

Revealing *Trans* Fats

Scientific evidence shows that consumption of saturated fat, *trans* fat, and dietary cholesterol raises low-density lipoprotein (LDL), or "bad" cholesterol, levels, which increases the risk of coronary heart disease (CHD). According to the National Heart, Lung, and Blood Institute of the National Institutes of Health, more than 12.5 million Americans have CHD, and more than 500,000 die each year. That makes CHD one of the leading causes of death in the United States.

The Food and Drug Administration has required that saturated fat and dietary cholesterol be listed on food labels since 1993. With *trans* fat added to the Nutrition Facts panel, you will know for the first time how much of all three--saturated fat, *trans* fat, and cholesterol--are in the foods you choose. Identifying saturated fat, *trans* fat, and cholesterol on the food label gives you information you need to make food choices that help reduce the risk of CHD. This revised label will be of particular interest to people concerned about high blood cholesterol and heart disease.

However, everyone should be aware of the risk posed by consuming too much saturated fat, *trans* fat, and cholesterol. But what is *trans* fat, and how can you limit the amount of this fat in your diet?

What is *Trans* Fat?

Basically, *trans* fat is made when manufacturers add hydrogen to vegetable oil--a process called hydrogenation. Hydrogenation increases the shelf life and flavor stability of foods containing these fats.

Trans fat can be found in vegetable shortenings, some margarines, crackers, cookies, snack foods, and other foods made with or fried in partially hydrogenated oils. Unlike other fats, the majority of *trans* fat is formed when food manufacturers turn liquid oils into solid fats like shortening and hard margarine. A small amount of *trans* fat is found naturally, primarily in dairy products, some meat, and other animal-based foods.

Trans fat, like saturated fat and dietary cholesterol, raises the LDL cholesterol that increases your risk for CHD. Americans consume on average 4 to 5 times as much saturated fat as *trans* fat in their diets.

Although saturated fat is the main dietary culprit that raises LDL, *trans* fat and dietary cholesterol also contribute significantly.

Are All Fats the Same?

Simply put: No. Fat is a major source of energy for the body and aids in the absorption of vitamins A, D, E, and K, and carotenoids. Both animal- and plant-derived food products contain fat, and when eaten in moderation, fat is important for proper growth, development, and maintenance of good health. As a food ingredient, fat provides taste, consistency, and stability and helps you feel full. In addition, parents should be aware that fats are an especially important source of calories and nutrients for infants and toddlers (up to 2 years of age), who have the highest energy needs per unit of body weight of any age group.

While unsaturated fats (monounsaturated and polyunsaturated) are beneficial when consumed in moderation, saturated and *trans* fats are not. Saturated fat and *trans* fat raise LDL cholesterol levels in the blood. Dietary cholesterol also raises LDL cholesterol and may contribute to heart disease even without raising LDL. Therefore, it is advisable to choose foods low in saturated fat, *trans* fat, and cholesterol as part of a healthful diet.

What Can You Do About Saturated Fat, *Trans* Fat, and Cholesterol?

When comparing foods, look at the Nutrition Facts panel, and choose the food with the lower amounts of saturated fat, *trans* fat, and cholesterol. Health experts recommend that you keep your intake of saturated fat, *trans* fat, and cholesterol as low as possible while consuming a nutritionally adequate diet. However, these experts recognize that eliminating these three components entirely from your diet is not practical because they are unavoidable in ordinary diets.

Where Can You Find *Trans* Fat on the Food Label?

Although some food products already have *trans* fat on the label, food manufacturers have until January 2006 to list it on all their products.

You will find *trans* fat listed on the Nutrition Facts panel directly under the line for saturated fat.

How Do Your Choices Stack Up?

With the addition of *trans* fat to the Nutrition Facts panel, you can review your food choices and see how they stack up. The following table illustrates total fat, saturated fat, *trans* fat, and cholesterol content per serving for selected food products.

Total Fat, Saturated Fat, *Trans* Fat, and Cholesterol Content Per Serving*

Product	Common Serving Size	Total Fat g	Sat. Fat g	%DV for Sat. Fat	Trans Fat g	Combined Sat. & Trans Fat g	Chol. mg	%DV for Chol.
French Fried Potatoes± (Fast Food)	Medium (147 g)	27	7	35%	8	15	0	0%
Butter**	1 tbsp	11	7	35%	0	7	30	10%
Margarine, stick†	1 tbsp	11	2	10%	3	5	0	0%
Margarine, tub†	1 tbsp	7	1	5%	0.5	1.5	0	0%
Mayonnaise†† (Soybean Oil)	1 tbsp	11	1.5	8%	0	1.5	5	2%
Shortening±	1 tbsp	13	3.5	18%	4	7.5	0	0%
Potato Chips±	Small bag (42.5 g)	11	2	10%	3	5	0	0%
Milk, whole±	1 cup	7	4.5	23%	0	4.5	35	12%
Milk, skim†	1 cup	0	0	0%	0	0	5	2%
Doughnut±	1	18	4.5	23%	5	9.5	25	8%
Cookies± (Cream Filled)	3 (30 g)	6	1	5%	2	3	0	0%
Candy Bar±	1 (40 g)	10	4	20%	3	7	<5	1%
Cake, pound±	1 slice (80 g)	16	3.5	18%	4.5	8	0	0%

*Nutrient values rounded based on FDA's nutrition labeling regulations.

** Butter values from FDA Table of *Trans* Values, 1/30/95.

† Values derived from 2002 USDA National Nutrient Database for Standard Reference, Release 15.

†† Prerelease values derived from 2003 USDA National Nutrient Database for Standard Reference, Release 16.

± 1995 USDA Composition Data.

Don't assume similar products are the same. Be sure to check the Nutrition Facts panel because even similar foods can vary in calories, ingredients, nutrients, and the size and number of servings in a package.

How Can You Use the Label to Make Heart-Healthy Food Choices?

The Nutrition Facts panel can help you choose foods lower in saturated fat, *trans* fat, and cholesterol. Compare similar foods and choose the food with the lower combined saturated and *trans* fats and the lower amount of cholesterol.

Although the updated Nutrition Facts panel will list the amount of *trans* fat in a product, it will not show a Percent Daily Value (%DV). While scientific reports have confirmed the relationship between *trans* fat and an increased risk of CHD, none has provided a reference value for *trans* fat or any other information that the FDA believes is sufficient to establish a Daily Reference Value or a %DV.

There is, however, a %DV shown for saturated fat and cholesterol. To choose foods low in saturated fat and cholesterol, use the general rule of thumb that 5 percent of the Daily Value or less is low and 20 percent or more is high.

You can also use the %DV to make dietary trade-offs with other foods throughout the day. You don't have to give up a favorite food to eat a healthy diet. When a food you like is high in saturated fat or cholesterol, balance it with foods that are low in saturated fat and cholesterol at other times of the day.

Do Dietary Supplements Contain *Trans* Fat?

Would it surprise you to know that some dietary supplements contain *trans* fat from partially hydrogenated vegetable oil as well as saturated fat or cholesterol? It's true. As a result of the FDA's new label requirement, if a dietary supplement contains a reportable amount of *trans* or saturated fat, which is 0.5 gram or more, dietary supplement manufacturers must list the amounts on the Supplement Facts panel. Some dietary supplements that may contain saturated fat, *trans* fat, and cholesterol include energy and nutrition bars.

Fat Tips

Here are some practical tips you can use every day to keep your consumption of saturated fat, *trans* fat, and cholesterol low while consuming a nutritionally adequate diet.

- Check the Nutrition Facts panel to compare foods because the serving sizes are generally consistent in similar types of foods. Choose foods lower in saturated fat, *trans* fat, and cholesterol. For saturated fat and cholesterol, keep in mind that 5 percent of the daily value (%DV) or less is low and 20 percent or more is high. (There is no %DV for *trans* fat.)

- Choose alternative fats. Replace saturated and *trans* fats in your diet with monounsaturated and polyunsaturated fats. These fats do not raise LDL cholesterol levels and have health benefits when eaten in moderation. Sources of monounsaturated fats include olive and canola oils.
- Sources of polyunsaturated fats include soybean oil, corn oil, sunflower oil and foods like nuts and fish.
- Choose vegetable oils (except coconut and palm kernel oils) and soft margarines (liquid, tub, or spray) more often because the amounts of saturated fat, *trans* fat, and cholesterol are lower than the amounts in solid shortenings, hard margarines, and animal fats, including butter.
- Consider fish. Most fish are lower in saturated fat than meat. Some fish, such as mackerel, sardines, and salmon, contain omega-3 fatty acids that are being studied to determine if they offer protection against heart disease.
- Ask before you order when eating out. A good tip to remember is to ask which fats are being used in the preparation of your food when eating or ordering out.
- Watch calories. Don't be fooled! Fats are high in calories. All sources of fat contain 9 calories per gram, making fat the most concentrated source of calories. By comparison, carbohydrates and protein have only 4 calories per gram.

To keep your intake of saturated fat, *trans* fat, and cholesterol low:

- Look at the Nutrition Facts panel when comparing products. Choose foods low in the combined amount of saturated fat and *trans* fat and low in cholesterol as part of a nutritionally adequate diet.
- Substitute alternative fats that are higher in mono- and polyunsaturated fats like olive oil, canola oil, soybean oil, corn oil, and sunflower oil.

Highlights of the Final Rule on *Trans* Fat

- Manufacturers of conventional foods and some dietary supplements will be required to list *trans* fat on a separate line, immediately under saturated fat on the nutrition label.
- Food manufacturers have until Jan. 1, 2006, to list *trans* fat on the nutrition label. The phase-in period minimizes the need for multiple labeling changes, allows small businesses to use current label inventories, and provides economic savings.
- FDA's regulatory chemical definition for *trans* fatty acids is all unsaturated fatty acids that contain one or more isolated (i.e., nonconjugated) double bonds in a *trans* configuration. Under the agency's definition, conjugated linoleic acid would be excluded from the definition of *trans* fat.
- Dietary supplement manufacturers must also list *trans* fat on the Supplement Facts panel when their products contain reportable amounts (0.5 gram or more) of *trans* fat. Examples of dietary supplements with *trans* fat are energy and nutrition bars.

For More Information

Topic-Specific Labeling Information

www.fda.gov/Food/LabelingNutrition/FoodLabelingGuidanceRegulatoryInformation/Topic-SpecificLabelingInformation/default.htm

Guidance on How to Understand and Use the Nutrition Facts Panel on Food Labels

www.fda.gov/Food/LabelingNutrition/ConsumerInformation/ucm078889.htm

Federal Register Final Rule: *Trans* Fatty Acids in Nutrition Labeling, Nutrient Content Claims, and Health Claims

www.fda.gov/Food/LabelingNutrition/LabelClaims/NutrientContentClaims/ucm110179.htm

Food Labeling: *Trans* Fatty Acids in Nutrition Labeling; Consumer Research to Consider Nutrient Content and Health Claims and Possible Footnote or Disclosure Statements, Advance notice of proposed rulemaking

www.fda.gov/Food/LabelingNutrition/LabelClaims/NutrientContentClaims/ucm110202.htm

"What's New on the Nutrition Facts Label? *Trans* Fat Now Listed with Saturated Fat and Cholesterol."

www.fda.gov/Food/LabelingNutrition/ConsumerInformation/ucm109832.htm

Major Food Sources of *Trans* Fat for American Adults
(Average Daily *Trans* Fat Intake is 5.8 Grams or 2.6
Percent of Calories)

