

FATS AND OILS FACT SHEET

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WHAT ARE ESSENTIAL FATTY ACIDS (EFAS)?

Omega-3, omega-6, and omega-9 fatty acids are essential because they're needed for many functions. EFAs cannot be manufactured by the body, so they must be obtained from food on a daily basis. EFAs are necessary for proper prostaglandin function, which regulates pain and swelling, maintains blood pressure, regulates cholesterol, and assists with nerve transmission.

Sufficient omega-3 fatty acids are thought to play a role in maintaining brain health and good cardiovascular function. They're also essential for the prevention of miscarriage and to promote optimal fetus development. Omega-3 fatty acids have also been linked to helping arthritis, depression, and intestinal inflammation.

Signs of EFA Deficiency

- Fatigue
- Heart problems
- Dry skin, eczema, or hair loss
- Immune weakness
- Mood swings and/or depression
- Poor circulation
- Poor memory
- Reproductive problems (men and women)
- Inflammation

FOODS CONTAINING EFAS

Omega-3s:

- Anchovies
- Chia seeds
- Cod liver
- Flaxseeds
- Mackerel
- Pasture-raised, grass-fed beef
- Salmon
- Sardines
- Walnuts

Note: Plant-based omega-3 sources are not complete, so the body needs to convert them in order to use them. This is why animal-based omega-3s are recommended over plant-based omega-3s, when possible.

Omega-6s:

- Beans
- Black currant oil
- Borage oil
- Evening primrose
- Nuts
- Seeds
- Sunflower

Most Americans have a high ratio of omega-6s to omega-3s, such as 20:1, which is pro-inflammatory. The recommended ratio is closer to 2:1, which means that one should limit the amount of omega-6 vegetable oils when cooking. Note that you get an abundance of the bad genetically modified oils, like soybean, corn, and canola, when you eat out, so try to eliminate these oils at home. Aim to use avocado oil and olive oil in salad dressings and coconut oil, ghee, or pastured butter when cooking.

Omega-3 fatty acids are precursors to anti-inflammatory compounds in the body. Omega-3 and omega-6 fatty acids actually compete for the enzymes that convert them into more biologically active compounds. So when you have an abundance of omega-6, it proportionately uses more of those enzymes, and you're left with a pro-inflammatory environment and a bad mood.

Omega-6 fatty acids are precursors to pro-inflammatory compounds in the body, which means they create inflammation in the body when taken in excess amounts. This is why the ratio of 3:1 of omega-3s to omega-6s is so important. High levels of omega-6 (relative to omega-3) create a pro-inflammatory environment and have been linked to cardiovascular disease, diabetes, certain cancers, and mental health problems.

SATURATED FATS

Saturated fats come mainly from animal sources. When eaten appropriately and of the highest quality, they can be very healing and strengthening and can raise your good (HDL) cholesterol.

Saturated fats include:

- Coconut oil
- Free-range, organic chicken
- Grass-fed beef
- Lamb
- Organ meats
- Pasture-raised pork
- Raw butter
- Raw cheese
- Raw milk

TRANS FATS, OR HYDROGENATED OILS

Trans fats, also known as hydrogenated or fractionated oils, are made during food processing through the partial hydrogenation of unsaturated fats. While this process creates fats that are easier to cook with and less likely to spoil than naturally occurring oils, the synthetic trans fat increases unhealthy LDL cholesterol and lowers healthy HDL cholesterol.

Trans fats should be eliminated from the diet completely, such as:

- Fried foods
- Margarine
- Partially hydrogenated oils in packaged foods
- Shortening

MONOUNSATURATED FATS/OILS (GENERALLY MORE STABLE)

This is a type of fat found in a variety of foods and oils. Studies show that eating foods rich in monounsaturated fats improves blood cholesterol levels, which can then decrease your risk of heart disease.

Monounsaturated fats and oils include:

- Avocado
- Hazelnut/almond
- Olive (use with low or no heat)
- Peanut
- Sesame (part mono-, part poly-)

POLYUNSATURATED FATS/OILS

This is a type of fat found mostly in plant-based foods and oils.

Polyunsaturated fats and oils include:

- Grapeseed
- Peanuts
- Safflower
- Sunflower

Note: Foods that are comprised mostly of monounsaturated and polyunsaturated fats are liquid at room temperature.

UNDERSTANDING OILS FOR COOKING AND BAKING

Refined oil has been processed to make it more stable and suitable for high-temperature cooking. The refining process also removes most of the flavor, color, and nutrients. They are good for baking and other uses when a bland flavor is desirable, and their stability and high smoke point make them essential for high-heat applications, like stir-fry.

Unrefined oil is simply pressed and bottled, retaining its original nutrient content, flavor, and color. Depending on the oil, filters are sometimes used to remove impurities. The compounds that give unrefined oils their unique flavor and character also shorten their shelf life and limit their cooking applications. Unrefined oils add full-bodied flavor to dishes and are best used for low-heat cooking or sauces, dressings, marinades, and dipping.

Expeller/cold pressing is a chemical-free mechanical process in which the oil in a seed or nut is forced out under pressure. This pressure, particularly when used on hard seeds or nuts, can generate heat due to friction. Therefore, some delicate oils are cold pressed, which simply means the expeller pressing is done under controlled temperatures, typically below 120°F. Expeller-pressed oils are among the most health-promoting oils available. Expeller-pressed oils ensure maximum purity, flavor, and nutrition. Choosing organic oils may minimize your exposure to pesticides, many of which are fat soluble.

STORING AND UTILIZING OILS

Oils, unlike wine, do not improve with age. If improperly stored (exposed to excessive heat, light, or air) or kept too long, oils eventually become rancid with a characteristic bad taste and smell. Discard rancid oils immediately. Most oils, particularly polyunsaturated oils, should be kept in the refrigerator. Never store cooking oils by the stove. Highly saturated oils, which include most tropical oils, like coconut, are quite stable and may be kept at room temperature, though refrigeration certainly won't harm them and will extend their useful life. Some oils – olive oil among them – become cloudy and may solidify when refrigerated, but this does not affect quality. Usually refrigerated oils will return to their liquid state when placed at room temperature for a few minutes.

Heating oils beyond their smoke point is also undesirable. The smoke point is the temperature at which the oil begins to smoke, generating toxic fumes and harmful free radicals. Always discard oil that has reached its smoke point along with any food that may have come in contact with it. Read the label of a particular oil to determine its smoke point and never heat the oil higher than this temperature. In general, refined oils will have a higher smoke point than unrefined oils. Also, never heat the same oil twice.

Best oils for cooking:

- Coconut oil
- Ghee
- Pastured butter

Best oils to remain unheated (salad dressings, etc.):

- Almond oil
- Avocado oil
- Extra-virgin olive oil
- Flax oil
- Toasted sesame oil
- Unrefined safflower oil
- Unrefined sesame oil
- Unrefined sunflower oil
- Unrefined walnut oil

Note: Avoid canola oil at all costs!! It's genetically modified and contains erucic acid, a very toxic substance.