



# DOES YOUR KITCHEN NEED AN OIL CHANGE?

A Guide to Selecting the Right Cooking Oil

# TABLE OF CONTENTS

(Click a chapter title or the arrows at the bottom.)

## THE SECRET TO YOUR SUCCESS STARTS HERE

The Importance of Choosing the Right Cooking Oil

## FLAVOR

Golden-Brown Goodness

## PERFORMANCE & PRICE

Creating Smoking-Hot Demand

## FUNCTIONALITY & FRY LIFE

Oil Maintenance

## NUTRITION

Kitchen Chemistry

## COOKING OILS SIMPLIFIED

Eight Common Types of Cooking Oil

## DID YOU KNOW?

## HUNGRY FOR MORE?

03

04

05

06

07

08

09

10





# THE SECRET TO YOUR SUCCESS STARTS HERE

## THE IMPORTANCE OF CHOOSING THE RIGHT COOKING OIL

Cooking oil may be the secret ingredient no one is talking about when it comes to fried food. It can mean the difference between a one-time visitor and a regular customer. You certainly want good taste, texture and appearance, but there are also other considerations for choosing oil.

This e-book offers seasoned advice on factors that influence oil selection, including flavor, performance, price, functionality, fry life and nutrition. It also offers tips to care for your oil, because no matter what type of oil you select, you need to manage it well to yield good results. Finally, it supplies a list of the common types of cooking oil – from Canola to soy – along with their attributes to help you choose the best match for your food.



# FLAVOR

## GOLDEN-BROWN GOODNESS

For chefs, flavor is always top of mind. Sometimes choice of oil is a personal preference, based on which oil pairs best with a certain food. Globally, palm oil is enjoyed for its strong flavor. However, in the United States, consumer palates are trained to prefer the clean flavor that the clearer oils such as soy or Canola convey. That is why chefs usually prefer oil that imparts the following attributes:

- **Taste:** The food's flavor is not masked by the oil, which has a light intensity and pleasant aroma.
- **Texture:** The food should not be too limp or too crunchy. It should have a crisp, tender bite.
- **Appearance:** Food should not appear too light or too dark, but have a golden color.

► **CLICK HERE TO LEARN HOW COOKING OIL CAN TAKE YOUR FOOD TO THE NEXT LEVEL. READ THE INFOGRAPHIC, "BEAUTY IS IN THE FRY OF THE BEHOLDER."**





# PERFORMANCE & PRICE

## CREATING SMOKING-HOT DEMAND

Maybe you're not creating menus but are in charge of purchasing. While flavor is important, protecting your operation's bottom line takes precedence. Oil can seem like one of the more expensive restaurant ingredients you purchase, but you shouldn't base your decision solely on cost per pound. Consider cost over time.

Pay attention to the following factors:

- **Performance:** While oil with an extended fry life such as high-oleic can last twice as long as commodity oils, filtering can also extend the life of any oil. Changing oil less frequently also reduces labor costs.
- **Price/availability:** Consider the types of oils your supplier offers locally. Your supplier should monitor crop success (for example, the Canola crop in Canada), biodiesel mandates and world demand.
- **Cost of storage space:** If you are buying your oil in 35-pound jibs, consider the cost of the space where you are storing the jibs. If you purchase oil with a low fry life, you are likely storing even more of these. It may be easier to buy oil in bulk with an oil filtration and monitoring system to extend fry life.

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- **Delivery:** There are many distribution methods for your oil, including tankers, totes and jibs. Depending on your oil usage, certain delivery methods can save you more money than others.



# FUNCTIONALITY & FRY LIFE

## OIL MAINTENANCE

While outside factors could affect the oil you choose, internal procedures are also critical because the oil is affected by what you're frying and how. In fact, proper oil maintenance is a significant influencer of food quality. So it's important to keep the following factors in mind:

- **Temperature:** The ideal frying temperature is typically between 325 and 350 degrees Fahrenheit, depending on the food. Extremely high temperatures cause oil to oxidize faster.
- **Smoke points:** The stage at which heated oils begin to smoke and the molecular structure of oil breaks down. Cooking food in oil past the smoke point can produce toxic bitter compounds that affect the flavor and even nutrition of food.
- **Filtering:** No matter what type of oil you choose, if it's not filtered properly, food particles will cause it to break down, affecting the flavor profile. Regularly filtering oil can make it last at least twice as long.
- **Testing:** Test your oil after filtering to determine whether to dispose of it or return it to the fryer. This can be done through sensory methods – looking to see if oil has become dark, if there's an odor, a change of viscosity, a decline in product quality, or signs of smoking or frothing. Commercial test kits can also be used.
- **Changing:** Regardless of how often you filter, fryer oil will eventually need to be changed. When it turns dark brown, starts to smell, or makes food taste bad, it's time to replace the oil. If you do large amounts of business, you may need to change your oil more often.

When it comes to maintaining the desired taste and quality of your food, following proper oil management procedures like these can actually be more important than the type of oil you select.

► [CLICK HERE TO LEARN MORE ABOUT MAINTAINING YOUR FRYER OIL TO GET THE MOST OUT OF IT. READ THE INFOGRAPHIC, "BASKET CASE: HOW TO DEFEAT THE SIX ENEMIES OF OIL."](#)



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# NUTRITION

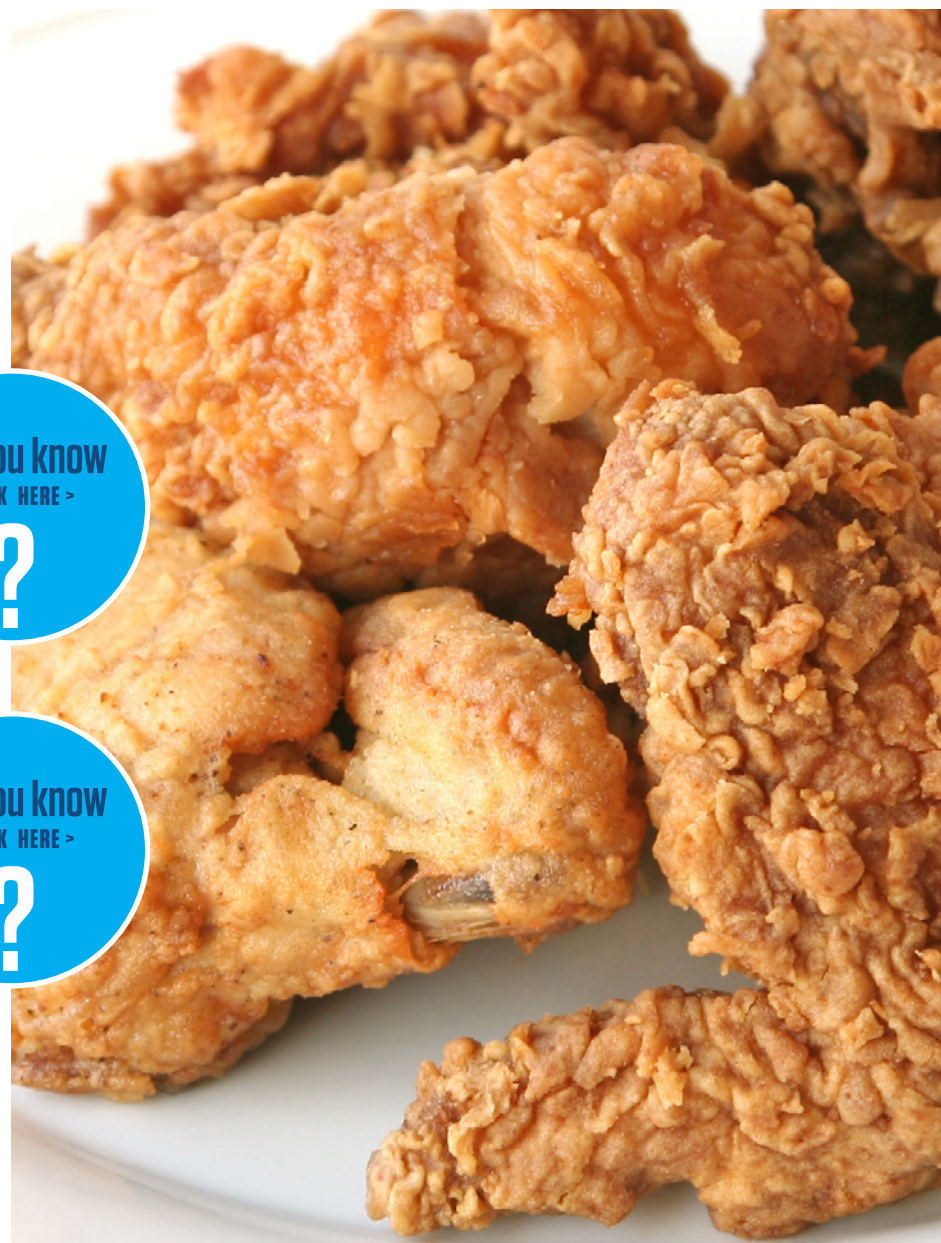
## KITCHEN CHEMISTRY

- **Saturated fats** are typically solid at room temperature, are considered more stable and less likely to be damaged by heat.
- **Trans fats** are formed when liquid fats are made into solid fats by the addition of hydrogen atoms (hydrogenation). They are more stable because they are solids, but are considered unhealthy.
- **Unsaturated fats** have more bonds in the fatty acid chain; so there's a higher likelihood these bonds might break and the oil degrade. Unsaturated fats are healthier than saturated fats.
- **Monounsaturated fats** have one double bond in their carbon chain. These fats stay in liquid form at room temperature, but turn into a solid when chilled.
- **Polyunsaturated fats** have more than one double bond along their carbon chain. That is why they are more prone to oxidizing than monounsaturated fats. These fats stay in liquid form at room and chilled temperatures.

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# 9 COMMON TYPES OF COOKING OIL

**PRICE RANGE** - \$ ECONOMICAL; \$\$ MID; \$\$\$ HIGH  
**DURABILITY** - ONE FRY LOW; TWO FRIES MEDIUM; THREE FRIES HIGH  
**SAFETY** - ONE PLUS GOOD; TWO PLUSES BETTER; THREE PLUSES BEST  
**NUTRITION** - ONE HEART LESS HEALTHY; TWO HEARTS HEALTHY;  
THREE HEARTS MOST HEALTHY

	Price Range	Flavor	Durability	Safety and Ease of Handling	Nutrition
Canola	\$	CLEAN	☞	+++	♥♥♥ <3% TRANS FAT; 7% SAT FAT; 0G TRANS PER SERVING; 1G SAT FAT PER SERVING
High-Oleic Canola	\$\$\$	CLEAN	☞☞☞	+++	♥♥♥ <3% TRANS FAT; 7% SAT FAT; 0G TRANS PER SERVING; 1G SAT FAT PER SERVING
Peanut	\$\$\$	NUTTY	☞☞	++	♥♥ <3% TRANS FAT; 20% SAT FAT; 0G TRANS PER SERVING; 3G SAT FAT PER SERVING
Soybean	\$	BLAND	☞	+++	♥♥♥ <3% TRANS FAT; 16% SAT FAT; 0G TRANS PER SERVING; 2G SAT FATS PER SERVING
Premium Soy	\$\$	NEUTRAL	☞☞	+++	♥♥♥ <3% TRANS FAT; 14% SAT FAT; 0G TRANS PER SERVING; 2.5G SAT FATS PER SERVING
Corn	\$	SWEET	☞☞	+++	♥♥♥ <3% TRANS FAT; 13% SAT FAT; 0G TRANS PER SERVING; 2G SAT FAT PER SERVING
Cottonseed	\$\$	CLEAN BLAND	☞☞	+++	♥♥ <3% TRANS FAT; 28% SAT FAT; 0G TRANS PER SERVING; 4G SAT FAT PER SERVING
Tallow	\$	BEEFY	☞☞☞	+	♥ <7% TRANS FAT; 46% SAT FAT; 0.5-1G TRANS PER SERVING; 7G SAT FAT PER SERVING
Palm	\$	MILD SAVORY	☞☞☞	+	♥ <3% TRANS FAT; 50% SAT FAT; 0G TRANS PER SERVING; 7G SAT FAT PER SERVING



# DID YOU KNOW?



# HUNGRY FOR MORE?

You know the considerations for choosing oil and have a list of the nine most common oil types. Before you switch to oil that's perfect for your needs, it's important to evaluate your current oil. To learn more about how to accomplish this and find out what your options are when it comes to cooking oil, contact a Restaurant Technologies representative.

► **CLICK HERE** TO LEARN HOW TO SELECT THE RIGHT OIL BY PUTTING YOURS TO THE TEST. READ THE GUIDE, "HOW TO PUT YOUR FRYING OIL TO THE TEST IN FIVE EASY STEPS."

#### Sources:

<sup>1</sup>Katie M. Palmer, "What Exactly is in McDonald's Famous French Fries?," Wired, July 16, 2014, <http://www.wired.com/2014/07/whats-inside-mcdonalds-french-fries/> (accessed June 10, 2016).

<sup>2</sup>Food and Agriculture Organization of the United Nations, Trade and Markets, Oilcrops table, <http://www.fao.org/economic/est/est-commodities/oilcrops/en/> (accessed June 10, 2016).

<sup>3</sup>Farm to Fork, A Natural Foods Co-op, "Tallow ... Why!?" blog, May 31, 2013, <http://arlingtonmeatcoop.blogspot.com/2013/05/tallow-why.html> (accessed June 10, 2016).

<sup>4</sup>Europe Food Information Council FAQs, <http://www.eufic.org/page/en/page/FAQ/faqid/question-answer-palm-oil/> (accessed June 10, 2016).

<sup>5</sup>Restaurant Technologies analysis (accessed June 10, 2016).

<sup>6</sup>Soy Connection newsletter, "Soybean Oil & Lecithin: Are They Allergenic?" United Soybean Board, <http://www.soyconnection.com/newsletters/soy-connection/health-nutrition/articles/Are-Soybean-Oil-Lecithin-Allergenic-and-Gluten-Free-Cooking-Oils/> (accessed June 10, 2016).

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McDonald's fries used to be cooked in solid beef tallow. The restaurant switched to a blend of oil decades ago in favor of a less saturated fat. The fries still maintain their distinct taste, thanks to the proprietary liquid oil blend that McDonald's uses.<sup>1</sup>

# PERFORMANCE & PRICE

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Success of oil crops – which includes plants whose seeds, fruits or nuts are crushed to obtain oil used by the food or biofuel industries, or to be used for feed in the livestock sector – affects global supply and demand and pricing.<sup>2</sup>



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How often you filter your fryer oil depends on what you're cooking, in what volume and how frequently. Filter oil more often when cooking breaded items such as chicken or fish.



# NUTRITION

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The U.S. Food & Drug Administration (FDA) told food manufacturers they need to stop using partially hydrogenated oils (PHOs), the major source of artificial trans fats, by June 2018. They are no longer generally recognized as safe (GRAS) for use in human food. The ban is on PHOs – not trans fats. Fully hydrogenated oils (FHOs) do not contain trans fat and are not affected by the FDA ban.

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Tallow may be considered a saturated fat, but because it is a natural trans fat, it hasn't been banned by the FDA.<sup>3</sup>

# DID YOU KNOW?

The difference between commodity soy and premium soy is that premium is fully hydrogenated, which is what gives it a longer fry life and better texture.

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Most of these types of oil (such as soy and Canola) are commodities. It is less important which provider you purchase them from and more important what your specifications are, which most suppliers can match.

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Palm oil contains no trans fat. It is also the only vegetable fat that is naturally solid at room temperature.<sup>4</sup>

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Of fried foods, doughnuts and onion rings have the most amount of fat; chicken and fries have the least.<sup>5</sup>

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Oils are inherently gluten-free and allergy-free, but if there is concern, be sure to ask if they are produced in facilities that also process wheat/gluten or peanuts, to avoid cross-contamination.<sup>6</sup>



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Tallow has the most trans fat and saturated fat per serving, but the best fry life. Canola has the least saturated fat and contains no trans fat, but has a short fry life.<sup>7</sup>