

Healthy Fats and Nutrition

How to Choose Good Fats and Avoid the Bad



For over thirty years, fat in our diet has been considered the culprit in obesity, heart disease, and high cholesterol. Unfortunately, the resulting “low fat” foods and diets haven’t resulted in most people controlling their weight or becoming healthier. In fact, the opposite is true.

It’s the *type* of fat that matters in addition to how much you consume. Reducing your intake of some types of fats reduces the risk of several chronic diseases, but other types of fats are absolutely essential to our health and well-being.

Sifting through all the conflicting information on fats can leave you with even more questions. What do you need to know about polyunsaturated fat, omega 3 fatty acids and other terms in the language of fats? Learn to incorporate the good fats into your diet while reducing your consumption of the bad fats.

Myths and facts about fats and oils

Myth: Eating a low-fat Diet is the best way to curb obesity.

Facts:

- The obesity rates for Americans have doubled in the last 20 years, coinciding with the advent of the low-fat revolution.
- In the 1960s, Americans ate 45% of their calories from fat – and only 13% of us were obese. Now, while most of us get only about 33% of our calories from fat, 34% of us qualify as obese!

Myth: Low-fat diets are essential to help you lose weight

Facts:

- Ironically, cutting fat out of our diets seems to have the opposite effect: while Americans have been eating less fat, we’ve been getting fatter. In place of fats, many people turn to foods full of easily digested carbohydrates, or to fat-free products that replace healthful fats with sugar and high-calorie, refined carbohydrates.
- You need to cut calories to lose weight - fats are more filling, and curbing hunger can stop you from indulging in additional calories.
- The 2006 Women's Health Initiative Dietary Modification Trial showed that women on low-fat diets didn't lose any more weight than women who followed their usual diets.

Healthy fats are essential to good health

The human body uses fatty acids to do everything from building cell membranes to performing key functions in the brain, eyes, and lungs. The functions of fats include:

- **Brain** – Fats compose 60% of the brain and are essential to brain function, including learning abilities, memory retention and moods. Fats are especially important for pregnant women, since they are integral to fetal brain development.
- **Cells** – Fatty acids help your cells stay moveable and flexible, as well as being responsible for building cell membranes.
- **Heart** – 60% of our heart's energy comes from burning fats. Specific fats are also used to help keep the heart beating in a regular rhythm.
- **Nerves** – Fats compose the material that insulates and protects the nerves, isolating electrical impulses and speeding their transmission.
- **Lungs** – Lung *surfactant*, which requires a high concentration of saturated fats, enables the lungs to work and keeps them from collapsing.
- **Eyes** – Fats are essential to eye function.
- **Digestion** – Fats in a meal slow down the digestion process so the body has more time to absorb nutrients. Fats help provide a constant level of energy and also keep the body satiated for longer periods of time. Fat-soluble vitamins (A, D, E, and K) can only be absorbed if fat is present.
- **Organs** – Fats cushion and protect your internal organs.
- **Immune System** –Some f ats ease inflammation, helping your metabolism and immune system stay healthy and functioning.

"Faces" in the Fats Families

To understand good and bad fats, you need to know the names of the players and some information about them:

Monounsaturated fats

- Are liquid at room temperature and turn cloudy when kept in refrigerator.
- Primary sources are plant oils like canola oil, peanut oil, and olive oil. Other good sources are avocados; nuts such as almonds, hazelnuts, and pecans; and seeds such as pumpkin and sesame seeds.
- People following traditional Mediterranean diets, which are very high in foods containing monounsaturated fats like olive oil, tend to have lower risk of cardiovascular disease.

Polyunsaturated fats

- Are liquid at room temperatures as well as at cold temperatures
- Primary sources are sunflower, corn, soybean, and flaxseed oils, and also foods such as walnuts, flax seeds, and fish.
- This fat family includes the Omega-3 group of fatty acids, which are anti-inflammatory and your body can't make. In addition, Omega-3 fats are found in very few foods.

Saturated fat

- Are usually solid at room temperature and have a high melting point
- Primary sources are animal products including red meat and whole milk dairy products. Other sources are tropical vegetable oils such as coconut oil, palm oil and foods made with these oils. Poultry and fish contain saturated fat, but less than red meat.
- Saturated fat raises low-density lipoprotein (LDL or "bad") cholesterol that increases your risk of coronary heart disease (CHD).
- It is unnecessary to eat saturated fat sources since our bodies can produce all the saturated fat that we need when we consume enough of the good fats.

Trans Fats

- Trans fats are created by heating liquid vegetable oils in the presence of hydrogen gas, a process called *hydrogenation*. Partially hydrogenating vegetable oils makes them more stable and less likely to spoil, which is very good for food manufacturers – and very bad for you.
- Primary sources of trans fat are vegetable shortenings, some margarines, crackers, candies, cookies, snack foods, fried foods, baked goods, and other processed foods made with partially hydrogenated vegetable oils.
- Trans fat raises low-density lipoprotein (LDL or "bad") cholesterol that increases your risk of coronary heart disease (CHD), as well as lowering HDL, or good cholesterol.

All fatty food contain several “fatty faces”

Each type of fat or oil is a mixture of different kinds of fats. The following chart shows how common oils have a balance of different types of fat:

Adapted from Harvard School of Public Health: What Type of Fat Is It?				
	Monounsaturated	Polyunsaturated	Saturated	Trans
Olive oil	72%	8%	13%	0%
Safflower oil	12%	74%	9%	0%
Butter	26%	5%	60%	5%
Stick margarine	2%	29%	18%	23%

The Omega-3 group: Super Healthy Fats

We should all be increasing our intake of healthy omega-3 fatty acids, which we need for body functions like controlling blood clotting and building cell membranes in the brain. We're still learning about the many benefits of Omega-3, but research has shown this fatty acid can have a positive impact on:

- **Cardiovascular Disease (CVD)** Epidemiologic and clinical trials have shown that omega-3 fatty acids reduce CVD incidence (American Heart Association), by:
 - decreasing risk of arrhythmias, which can lead to sudden cardiac death
 - decreasing triglyceride levels
 - decreasing growth rate of atherosclerotic plaque
 - lowering blood pressure (slightly)

- **Liver cancer:** omega-3 fatty acids may be an effective therapy for both the treatment and prevention of human liver cancers. (University of Pittsburg study)
- **Depression:** Omega-3 fatty acid DHA reduces symptoms of depression probably because it increases gray matter in the brain. (University of Pittsburg study)
- **Dementia** - Eating fatty fish, high in omega 3, lowers the likelihood of developing “silent” brain lesions that can cause memory loss and dementia (University of Kuopio in Finland)

Types of Omega 3 fatty acids

The three key members of the Omega -3 family are alpha-linolenic acid (ALA);eicosapentaenoic acid (EPA); and docosahexaenoic acid (DHA). The best sources are fatty fish such as salmon, herring, mackerel, anchovies, or sardines, or some cold-water fish oil supplements. Canned (albacore) tuna and lake trout can also be good sources, depending on how the fish were raised and processed.

You may hear a lot about getting your omega-3’s from foods rich in ALA fatty acids. ALA is the most common Omega-3 found in American diets and is found in abundance in flax seeds and flax seed oil, as well as walnuts. While your body may be able to convert ALA into EPA and DHA, you can’t be sure – only some people have the ability to do so. Thus, to insure you get enough of these vital nutrients, it’s prudent to include fatty fish or fatty fish oil supplements in your diet. But, if you eat no fish or fish oil, getting just ALA is better than nothing - your cardiovascular protection may still go up, though not nearly as much as with fish oils.

Some people avoid seafood because they worry about mercury or other possible toxins in fish. Most experts agree that the benefits of eating two servings a week of these cold water fatty fish outweigh the risks.

Choosing the best Omega-3 Supplements

When choosing an omega-3 supplement, keep the following in mind:

- One 500-mg capsule per day is sufficient – any more than that is extraneous and could even be detrimental to your health. The American Heart Association recommends consuming 1–3 grams per day of EPA and DHA. For certain medical conditions, higher doses of omega-3 might be beneficial, but make sure these are prescribed by a medical professional.
- Choose supplements that are mercury-free, pharmaceutical grade and molecularly distilled. Make sure the supplement contains both DHA and EPA. They may be hard to find, but supplements with higher concentrations of EPA are better. A good ratio to look for is 3:2 (EPA:DHA).
- Check the expiration date!

The Omega-6 to Omega-3 Ratio

Omega-3 and omega-6 fats are both essential fats (meaning the body can’t make them and instead we need to get them from the food we eat). The proper balance of these two fats is extremely important for a number of reasons – one being that omega-6 fats are the precursors for pro-inflammatory molecules (which helps us avoid infections and promotes healing) whereas omega-3 fats are anti-inflammatory and turn off the inflammatory response when it is no longer needed.

In recent decades the ratio of omega-6 to omega-3 fatty acids has become way out of balance in the western diet. Most people consume far too many omega-6 fatty acids and consume far too little omega-3 fatty acids. This ratio is one of the important factors that can help reduce the risk of heart disease, cancer, inflammatory conditions, and depression.

Tips for helping to balance your intake of the omega fats

- Avoid vegetable oils such as corn or safflower oil.
- Reduce your consumption of meats and dairy products.
- Eliminate highly processed foods.
- Increase consumption of omega-3 rich foods such as wild-caught cold-water fish like salmon, flaxseed oil, and walnuts.

Understanding the “bad” fats

Damaged fat: letting good fats turn bad

A good fat can become bad if it gets damaged by heat, light or oxygen. Poly-unsaturated fats are the most fragile. Oils that are high in poly-unsaturated fats (such as flax seed oil) **must** be refrigerated and kept in a dark container. Cooking with these oils also damages the fats. Never use oils, seeds or nuts after they begin to smell or taste rank or bitter.

The worst fats: Trans fats (trans-fatty acids - TFA)

A trans fat is a normal fat molecule that has been twisted and deformed during a process called hydrogenation. During this process, liquid vegetable oil is heated and combined with hydrogen gas. No amount of these trans fats is healthy - if your diet doesn't contain enough good fat, your body will use the deformed trans fats instead, which could possibly contribute to major health risks from heart disease to cancer.

So why are trans fatty acids (TFAs) so prevalent in commercial foods? Partially hydrogenated oils (what comes out of the hydrogenation process) are more stable (less likely to spoil), can be transported more easily, and can withstand repeated heating, which makes them perfect for frying up those French fries and burgers at your favorite fast food establishment.

Trans fats may be found in foods like:

- **Baked Goods** -- cookies, crackers, cakes, muffins, pie crusts, pizza dough, and some breads like hamburger buns
- **Fried foods** -- doughnuts, French fries, fried chicken including chicken nuggets, and hard taco shells
- **Snack foods** -- potato, corn, and tortilla chips; candy; packaged or microwave popcorn.
- **Solid fats** -- Hard margarine (stick margarine) and semi solid vegetable shortening.
- **Pre-mixed products** -- cake mix, pancake mix, and chocolate drink mix.

TFAs tend to raise total LDL (bad) cholesterol levels and lower HDL (good cholesterol). This can contribute to major health problems, from heart disease to cancer. No amount of trans fat is healthy, and should be kept below 1 percent of your total calories.

Be a trans fat detective

- Use your own investigative skills to avoid trans fats:
- When shopping, read the labels and watch out for “partially hydrogenated oil” in the ingredients. Even if the food claims to be trans fat free, this ingredient tells you that the product is a trans fat suspect.
- When eating out, put fried foods, biscuits, and other baked goods on your “skip” list. Avoid these products unless you know that the restaurant has eliminated trans fat
- Most states have no labeling regulations for fast food, and it can even be advertised as cholesterol-free and cooked in vegetable oil. Eating one doughnut at breakfast (3.2 g of TFA) and a large order of french fries at lunch (6.8 g of TFA) adds 10 grams of TFA to one's diet, according to the American Heart Association.
- **Some cities** (i.e. NYC, Philadelphia, Seattle, Boston), as well as the state of California, **have banned trans fats in restaurants**. This has caused some big chains to start to move away from using trans fats. Learn more and look into whether your city or state is part of this group.

Fats and your cholesterol

For many people, unless you have diabetes, there is only a weak link between the amount of cholesterol we consume and our blood cholesterol levels. According to the Harvard School of Public Health, the biggest influence on blood cholesterol level is the **mix** of fats in your diet—not the amount of cholesterol you eat from food.

While it’s prudent to watch the levels of cholesterol you eat, healthy fats can actually help your body process cholesterol in a more beneficial manner. For example:

- Monounsaturated fats lower total and bad (LDL) cholesterol levels, while increasing good cholesterol (HDL).
- Polyunsaturated fats can lower triglycerides and fight inflammation,
- On the other hand, saturated fat can raise your blood cholesterol. Trans fats are even worse, since they can not only raise your bad LDL cholesterol, but also lower the good HDL cholesterol.

If you have or are at risk for Cardiovascular Disease or Diabetes

Do not change your diet without consulting your physician!

The bottom line: How much fat is too much?

How much fat is too much depends on your lifestyle, your weight, your age and most importantly the state of your health. The USDA recommends that the average individual:

- Keep total fat intake to 20-35% of calories

- Limit saturated fats to less than 10% of your calories (200 calories for a 2000 calorie diet)
- Limit trans fats to 1% of calories (2 grams per day for a 2000 cal diet)
- Limit cholesterol to 300 mg per day

However, if you are concerned about cardiovascular disease, the American Heart Association suggests a similar plan, but limiting saturated fats to less than 7% of your calories (140 calories for a 2000 calorie diet).

How do you go about implementing these recommendations? The simplest way to approach fats is to replace the saturated and trans fat in your diet with healthy monounsaturated and polyunsaturated fats, and to increase your intake of Omega-3 fatty acids. Use these percentages to your advantage by making sure the fat you *do* consume is healthy (monounsaturated or polyunsaturated).

Fat-friendly lifestyle tips: Out with the bad, in with the good

Okay, so you realize you need to avoid saturated fat and trans fat... but how do you get the healthy monounsaturated, polyunsaturated, and omega-3 fats everyone keeps talking about?

- **Dress your own salad.** Commercial salad dressings are often high in saturated fat, unhealthy chemicals, and made with inferior, overly-processed, damaged oils. Create your own dressings with high-quality, cold-pressed olive oil, flaxseed oil or sesame oil and your favorite herbs.
- **What's better: butter or margarine?** Both have good and bad points. With margarine, choose the soft-tub versions, and make sure the product has zero grams trans fats and no partially hydrogenated oils. Regardless of whether you choose butter or margarine, use it in moderation and avoid adding it to other foods. Olive oil is a healthier substitute.
- **The meat of the matter.** Beef, pork, lamb, and dairy products are high in saturated fat. Reduce your consumption of these foods. When you do eat them, choose low-fat milk and lower-fat cheeses like mozzarella whenever possible; enjoy full-fat dairy in moderation. Go for lean cuts of meat, and stick to white meat, which has less saturated fat.
- **Don't go no-fat, go good fat.** If you are concerned about your weight or heart health, rather than avoiding fat in your diet, try replacing all the bad fats with good fats. This might mean replacing some of the meat you eat with beans and legumes, and using vegetable oils rather than tropical oils, which tend to contain more saturated fats.
- **Ask what type of oil your food is cooked in.** When eating out, ask your server or counter person what type of oil they use in their cooking. If it's partially-hydrogenated oil, run the other way. Otherwise, see if you can request your food to be prepared using olive oil, which most restaurants have in stock.