Spectrum

THE TASTE OF GOODNESS™

1-2-3 COOKING

Using the Right Oil for the Right Reasons

Where there's smoke there's fire! You're chopping garlic when you notice smoke rising from the cooking oil you've been heating in the sauté pan. When an oil smokes (hence the term "smoke point") it begins to decompose, known as thermal oxidation, which leads to a loss in nutritional integrity, and the creation of oxidative (free radical) molecules. Additionally, carcinogenic compounds such as benzo[a]pyrene (BaP) have been found in fumes from cooking oil. BaP is linked to red blood cell damage, suppression of the immune system, cancers, and reproductive defects. If you see smoke coming from your cooking oil, stop breathing! It's time to toss out the oil and start all over.

1-2-3 Cooking is a simple concept that organizes cooking oils into categories of use. By using the right oil for the right reasons, you can preserve the healthful benefits of the oil, and your foods will not only taste their best but also provide a healthy array of beneficial fatty acids.

1 REFINED FOR HIGH HEAT (numbers in parentheses indicate smoke point)

In high heat applications, like frying, wok cooking or popping popcorn, you want to use a high smoke point oil to avoid the harmful outcomes from burning oil. Use naturally refined oils such as cold-pressed **Avocado Oil** (510°F), expeller-pressed **Almond Oil** (490°F) or expeller-pressed **High Heat Safflower Oil** (460°F). All are high in monounsaturated fats, which have been found to have a beneficial effect on blood lipids and other cardiovascular disease risk factors. Additionally, these high heat oils allow the true taste of your foods to shine through.

2 UNREFINED FOR FLAVOR (numbers in parentheses indicate smoke point)

When you want the flavor of the oil to be part of the final dish use unrefined oils such as **Peanut Oil** (350°F), **Toasted Sesame Oil** (350°F), **Extra Virgin Olive Oil** (325°F), **Corn Oil** (320°F), or **Coconut Oil** (280°F). These oils are best for short-term medium heat cooking, sautéing or baking. Because their flavors add an intense and unique taste to any dish, they can offer a wide variety of tastes to the same basic recipe. They can also be added in the last few minutes of cooking to add a healthy boost of flavor to your favorite recipe. Your salad dressings, pasta dishes, pancakes, sauces and other dishes will come alive with a burst of healthy flavors.

3 NUTRIENTS FOR HEALTH (numbers in parentheses indicate smoke point)

The term "nutrient" comes from early Latin, with its root "nutrire" meaning "to suckle" indicating the importance of the first food of life. From this came nourish, nutrient, nursery and nutrition. Hippocrates described nutriments as foods that nourish, promote growth or repair organic life. Oils with nutriment qualities include **Flax Oil** (225°F), **Enriched Flax Oil** (225°F), **Flax/Borage Oil** (225°F) and **Wheat Germ Oil** (225°F). They're best used without direct heat in finished dishes, including soups, grains, salads, or blended into dressings and smoothies. They can also be taken directly without food, as a dietary supplement.

For more information, please see the Kitchen Guide on the reverse side or visit www.spectrumorganics.com

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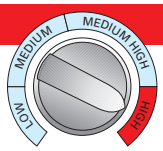
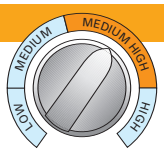
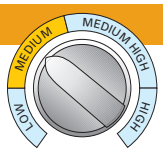
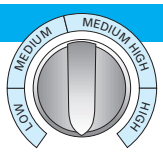
KITCHEN GUIDE

Different oils have different uses, and each performs best within a certain range of temperatures. Some are made for high heat cooking, while others have intense flavors that are best enjoyed by drizzling directly on to food. The guide below shows the smoke point for each type of oil.

SMOKE POINT An oil's 'smoke point' indicates how high a heat the oil can take before, literally, beginning to smoke. When an oil smokes, it releases carcinogens into the air and free radicals within the oil. For the healthiest approach, discard any oil that has gone beyond its smoke point. All oils are refined except where designated with an asterisk.

USES	OIL TYPE	SMOKE POINT
ALL PURPOSE COOKING	**HIGH HEAT OILS**	
 UP TO 510°F	Oils with a high 'smoke point' are ideal for sautéing, frying and other high heat applications.	Avocado 510°F Almond 495°F Apricot Kernel 495°F Canola (Super High Heat) 460°F Safflower (Super High Heat) 460°F Sunflower 460°F Palm Fruit 450°F Safflower, High Oleic 445°F Sesame 445°F
BAKING & SAUTÉING-	**MEDIUM HIGH HEAT OILS**	
 UP TO 425°F	Oils with a medium-high 'smoke point' are best for sautéing at medium-high heat or, because of their neutral flavor, for baking.	Canola 425°F Grapeseed 425°F Walnut 400°F Safflower, High Oleic* 390°F Coconut 365°F Soy 360°F
LIGHT SAUTÉING & SAUCES	**MEDIUM HEAT OILS**	
 UP TO 350°F	Medium heat oils normally have fuller flavors, making them ideal for sauces and salad dressings, or for sautéing at medium heat where the oil's flavor is intended as an integral part of the finished dish.	Sesame* 350°F Peanut* 350°F Toasted Sesame* 350°F Olive* 325°F Corn* 320°F Coconut* 280°F
NUTRIMENT	**NO DIRECT HEAT OILS**	
 NO HEAT	Oils with low 'smoke points' have such rich, robust flavor and fragile structure that they're best poured directly onto a finished dish, or blended into a dressing, simple sauce or taken directly.	Borage* 225°F Evening Primrose* 225°F Flax Oil* 225°F Enriched Flax Oil* 225°F Ultra Enriched Flax Oil* 225°F Wheat Germ* 225°F

THE LOWDOWN ON FATTY ACIDS

The two fatty acids that are essential to our health, but that our bodies cannot manufacture on their own, are Omega-3 fatty acid, such as Alpha Linolenic Acid (ALA), and Omega-6 fatty acid, like Gamma Linoleic Acid (GLA). These fatty acids are often called 'Essential Fatty Acids' (EFAs) precisely for this reason. There is another fatty acid intrinsic to good health that our bodies do produce naturally, and that is Omega-9 fatty acid. Read on for how to incorporate each into your diet.

Omega-3: Omega-3 is particularly critical to our body because it's put to use literally everywhere—our eyes, hair and skin, brain, heart, nerves and joints. Every cell in our bodies needs Omega-3 fatty acids to thrive and survive.

Studies show that populations that consume a diet high in Omega-3 fatty acids have the lowest mortality rate from cardiovascular disease. But about 80% of Americans are deficient in Omega-3. Nutritionists suggest off-setting this imbalance through adding an Omega-3 supplement to our diets, of which flaxseed and fish oils are the richest sources.

Omega-6: Omega-6 fatty acids are more plentiful, and can be found in many vegetable oils including walnut, soy and corn, and in supplement oils such as borage and evening primrose oil.

Omega-6 fatty acids are broken down by the body into AA (Arachadonic Acid) and GLA (Gamma Linoleic Acid) which has been shown to help with skin disorders like eczema and psoriasis.

Omega-9: Omega-9 fatty acids are important monounsaturated fats that occur naturally in our bodies. But they are also prevalent in kitchen staples—olive oil, canola oil, sunflower oil and almond oil.

Much of the praise showered on the Mediterranean diet is due to the cardiovascular benefits derived from Omega-9 fatty acids. Olive oil has been proven to raise good cholesterol (HDL) and lower bad cholesterol (LDL), and has more antioxidants than any other oil, including hydroxytyrosol, a polyphenol with a high level of free radical scavenging activity.

Another role Omega-9 plays is to help offset the overconsumption of Omega-6 rich oils like corn and soy. By consuming more Omega-9, we are balancing out our fatty acid profile to a ratio our bodies prefer.

ARE ALL FATS THE SAME?

Not at all. Here are some basics on the various types of fats to help you make sense of what's best for your own body.

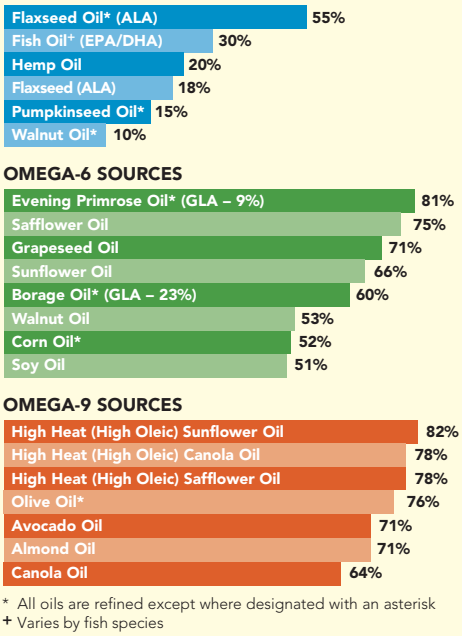
Monounsaturated Fat:
Monounsaturated fats are at the heart of the highly touted Mediterranean diet. These types of fats are tied to cholesterol regulation in the blood, promoting healthy cardiovascular function. Olive, canola, avocado and sunflower are examples of oils with high monoun-saturated fat content.

Polyunsaturated Fat:
Polyunsaturated fats include the 'essential' Omega-3 and Omega-6 fatty acids. These play an integral role in several areas—from strengthening our cell structure to reducing the risk of heart attack and stroke. Oils high in Omega-3 fats include flaxseed and fish.

Saturated Fat:
There are two main types of saturated fats—animal-based, like lard, and plant-based, such as coconut and palm oils. Most of what we consume in the U.S. are artery-clogging, 'long-chain' saturated fats derived from animals. But plant-based saturated fats are made up of 'short- and medium-chain' fatty acids which our bodies use for energy—the reason oils like coconut oil are popular with athletes.

Trans-Fatty Acids:
Trans-fats may well be our worst enemy. Trans-fats are formed during a chemical process called hydrogenation whereby cellular chains of fats are artificially altered to create a more solid, stable substance. The result is a fat that is virtually impossible for our bodies to break down.

COMPARISON OF OMEGA-3-6-9 SOURCES



* All oils are refined except where designated with an asterisk
\+ Varies by fish species