

Choosing the fry products that are right for you.

Not every fry oil or shortening is ideal for every purpose. On our 0 grams trans fat fry oils and shortenings list, we have categories for:

- **"Light/medium duty" oils** include traditional oils such as canola, soy, sunflower, and olive oil. These oils can be used for salad dressings, marinades, sautéing, stir frying, and deep frying. When used at high heat, light/medium duty oils break down more quickly than heavy duty oils and fry oils that contain trans fat. **If you deep fry with these oils, it's important to change oil more frequently.**

Soy and canola oils are often treated with an antioxidant (such as TBHQ). The anti-oxidant is usually paired with an anti-foaming agent (such as dimethylpolysiloxane) that further slows the breakdown of the oil. These additives make cooking oil more durable for restaurant use. Oils with additives may hold up a little longer in the deep fryer, but still require more frequent changing than heavy duty oils.

You can get extend the fry-life of a low-cost light/medium oil by blending it with a small quantity of heavy duty oil. See "Understanding heavy-duty fry oils", below, for more information.

- **"Heavy duty" oils** are good for extended deep frying over longer periods. (Under the right conditions, certain heavy-duty oils can last a week or more.) These oils differ in terms of flavor, cost, and stability. They are available as clear oil or creamy pourable shortening. Heavy duty oils and shortenings with 0 grams of trans fat will perform most like partially hydrogenated fry products. See "Understanding heavy-duty oils", below, for more information.
- **"Liquid butter substitutes,"** for griddle and pan frying. These are butter-flavored 0 grams trans fat shortenings and margarines (creamy and solid) that are much more stable than butter at high heat. Liquid butter substitutes may contain a chemical called diacetyl that may cause harmful lung exposure during cooking. Exposure to diacetyl can be reduced by switching to a butter-flavored substitute that contain less or no added diacetyl. More research is needed to determine how much diacetyl restaurant workers are exposed to.

More information on diacetyl: www.lni.wa.gov/Safety/Research/Files/DiacetylFactSheet.pdf

Understanding “heavy-duty” fry oils

Some restaurants prefer highly stable oils that can withstand deep frying for extended periods. These oils are slow to break down through multiple fryings over a longer period of time.

Partially hydrogenated oils and shortenings (with trans fat), because they have such a long fry life and shelf life, became popular over the last 50 years as the "heavy-duty" fry products of choice. Now that we know how unhealthy artificial trans fat is, chefs are returning to traditional heavy-duty oils and some newer heavy-duty alternatives.

Heavy duty oils cost more per gallon than light/medium duty oils. However, because they last longer in the fryer, you may find that they're cost-neutral.

There are several choices for heavy-duty and extended deep frying:

- **Naturally stable plant oils.** These include **cottonseed, peanut, corn, rice bran,** and **palm.** Cottonseed, corn, and peanut are traditional favorites for heavy-duty frying. Palm oil, a tropical import, while stable, is very high in saturated fat and should be used sparingly.
- **Modified composition oils.** "Low linolenic," "mid oleic," and "high oleic" are terms used to describe newer oils with a fatty acid composition that is very stable, and good for extended deep frying. These oils come from plant sources (mainly soy, canola, and sunflower) that have been bred for this purpose. Under the right conditions (see Deep Frying tips, above), these oils can last a week or longer.
- **Light/medium duty-heavy duty oil blends.** You can increase the stability of low-cost medium duty oils by blending them with small amounts of naturally stable plant oil or modified composition oil. You can also purchase pre-made blends (see our 0 grams trans fat fry oils and shortenings list for examples, listed in the "heavy duty" category). A blend made this way can be used for extended deep frying, but it will not last as long as a 100% naturally stable oil or modified composition oil. Typical blends contain 75-90% percent soy or canola oil with TBHQ mixed with 10-25% peanut, cottonseed, rice bran, or a modified composition oil.