FATS & OILS

NOT ALL FATS ARE CREATED EQUAL

Though excess consumption of certain fats has been linked with heart disease, cancer, diabetes and arthritis, the truth is that fats play an important role in the body's health. There are particular fats that, when included in moderation in a balanced diet, help reduce inflammation, burn unwanted fat, stabilize blood sugar levels and lower blood pressure. Unfortunately, most of us consume too few of the healthy fats, and too many of the unwholesome, man-made varieties.

Fat is one of three nutrients that provide calories to the body, along with carbohydrates and protein.The responsibility fat plays in our health is extensive. Fat provides us energy; controls inflammation and blood clotting; aids normal brain development; maintains healthy skin and hair, and helps absorb and move vitamins A, D, E and K through the bloodstream. The 2010 Dietary Guidelines for Americans recommend most fats come from sources of polyunsaturated and monounsaturated fatty acids and that calories from fat comprise 30% or less of our total caloric intake.

Types of Fats

Animal fatty acids can be beneficial or harmful depending on the source and quantity. Avoid consuming high amounts of animal fat such as bacon grease (lard), and chicken skin because they are high in "bad" cholesterol (LDL).

Saturated fats are solid at room temperature and are the biggest dietary cause of high LDL levels. Not all saturated fats are necessarily bad for you, however. Saturated fats are broken down into three subcategories based on their fat chain length. The less desirable ones are found in animal products, fried foods, packaged baked goods and processed foods.

Trans-fatty acids are man-made, solid or semi-solid, shelf-stable fats. Our bodies cannot recognize them as nutrients and therefore are not able to process them.

Unsaturated fats are liquid at room temperature and are typically considered to be good quality fats. In general, the more liquid a fat is, the healthier it is. Unsaturated fats can further be classified as either monounsaturated or polyunsaturated. These fats protect the body from heart disease by raising the blood level of HDL ("good" cholesterol), and lowering levels of LDL.

Cold water fish preferably wild and line caught, salmon, mackerel, herring, halibut, sardines, and fish oil supplements such as cod liver oil are rich in healthy fats.

Nuts and seeds are heart-healthy snacks or additions to any meal. Limit serving size and choose from a wide variety such as almonds, walnuts, pecans, sunflower seeds, pumpkin seeds, sesame seeds, pistachios, hempseeds, chia seeds, and flaxseeds.

The Healthiest Fats and Oils

Extra-virgin olive oil is a monounsaturated fat that helps improve cholesterol levels.

Coconut oil is a saturated fat, but it contains no cholesterol and has not been shown to raise LDL levels. Additionally, coconut oil has a thermogenic effect, meaning it raises body temperature, boosts energy and metabolic rate and promotes weight loss.

Essential fatty acids are long-chain polyunsaturated fatty acids, which include linolenic (Omega-3) and linoleic (Omega-6). The typical Western diet includes too many oils rich in Omega-6s (corn, safflower, sunflower, cottonseed, peanut and soybean oils), and too few Omega-3s, which are found primarily in fish, fish oil and seafood; grass-fed meat and dairy; walnuts; flax, hemp and chia seeds, and in smaller amounts in vegetables, whole grains and beans.

Butter/Ghee may be saturated fats but they are often a healthier choice than margarine or most vegetable spreads. They are also concentrated sources of vitamins A, D, E and K and boast antimicrobial and antifungal properties.

Fats and Oils to Limit or Avoid

Polyunsaturated oils such as corn, soy, safflower and sunflower oils are hard-seed oils high in Omega-6s and are especially vulnerable to oxidation and degeneration. This potentially leads to free-radical damage, implicated in heart disease and cancer. Better choices for high-heat cooking include almond oil, avocado oil and ghee.

Canola oil is a monounsaturated fat, like olive oil, but unless it's organic, assume it is made from GMO canola.

Trans-fatty acids are created in the process of hydrogenating oils and should be completely avoided. These man made fats are a manufacturer's dream, but your body won't recognize them, leading to an increased risk of coronary heart disease.

Margarine and butter replacement spreads are made from a variety of oils mixed with emulsifiers, vitamins, coloring, flavoring and other ingredients that make them spreadable. Like trans fats, they are correlated with an increased risk of heart disease. When it comes to natural spreads that are substitutes for butter, read labels; know what oils are used, as an olive oil or coconut oil spread would be acceptable but anything made of polyunsaturates or non-organic canola oil should be avoided.

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Different oils suit different needs—for health, flavor and cuisine. Use this guide as a suggestion for what oils are most appropriate for specific cooking methods.

Smoke Point: An oil's 'smoke point' indicates how high a heat the oil can take before, literally, beginning to smoke. When 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.**

NO HEAT (120˚F) *Condiments, salad dressings*	LOW HEAT (212˚F) *Sauces*	MEDIUM HEAT (350˚F) *Baking, light sauteing*	HIGH HEAT (510˚F) *Stir-frying, sauteing, frying*
Almond	Almond	Almond	Almond
Avocado	Avocado	Avocado	Avocado
Butter	Butter	Butter	Coconut
Canola	Canola	Canola	Ghee
Coconut*	Coconut*	Coconut	Grapeseed
Flaxseed	Ghee	Ghee	Peanut
Ghee	Grapeseed	Grapeseed	Red Palm Oil
Grapeseed	Olive*	Olive*	Safflower
Olive*	Peanut*	Peanut*	Sesame
Peanut*	Red Palm Oil	Safflower	Sunflower
Safflower	Safflower	Sesame	
Sesame*	Sesame*	Sunflower	
Sunflower	Sunflower	Walnut	
Walnut*	Walnut		

Shopping for fats/oils

- Refined versus unrefined—refined oils, which are free of tiny impurities that can burn and lower the smoke point, are best for higher-heat cooking. Unrefined oils have a fuller flavor and aroma, but a lower smoke point; reserve them for salad dressings, low heat sauces, or drizzling over finished dishes.
- Packaging—glass bottles help you avoid toxins that may leach into oils from plastic bottles. Dark glass is best; exposure to light can damage oils and destroy antioxidants. Buy smaller bottles so you'll use the oil while it's fresh.
- Extraction—most conventional oils are extracted with chemical solvents or high heat; expeller-pressed oils are mechanically extracted. Cold-pressing, a method of expeller pressing that keeps temperatures low during extraction, minimizes damage to the subtle flavors of nut and finishing oils.

Storage

- The rancidity process in oil starts immediately. Both heat and air will speed up its deterioration. Therefore, all oil is best kept in a closed container at a temperature of no more than 65°F.
- The less saturated oil, the more quickly it becomes rancid. When oil starts to taste rank and bitter, it should no longer be used.
- Highly monounsaturated oils tend to solidify at very cool temperatures which do not present a problem. The effect of light on oil is far worse than air because it rapidly alters the unsaturated fatty acids into free-radical chains. To counteract this tendency, store all oil in dark or opaque containers.
- Oil readily combines with most types of plastic to form toxic plasticides. If you purchase oil packaged in plastic, remove the oil from its container as soon as possible and store it in a glass bottle.

Tips on reading nutrition labels

- Pay attention to the percentage of saturated fat and avoid or limit any foods that are high in it—aim for no more than10% of calories to come from saturated fats.
- Food manufacturers are not required to label the content of trans fats in foods, therefore, a product could be labeled "low fat" and still contain trans fats. Read ingredient lists and avoid any products with "hydrogenated" or "partially hydrogenated" oil

Sources: Vegetarian Times; Consumer Reports; *The Deluxe Food Lovers Companion* by Sharon Tyler Herbst and Ron Herbst; *Healing with Whole Foods* by Paul Pitchford; *Whole Foods Companion* by Diane Onstad; *Healthy Fats for Life* by Lorna R. Vanderhaeghe, Karlene Karst, RD; *Know Your Fats: The Complete Primer for Understanding the Nutrition of Fats, Oils, and Cholesterol* by Mary G. Enig, Spectrum Kitchen Guide

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