brands M, et al. Diet and lifestyle recommendations revision 2006: a scientific statement from the American Heart Association Nutrition Committee. Circulation. 2006;114:82-96.

Nutritionists often talk in terms of "good" fats, such as monounsaturated and polyunsaturated fats, and "bad" fats, like saturated and trans fats. Here's a summary of the different categories of fats, broken down into the good, the bad and the downright ugly.

The Good

Monounsaturated Fat:

- A "good" fat
- Reduces overall cholesterol levels, and specifically LDL or "bad" cholesterol, while increasing levels of HDL or "good" cholesterol
- Also may help manage blood sugar levels
- Found in nuts and seeds, avocados, olive oil and canola oil

Polyunsaturated Fat:

- Another "good" fat
- Reduces overall cholesterol levels, and specifically LDL or "bad" cholesterol
- Found in fatty fish such as salmon, mackerel, trout and sardines
- Chief fat in walnuts, flaxseed, whole grains and vegetable oils, including canola, safflower, soybean and corn oils

Omega 3 Fatty Acids:

- Another "good" fat
- Though actually in the polyunsaturated category, generally considered to be in a class by themselves
- Reduces chance of heart disease, cancer, swollen joints
- Lowers bad cholesterol, raises good cholesterol
- May help with eczema, depression, and Alzheimer's disease
- Found on land and sea in the company of fish, shellfish, flaxseed, walnuts and canola and liquid soybean oil

The Bad

Saturated Fat:

- A "bad" fat
- Increases overall cholesterol levels, specifically LDL or "bad" cholesterol
- Known to clog arteries and suspected of other underhanded dealings affecting heart health.
- Found in animal-based foods such as meat, poultry and eggs, and also in butter, cream and other dairy products
- Also found in plant-based products such as coconut, so-called "tropical oils" like coconut oil, palm oil and palm kernel oil, and cocoa butter
- Acceptable in small doses; should make up only 7 percent of your total calories

The Ugly

Trans Fat:

- Now known to be really bad news
- Long-term experience raising artery-clogging bad cholesterol in the blood and lowers levels of HDL or "good" cholesterol
- Created when otherwise healthy liquid oils are processed into solid vegetable shortening, such as stick margarines.
- Used in many packaged foods — crackers, chips, cakes, cookies, pastries, cereals, soups and salad dressings - and in fried foods from fast-food and other restaurants
- Found in hydrogenated fat products such as margarines and vegetable shortenings
- Often goes by the name "partially hydrogenated vegetable oil."

Daily limits for fat intake

The U.S. Department of Agriculture (USDA) and the Department of Health and Human Services (HHS) recommend that fat make up no more than 35 percent of your daily calories. This means that if you consume 1,800 calories a day, eat no more than 70 grams of fat daily. (To figure: Multiply 1,800 by 0.35 to get 630 calories, and divide that number by 9, the number of calories per gram of fat, to get 70 grams of total fat.) Keep in mind, however, that this is an upper limit and that most of these fat calories should come from monounsaturated and polyunsaturated sources.

In addition, the USDA and HHS recommend these upper limits for saturated fat and dietary cholesterol for healthy adults:

Type of Fat	Recommendation
Saturated fat	Less than 7 percent of your total daily calories
Dietary cholesterol	Less than 300 milligrams a day

Though the USDA and HHS haven't yet established an upper limit for trans fat, they do suggest that you keep your trans fat intake as low as possible. The American Heart Association, on the other hand, has set an upper limit for trans fat — no more than 1 percent of your total daily calories. For most people, this is less than 2 grams a day.

Be aware that many foods contain different kinds of fat and varying levels of each type. For example, butter contains unsaturated fats, but a large percentage of the total fat is saturated fat. And canola oil has a high percentage of monounsaturated fat, but also contains smaller amounts of polyunsaturated fat and saturated fat.

Tips for choosing the best types of fat

Limit fat in your diet, but don't try to cut it out completely. Focus on reducing foods high in saturated fat, trans fat and cholesterol, and select more foods made with unsaturated fats.

Consider these tips when making your choices:

- Sauté with olive oil instead of butter.
- Use olive oil in salad dressings and marinades. Use canola oil when baking.
- Sprinkle slivered nuts or sunflower seeds on salads instead of bacon bits.
- Snack on a small handful of nuts rather than potato chips or processed crackers. Or try peanut butter or other nut-butter spreads — non-hydrogenated — on celery, bananas, or rice or popcorn cakes.
- Add slices of avocado, rather than cheese, to your sandwich.
- Prepare fish such as salmon and mackerel, which contain monounsaturated and omega-3 fats, instead of meat one or two times a week.

Monounsaturated and polyunsaturated fats have few adverse effects on blood cholesterol levels, but you still need to consume all fats in moderation. Eating large amounts of any fat adds excess calories. Also make sure that fatty foods don't replace more nutritious options, such as fruits, vegetables, legumes or whole grains.

The following table shows, in grams, how much saturated, monounsaturated, polyunsaturated and trans fats are contained in 1 tablespoon of various commonly used oils and fats.

Fat Comparison Chart

		Mono-	Poly-	
Safflower Oil	0.8	10.2	2.0	0.0
Canola Oil	0.9	8.2	4.1	0.0
Flaxseed Oil	1.3	2.5	10.2	0.0
Sunflower Oil	1.4	2.7	8.9	0.0
Margarine (stick)	1.6	4.2	2.4	3.0
Corn Oil	1.7	3.3	8.0	0.0
Olive Oil	1.8	10.0	1.2	0.0
Sesame Oil	1.9	5.4	5.6	0.0
Soybean Oil	2.0	3.2	7.8	0.0
Margarine (tub)	2.0	5.2	3.8	0.5
Peanut Oil	2.3	6.2	4.3	0.0
Cottonseed Oil	3.5	2.4	7.0	0.0
Vegetable Shortening	3.2	5.7	3.3	1.7
Chicken Fat	3.8	5.7	2.6	0.0
Lard (pork fat)	5.0	5.8	1.4	0.0
Beef Tallow	6.4	5.4	0.5	0.0
Palm Oil	6.7	5.0	1.2	0.0
Butter	7.2	3.3	0.5	0.0
Cocoa Butter	8.1	4.5	0.4	0.0
Palm Kernel Oil	11.1	1.6	0.2	0.0
Coconut Oil	11.8	0.8	0.2	0.0

UNDERSTANDING TRANS FATS

Trans fats seemed like such a good thing once, enhancing the flavor, texture, and shelf life of many processed foods -- from cookies to frozen pizza. Unfortunately, they come with a health risk. Trans fatty foods tantalize your taste buds, then travel through your digestive system to your arteries, where they turn to sludge.

Small amounts of trans fats occur naturally in beef, lamb, and full-fat dairy products. But most come from processing liquid vegetable oil to become solid fat.

As of Jan. 1, 2006, food manufacturers have been required by the FDA to list trans fats on food labels. Health-conscious shopping became a lot easier, but there's more to it than buying products that boast "0 Trans Fats!"

Trans Fats: Recommended Limits

Like saturated fats, trans fats raise LDL "bad" cholesterol and increase the risk of heart disease. But unlike saturated fats, trans fats lower HDL "good" cholesterol and may do more damage, says the American Heart Association (AHA). The AHA advises limiting saturated fat consumption to less than 7% of daily calories and trans fat consumption to less than 1%. Given that a gram of fat has 9 calories, the following are the recommended trans fat limits based on calorie intake:

Total calories 1% of total calories = Trans fat limit

- 2,000 20 About 2 grams
- 1,500 15 About 1.5 grams
- 1,200 12 Slightly more than 1 gram

Trans Fats: Food Categories to Watch Out For

The FDA label ruling and consumer awareness of the dangers of trans fats have led many food manufacturers to reformulate products to reduce or eliminate trans fats. Today you can buy cookies and soft-spread margarine with zero trans fats. But trans fats still exist in some products. Carefully read nutrition labels on foods in these categories. Chose brands that don't use trans fats and are low in saturated fat in these products:

- cookies, crackers, cakes, muffins, pie crusts, pizza dough, and breads such as hamburger buns
- some stick margarine and vegetable shortening
- pre-mixed cake mixes, pancake mixes, and chocolate drink mixes
- fried foods, including donuts, French fries, chicken nuggets, and hard taco shells
- snack foods, including chips, candy, and packaged or microwave popcorn
- frozen dinners

The Meaning of Zero Trans Fat

Reach for the product whose label shouts "0 Trans Fats!" and what do you get? Maybe some trans fats. That's because the FDA allows that label on anything with 0.5 grams of trans fat per serving.

As a result, keep in mind this advice:

1. Even if you're a conscientious shopper, it's easy to ingest a significant amount of trans fats without knowing it. A bowl of "trans-fat-free" cereal (that actually contains half a gram) plus a slice of birthday cake at the office and some microwave popcorn in the evening add up quickly
2. Get in the habit of reading nutrition labels, the ones headed "**Nutrition Facts.**" Look at all the fats listed there. Keep in mind that saturated fat is also unhealthy. If the label lists Trans Fat as 0

"Zero" Isn't Zero

Supermarket shelves are loaded with products claiming zero trans fat.

But that "zero" on the label isn't necessarily zero. And all that bad fat can really add up.

g, look at the **Ingredients List** for the words "**partially hydrogenated.**" Any oil that is partially hydrogenated is a trans fat. So a single serving of cookies could have as much as a half gram of trans fat and be labeled "0 Trans Fats." Be aware, too, that often a "single serving" is often less than an average person would eat.

Bottom line: When choosing foods with "0 grams trans fats," evaluate the total fat content including the amount of saturated fat. Choose foods that have the least amount of saturated fat and that use healthy fats such as canola oil in the product. Here are some examples from the Nutrition Facts on food labels:

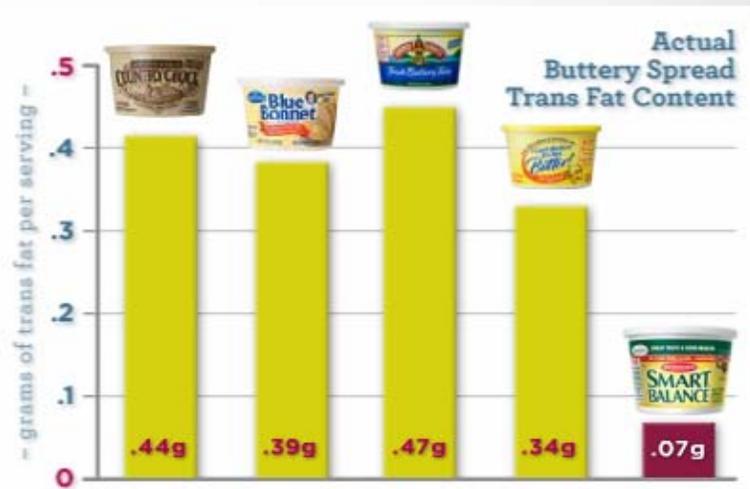
Food Trans fats in a single serving

- Cake mix 0.5 g
- Frozen chicken and noodles 0.5 g
- Blueberry muffin mix 1.5 g
- Refrigerated crescent rolls 1.5 g
- Stick margarine (1T) 1.5 g
- Frozen beef pot pie 2 g
- Microwave popcorn 6 g

The following are some examples of foods that list 0 g trans fats but contain partially hydrogenated oils, such as soybean or cottonseed oil:

- Corn muffin mix
- Pizza
- Stoned wheat thin crackers
- Cookies, including some cartoon-licensed brands

What "Zero" Really Means How Major Buttery Spread Brands Stack Up



Trans fat expressed as grams/serving. Based on an independent laboratory

Trans Fat-Free Products: Does Better Nutrition Come at a Higher Price?

Budget-conscious shoppers might be tempted to buy the cheapest brand of pastry, pot pie, or microwave popcorn. But don't make that decision at the expense of nutrition. Reformulating foods to reduce or eliminate trans fats costs manufacturers' money. Some "0 trans fats" foods may cost more, although not all do. Again, be sure to read the nutrition label carefully so you know if you're buying a healthier version of the snack, cookie, cracker, or cake.

There's also concern that some food processors will remove trans fats only to substitute low-cost saturated fats -- another contributor to heart disease. But a 2006 marketplace survey published in the *Journal of the American Dietetic Association* showed that had not occurred except in one category: microwave popcorn.

Snack Food: Better Alternatives

While the FDA's labeling rule has made consumers aware of a hidden danger and has motivated food manufacturers to reduce or eliminate trans fats, health experts say even the reformulated snack food products rarely deliver good nutrition. Most are loaded with empty calories and should be avoided anyway.

The AHA advocates a diet containing a variety of fruits, vegetables, and grains, especially whole-grain products; fat-free and low-fat dairy products; legumes, poultry, and lean meats; and fish, preferably oily, at least twice a week.

CAN YOU NAME 3 TRANS FAT FOODS?

Survey Shows 73% Know Trans Fats Are Bad, but Just 21% Can Name 3 Trans Fat Foods

By Daniel J. DeNoon Feb. 9, 2009

Yes, you know trans fat is bad for you. But it's a good bet that knowledge isn't doing you much good. About four out of five Americans know trans fats are bad for health. But only one in five can name three foods high in trans fat, find University of Colorado researcher Robert H. Eckel, MD, and colleagues.

"The trans fat message is pretty well out there, but we need to wake up to the fact that the trans fats intake pattern for America and the Western world is still too high," Eckel tells WebMD. "And we are still eating too many saturated fats, too."

We're trying, but we still don't get it, says Michael L. Dansinger, director of obesity research for the Tufts University atherosclerosis research lab and nutrition advisor for *The Biggest Loser* television series.

"There is a lot of confusion about where the sources of fat are and the best way to identify unhealthy fats," Dansinger tells WebMD.

The good news is that the Eckel study, a nationally representative survey of 1,000 U.S. adults, shows we're getting the message about fats:

- 92% of Americans have heard of trans fat.
- 73% of Americans know trans fats increase the risk of heart disease.
- 77% of Americans know saturated fats increase the risk of heart disease.

The bad news is that most Americans have a fat chance of taking advantage of their fat knowledge:

- Only 21% of Americans can name three food sources of trans fat.
- Nearly half of Americans can't name even one trans fat food source.
- Only a third of Americans can name even one trans fat food without seeing a list.

Looking Out for Trans Fats, Blindsided by Saturated Fats

Fortunately, new laws insist that products made with trans fats (and/or partially hydrogenated oils) have to say so on their labels.

Unfortunately, that's as far as many people read, says Leslie Bonci, MPH, RD, director of sports nutrition at the University of Pittsburgh Medical Center and nutritional consultant to the Pittsburgh Steelers.

"People are pressed for time. So they see 'Trans fats: zero' on the label and they say, 'Fine, I'll buy it,'" Bonci tells WebMD. "But a lot of those foods have replaced the trans fat with a saturated fat. Free does not equal healthy. It is this assumption that 'trans-fat free must be good' that does us in."

Yes, trans fats are particularly bad. They raise total cholesterol. They raise LDL "bad" cholesterol. And the double whammy is that they lower HDL "good" cholesterol.

But as Eckel points out, saturated fats aren't a whole heck of a lot better. They can do a world of harm to your heart if not eaten in moderation. And when it comes to saturated fat, we tend not to be moderate.

"The health message is more than trans fats. But this message is ignored: 12.4% of our total calories come from saturated fats. That's twice what we should be eating," Eckel says.

Where to Find Trans Fats

Where are trans fats?

Here's a list of foods typically high in trans fats:

- French fries
- Doughnuts
- Pastries (also high in saturated fats)

- Hard margarine
- Vegetable shortening
- Cookies (also high in saturated fats)
- Crackers

While many restaurants and manufacturers have started making trans-fat-free versions of these foods, this still doesn't make them heart healthy.

Avoiding manufactured foods high in trans fats is essential, Eckel says, as we get plenty of trans fats from natural foods.

"Twenty percent of trans fat consumption comes from natural foods, not oils or solid spreads modified by the food industry to enhance shelf life or enhance palatability," he says. "And now we are avoiding trans fats in manufactured food products, if we eat beef or dairy we probably are consuming most of our trans fats through natural foods."

Here's a list of foods typically high in saturated fats:

- Lard
- Butter
- Fatty beef (also naturally contain some trans fat)
- Pastries (also high in trans fat)
- Cookies (also high in trans fat)
- Dairy products (also naturally contain some trans fat)
- Whole milk

How to Eat Fewer Fats

Want to eat fewer fats? Here's advice that really works:

- Don't deny yourself today only to binge tomorrow. Enjoy fatty foods in moderation.
- To be moderate, fill up on healthy foods.

"People are getting sick of this negative message of what not to have," Bonci says. "Let's focus instead on foods we love to eat."

When you're filling your plate, Bonci says, start with the foods you know are good for you.

"If half of the plate is red, yellow, orange, or green -- and it is not M&M's -- that's cool," she says. "And if another third of the plate is lean plant or animal protein. And if the remainder of the plate is grain, that's not fat either. But even if you decide at that point to have french fries or a pastry -- well, there's not much more room on the plate, so you're not getting an overwhelming dose of fat."

If you want a doughnut, Bonci tells her football players, go buy a doughnut, not a box. Gotta have chips? Get a tiny bag, not a family-sized bag.

Not everyone has this much self-control, Dansinger says. He should know, as the people he advises on *The Biggest Loser* have serious self-control issues.

The answer for those of us who tend to be immoderate is "voluntary submission" to someone -- a trainer, for example, or a doctor -- who will hold our feet to the fire.

"If adherence to a plan is the key, the key to adherence is voluntary submission," Dansinger says. "I let my patients know there is a certain set of rules: keeping a food record, following a particular food strategy, and exercising. The principle of being accountable to an outside authority has been a key to my success."

The bottom line, Eckel says, is to enjoy good foods and to limit -- not deny ourselves -- consumption of foods that carry a risk.

"We emphasize the good side of the equation: Enjoy fruits and vegetables, whole grains, poultry, and fish," he says. "And if we enjoy fatty foods on certain occasions, I don't think we need to contest that."

The Eckel study appears in the February issue of the Journal of the American Dietetic Association.