

What is Trans-Fat?

Trans-fats are a form of unsaturated fat and can be either natural or artificial.

Natural trans-fats are formed by bacteria in the stomachs of cattle, sheep, and goats. Beef, lamb, and dairy products contain naturally occurring trans-fats. Other types of meat, such as poultry, fish, and pork, also contain a small amount ($\underline{2}$).

Artificial trans-fats are mainly formed during hydrogenation, a process in which hydrogen is added to vegetable oil to form a semisolid product known as *partially hydrogenated oil* (3).

Studies have linked consumption of trans-fats to heart disease, inflammation, higher LDL (bad) cholesterol, and lower HDL (good) cholesterol levels (4, 5, 6). While evidence is limited, natural trans-fats appear to be less harmful than artificial trans-fats (7, 8, 9).

Though the FDA's ban of trans-fats went into effect on June 18, 2018, products manufactured before this date could still be distributed until January 2020, or in some cases 2021 (<u>1</u>Trusted Source). Since the ban, many food manufacturers have reformulated their products to use other ingredients, including *fully hydrogenated oil*.

Unlike partially hydrogenated oil, fully hydrogenated oil does not contain trans-fat. Instead, it contains a saturated fatty acid known as *stearic acid*, which may help reduce levels of LDL (bad) cholesterol compared with other types of saturated fat (10, 11).

In some cases, fully hydrogenated oil may also be blended with polyunsaturated oil to improve the texture using a process called interesterification ($\frac{10}{10}$).

Though interesterified fats do not contain trans-fats, more research is needed to understand the long-term effects these fats may have on health ($\underline{10}$, $\underline{12}$).

SUMMARY

Trans-fat is a type of fat found naturally in some foods and added to others in the form of partially hydrogenated oil. Though partially hydrogenated oil is no longer added to foods, trans-fats may still be found in some fried or processed food products.

7 Foods that may contain trans-fats

1. Vegetable Shortening

Shortening is a type of fat that is solid at room temperature. It's often used in cooking and baking. <u>Vegetable shortening</u> was invented in the early 1900s as a cheap alternative to butter and was typically made from partially hydrogenated vegetable oil. It is popular for baking because of its high fat content, which produces a softer and flakier pastry than other shortenings, such as lard and butter.

Since the FDA's ban went into effect, food manufacturers have started using fully hydrogenated oil in place of partially hydrogenated oil in their shortening, making it free of trans-fat. However, if you have shortening in your kitchen cabinet that was produced before the ban went into effect, it may still contain trans-fat.

To find out whether your shortening contains trans-fat, check the ingredients list. If it includes partially hydrogenated vegetable oil, then trans-fats are present.

SUMMARY

Vegetable shortening made from partially hydrogenated oil was invented as a cheap substitute for butter. However, since the FDA ban on trans-fats went into effect, commercial shortening is now made from fully hydrogenated oil and is trans-fat-free.

2. Some Varieties of Microwavable Popcorn

Food manufacturers have historically used partially hydrogenated oil in their <u>microwavable</u> <u>popcorn</u> because of its high melting point, which keeps the oil solid until the popcorn bag is microwaved. As a result of the recent ban on trans-fats, manufacturers have switched to transfat-free oil. Still, if you have some microwave popcorn sitting in your pantry that you purchased before the ban went into effect, it may contain trans-fat.

Be sure to choose varieties of microwave popcorn that are low in <u>sodium</u> and free of partially hydrogenated oils, additives, and preservatives for your next movie night, if you're looking for the most health-promoting type of this product.

A few tasty brands:

- Quinn
- Boom Chicka Pop
- Black Jewell

Alternatively, you can make your own popcorn on the stovetop or in an air popper — it's simple, cheap, and delicious.

SUMMARY

Some varieties of microwavable popcorn purchased before the FDA ban went into effect may contain trans-fats. If you want to avoid trans-fats, steer clear of store-bought popcorn made with partially hydrogenated vegetable oil or make your own at home.

3. Certain Vegetable Oils

Some vegetable oils may contain trans-fats, especially if the oils are hydrogenated. Because hydrogenation solidifies oil, these partially hydrogenated oils were long used to make margarine. Therefore, many types of margarine on the market in past years were high in transfats. Trans-fat-free margarine has become widely available now that these oils have been phased out. However, some non-hydrogenated vegetable oils may also contain small amounts of trans-fat as a result of high heat used in some processing methods (13, 14).

To reduce trans-fat consumption from margarine and vegetable oils, avoid products that contain partially hydrogenated oils or choose healthier oils such <u>extra-virgin olive oil</u> or coconut oil.

SUMMARY

Although margarine used to be made from partially hydrogenated oils, trans-fat-free margarine is now widely available. However, some vegetable oils may contain a small amount of trans-fat as a result of the high heat used in certain processing methods.

4. Fried Fast Foods

When eating on the go, bear in mind that certain takeout food options may contain trans-fat.

Fried <u>fast foods</u>, such as fried chicken, battered fish, doughnuts, French fries, and mozzarella sticks, can all contain high levels of trans-fat.

That's because the high cooking temperatures used during frying can cause the trans-fat content of the oil to increase slightly (13, 14).

The trans-fat content also increases each time the same oil is reused for frying (13, 14, 15).

Because it can be hard to avoid trans-fats from fried food, it may be best to limit your intake of fried foods and choose foods that are grilled, roasted, steamed, or sauteed instead.

SUMMARY

During frying of foods such as French fries or fried chicken, the heat applied to the vegetable oils can create trans-fats. Furthermore, the trans-fat content of the oil increases each time the oil is reused.

5. Bakery Products

Bakery goods such as <u>muffins</u>, cakes, pastries, and pies are often made with vegetable shortening or margarine. Vegetable shortening helps produce a flakier, softer pastry. It's also cheaper and has a longer shelf life than butter or lard.

Until recently, both vegetable shortening and margarine were made from partially hydrogenated oils. For this reason, baked goods have traditionally been a common source of trans-fat. As manufacturers have begun to eliminate trans-fat from shortening and margarine, the total amount of trans-fats in baked goods has similarly declined (16).

However, it's still a good idea to limit your consumption of baked goods that have been fried, such as <u>doughnuts</u>, because they may contain trans-fats formed during frying (<u>13</u>, <u>14</u>). Making

your own baked foods at home is a simple and effective way to take control of what you're putting on your plate while still enjoying your favorite sweets.

SUMMARY

Bakery products are often made with vegetable shortening and margarine, which were previously high in trans-fats. However, trans-fats have been mostly eliminated from these ingredients, resulting in less trans-fat in baked goods.

6. Nondairy Coffee Creamers

Nondairy coffee creamers are used as a substitute for milk or cream in coffee, tea, and other hot beverages.

The main ingredients in most nondairy <u>coffee creamers</u> are **sugar and oil.** Most nondairy creamers were traditionally made from partially hydrogenated oil in order to increase shelf life and provide a creamy consistency. However, most brands have switched to fully hydrogenated oil since the FDA ban went into effect. Still, because powdered nondairy coffee creamers typically have a long shelf life, there's a chance you may have some sitting in your kitchen cabinet that could contain partially hydrogenated oil.

Be sure to check the ingredients list carefully and look for brands that contain less sugar and fewer additives and artificial ingredients, such as:

- Califia Farms
- Milk
- Nut Pods

SUMMARY

Nondairy coffee creamers can replace milk or cream in hot beverages. Until recently, most were made from partially hydrogenated oil, but they are now made with healthier oils.

7. Other Sources

Trans-fats can also be found in smaller amounts in a range of other foods manufactured before the FDA ban went into full effect.

Here are a few foods to keep an eye out for:

- Potato and corn chips. Though most corn and potato <u>chips</u> are now free of trans-fats, it's important to read the ingredients lists and avoid any that contain partially hydrogenated oil.
- Canned frosting. Canned frosting is mostly made up of sugar, water, and oil. Since some
 products manufactured prior to the FDA ban may contain partially hydrogenated oil, it's
 important to read ingredients lists carefully if you have any canned frosting in your
 fridge.
- **Crackers.** Though partially hydrogenated oils are no longer added to crackers, certain varieties produced before the trans-fat ban went into effect may contain small amounts.

• **Pizza.** In the past, trans-fats were frequently found in some brands of pizza dough. Look out for this ingredient, especially in frozen <u>pizzas</u> that you may have stashed in your freezer.

SUMMARY

It's a good idea to check labels carefully for trans-fats in foods manufactured before the FDA ban took effect, including potato chips, frozen pizza, canned frosting, and crackers.

The Bottom Line:

- Trans-fats are a form of unsaturated fat associated with several negative health effects.
- Artificial trans-fat is created during hydrogenation, which converts liquid vegetable oils into semisolid partially hydrogenated oil.
- Trans-fat can also occur naturally in meat and dairy.
- Though the amount of trans-fats in food has significantly declined since the FDA's ban of trans-fats went into effect, trans-fat can still be found in some products, such as fried foods.
- To reduce your intake, make sure to read labels and check ingredients lists for
 partially hydrogenated oil, especially if you have any foods in your pantry that you
 purchased before the ban took effect.
- The best way to avoid trans-fats is to **limit your consumption of processed** packaged foods and fried fast foods.
- Eat a balanced diet rich in fruit, vegetables, whole grains, healthy fats, and lean protein.

• Just one thing more:

Reducing your intake of processed foods is one of the easiest ways to reduce your consumption of trans-fat and improve the overall quality of your diet. Check out <u>this</u> article for 10 simple and realistic ways to eat less processed food.

Source: https://www.healthline.com/nutrition/trans-fat-foods

What does a healthy diet include?

- Higher amounts of fruits, vegetables, whole grains, legumes, and nuts.
- Lower amounts of refined grains and red and processed meats.
- Low consumption of added sugar, especially sugar-sweetened beverages.
- Reduced intake of sodium.
- Appropriate portion size and balancing caloric intake with physical activity to manage weight.

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