

The retailers are not required to file a notice with the FDA. Further, under 21 CFR 101.9(j)(18) and 21 CFR 101.36(h)(2), nutrition labeling exemptions for low-volume products apply under certain circumstances. For example, if the person claiming the exemption employs fewer than an average of 100 full-time equivalent employees and fewer than 100,000 units of that product are sold in the United States in a preceding 12-month period the product would be eligible for a labeling exemption for any 12-month period. For these exemptions, a notice must be filed annually with FDA.

#### Trans Reduction in Foods and Oils

There are currently four main sources of trans fat alternatives:

1. Naturally stable oils/fats: palm, corn and cottonseed oils. Also used to a lesser extent are palm kernel, coconut, high oleic canola, high oleic safflower, mid and high oleic sunflower and low linolenic soybean oils and animal fats.
2. Interesterified oils: This process rearranges the fatty acids in a fat molecule resulting in customized melting characteristics.
3. Modification of partially hydrogenation process: Reduced trans fat content can be achieved by altering the variables influencing the hydrogenation process.
4. Trait enhanced oils: These are newer varieties designed to have increased stability. They are bred to have either lower amounts of relatively unstable fatty acids or higher amounts of more stable fatty acids.



#### Reformulation of foods

1. Blending partially hydrogenated oil with stable high oleic oils can provide structure and oxidative stability with reduced trans fat content.
2. Addition of antioxidants to fats and oils can provide oxidative stability and improve the shelf life of the products.
3. Entrapment of liquid oils in solid fat matrix or emulsifiers.
4. Use of naturally saturated vegetable and animal fats can provide the desired solid fat content without the use of trans or hydrogenated fat.

**For more information or to obtain camera-ready nutrition facts with trans fat listing, contact:**

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# Trans Fat Labeling



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## DIETARY FATS AND FATTY ACIDS

Fat is an important part of a healthy diet because it provides energy, essential fatty acids and helps absorb some vitamins. Fatty acids comprise 85%-95% of the fats in foods. The terms fat and fatty acids are frequently used interchangeably. The fat in foods contains a mixture of four types of fatty acids:

**Saturated fatty acid** – A saturated fatty acid has the maximum number of hydrogen atoms attached to every carbon atom, therefore, “saturated” with hydrogen atoms. Saturated fats are usually solid at room temperature, are more stable than oils and don’t combine readily with oxygen and turn rancid. Examples: Coconut, palm, palm kernel oil, animal fats from pork and beef, butter, cheese and cream. In foods of animal origin, a large proportion of fatty acids are saturated, whereas in foods of plant origin and some seafood, a large proportion of the fatty acids are monounsaturated and polyunsaturated.

**Monounsaturated fatty acids** – A fatty acid with one double (unsaturated) bond is called “monounsaturated”. Monounsaturated oils are liquid at room temperature but start to solidify at refrigerator temperatures. Examples: Canola oil, high oleic sunflower oil, olive oil, avocados as well as nuts like almonds, peanuts, pecans and cashews.

**Polyunsaturated fatty acids** – Fatty acids having more than one unsaturated bond are called “polyunsaturated.” Polyunsaturated oils are liquid at room temperature and in the refrigerator. They easily combine with oxygen in the air and become rancid. Examples: Vegetable oils (soybean, corn and sunflower oils), fatty fish (e.g. salmon, mackerel, herring and trout), fish oils, flaxseeds, sunflower seeds, soybeans and some nuts (e.g. walnuts).

**Trans fatty acids** – Also known as **trans fat**, are defined as the sum of all unsaturated fatty acids that contain one or more isolated double bonds in a *trans* configuration. *Trans* fats are formed when vegetable oils are processed and made more solid or into a more stable liquid by a process called hydrogenation. Partial hydrogenation is an incomplete saturation of the double bonds. This results in fatty acids that solidify at room temperature. *Trans* fats also occur naturally in small amounts in foods such as milk, cheese and animal fats. About 20% of the *trans* fat in the diet come from meat and dairy products.

### Where they come from and why?

*Trans* fats are present in foods made with hydrogenated or partially hydrogenated oils. Examples include baked goods, fried foods and some margarine products. Partially hydrogenated oils and solid fats are used in processed foods for their functionality to help food products stay fresh longer and have more desirable texture. These products resist rancidity longer than those made with liquid oil. The hardness of a fat imparts certain desirable properties such as crispiness, snap, and texture of a food product. For example, shortening is used to make french fries, flaky pie crusts and crispy crackers.



## Typical Levels of Tran Fatty Acids in Food Products

Frying fats: 0-35% of fatty acids  
Margarines/spreads: fat: 15-25% of fatty acids  
Products containing trans fat: 8-15% by wt  
Shortenings: 15-30% of fatty acids  
Beef and dairy fat: 3% of fatty acids

### Nutritional Considerations of *Trans* Fat

The FDA estimates that the average daily intake of *trans* fat in the U.S. population is about 5.8 grams or 2.6% of calories per day for individuals over 20 years of age and older. *Trans* fat behaves like saturated fat by raising low-density lipoprotein, LDL or “bad,” cholesterol which increases the risk of coronary heart disease. *Trans* fats go a step further and lower high-density lipoprotein, HDL or “good,” cholesterol (HDL), which helps protect against heart disease.

*Trans* fat can be found in vegetable shortenings, some margarines, crackers, candies, cookies, snack foods, fried foods, baked goods and other processed foods made with partially hydrogenated vegetable oils.

Some dietary supplements contain partially hydrogenated vegetable oil or *trans* fat, saturated fat and cholesterol. Supplement manufacturers are required to list *trans* fat content on the Supplement Facts Panel if it contains 0.5 gram or more.

## LABELING OF TRANS FATTY ACIDS

In 2003, the FDA issued a regulation requiring manufacturers to list *trans* fat, on the Nutrition Facts panel of foods, including dietary supplements. The declaration of *trans* fat is to be expressed as grams per serving to the nearest 0.5 gram increment below 5 grams, and to the nearest gram increment above 5 grams. The *trans* fat regulations was effective beginning January 1, 2006. With this rule, consumers have more information to make healthier food choices that could lower their consumption of trans fat as part of a heart-healthy diet. Scientific reports have confirmed the relationship between *trans* fat and an increased risk of coronary heart disease.

An example of the revised Nutrition Facts panel listing *trans* fat is displayed here.

The FDA requires that the amount of *trans* fat in a serving be listed on a separate line under saturated fat on the Nutrition Facts panel. No recommendation has been made by the scientific reports as to the amount of *trans* fat that the FDA could use to establish a daily value. *Trans* fat will be listed with only a gram amount.

### Exemptions

- If the total fat in a food is less than 0.5 gram per serving and no claims are made about fat, fatty acids or cholesterol content. A footnote will be added stating the food is “not a significant source of trans fat.
- Products that qualify for and use the simplified format (21CFR 101.9(f) – also don’t require footnote statement.
- Retailers with annual gross sales of not more than \$500,000 or with annual gross sales of foods to consumers of not more than \$50,000 and who place no nutrition claims or other nutrition information.
- Raw fish, meat and chicken are also exempted.

Nutrition Facts	
Serving Size 2 cookies (25g)	
Servings Per Container 7	
Amount Per Serving	
Calories 100	Calories from Fat 70
% Daily Value*	
Total Fat 8g	16%
<b>Saturated Fat 5g</b>	<b>10%</b>
<b>Trans Fat 0g</b>	
Cholesterol 5mg	10%
Sodium 50mg	1%
Total Carbohydrate 15g	3%
Dietary Fiber 0g	0%
Sugars 8g	
Protein 2g	
Vitamin A 0%	Vitamin C 0%
Calcium 0%	Iron 0%
*Percent Daily Values are based on a diet of other people's secrets.	
INGREDIENTS: Wheat Flour, Partially Hydrogenated Soybean and/or Cottonseed Oil, Sugar, Dark Chopped Hazelnuts, Toffee Pieces, (Sugar, Dextrose, Butter, Hydrogenated Palm Kernel Oil, Eggs, Baking and Artificial Flavors, Baking Soda).	
ALLERGEN INFORMATION: Contains wheat, soy, and egg. Manufactured in a facility that processes peanuts and other tree nuts.	