Some Facts about Fat

What are fats?

Fats are a kind of nutrient called lipids. There are many different kinds of fat in the diet, but they are all made of the same building blocks, called fatty acids.

Why do we need fat in our diets?

Fat not only serves as a primary fuel used by the body for energy, but also contributes several important functions. Fats are made up of fatty acids, which are used for a variety of functions in the body. The outside barriers of our cells, the cell membrane, are made up of a substance called phospholipid, which contains fatty acids. Fat is also needed for nerve and immune function.

Fats help us store energy and insulate the body and organs. They also help us absorb certain vitamins in our food. Fat also contributes to the taste of food and can help with feeling full after eating a meal.¹

There are also what are called essential fatty acids. These are fatty acids our bodies need, but are unable to make.

¹ Turn the page to learn more about fatty acids!
What are fatty acids?

Three types of fatty acids are found in fat: saturated, monounsaturated, and polyunsaturated.

**Saturated fatty acids**

Saturated fatty acids can be found in higher amounts in meat and dairy products. They are also found in tropical oils like coconut, palm, and palm kernel oils. Saturated fats are generally solid at room temperature.

**Monounsaturated fatty acids**

Monounsaturated fatty acids can be found in plant sources such as nuts and vegetable oils like olive, canola, and sunflower oils. They are liquid at room temperature.

**Polyunsaturated fatty acids**

Polyunsaturated fatty acids are usually liquid at room temperature. There are two types that we need from our diets: omega-6 or omega-3 fatty acids. Sources of omega-6 fatty acids include nuts and liquid vegetable oils such as soybean, corn, and safflower oils. Sources of omega-3 fatty acids include fish, walnuts, flaxseed, soybean oil, and canola oil.

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What are trans fatty acids?

Trans fatty acids are made when oils under a manufacturing process called “hydrogenation.” This converts liquid oils into solid fats. This method has been used by many food manufacturers because it extends the shelf life of foods.

Studies have found that trans fats raise low-density lipoprotein cholesterol (LDL-C), commonly referred to as "bad cholesterol", and total cholesterol. Trans fats may increase risk for heart disease.
What are essential fatty acids?

Essential fatty acids are ones that our bodies are unable to make and we need to come from food.² There are two main types: omega-3 and omega-6 fatty acids.

**Alpha-linolenic acid (omega-3) and Linoleic acid (omega-6)**

These are the two essential fatty acids; they play a key role in the immune system, vision, and cell structure. Good food sources for these include vegetable oils, such as canola, safflower, sunflower, and corn oils.

**Eicosapentaenoic acid (EPA) and Docosahexaenoic acid (DHA)**

These are a kind of omega-3 fatty acids important for the immune system, cells and brain.¹,² These fatty acids are found in fish such as salmon, halibut, and trout.

Swap it out!

**Try these easy substitutions to eat more healthy fats.**

- Sauté veggies in olive or canola oil instead of butter.
- Have a small handful of nuts instead of chips for a snack.
- Use a little bit of avocado on your sandwich instead of cheese.

What is the relationship between fat and diseases like cardiovascular disease and cancer?

While we need some fat in our diet, the American diet has more total fat and saturated fat than recommended. This can contribute to increased low-density lipoprotein cholesterol (LDL cholesterol, which is sometimes called “bad cholesterol”) in the blood.²,⁶ Replacing saturated fat with polyunsaturated fat may help lower LDL cholesterol in the blood and reduce risk of CVD.⁴,⁵

Diets high in vegetables, fruit, whole grains, lean meats, and seafood, and are lower in processed or red meats and saturated fat may lower risk of some cancers, especially colorectal and breast cancer.² The way food is cooked may also make a difference. Deep-frying foods or charbroiling them until they have a burned surface can result in development of compounds that may cause cancer.⁷
What are some ways to balance fat intake?

The Dietary Guidelines for Americans recommends a few simple strategies to balance the amount of fat in the diet:\(^2\)

- Consume 7 to 9 servings of fruits and vegetables each day to partially replace fatty foods and help you feel full.
- Add a mixture of whole grain products to the diet.
- Replace fatty meats with skinless chicken, fish, or other lean meats, and drink fat-free or low-fat milk instead of whole milk.
- Include a wide variety of food and beverages.

Diets very low in fat are generally not recommended because fat is often replaced with foods that can lower levels of HDL cholesterol, commonly referred to as "good cholesterol", in the blood.\(^2,5\) Dietary fat consumption should be balanced instead of reducing total fat.\(^2\)

What are some food sources for different kinds of fat?

**Saturated fatty acids:** Meat, poultry, and whole-dairy products

**Monounsaturated fatty acids:** Olive and canola oil, peanuts, and avocados

**Polyunsaturated fats:** Safflower, sunflower, corn, and soybean oils, as well as fish

**Omega-3 fatty acids:** Fish such as salmon and trout, shellfish, walnuts, flaxseed, and canola oil

**Omega-6 fatty acids:** Salad dressings, soybean oil, corn oil, and nuts

**Trans fatty acids:** Packaged baked goods, chips, stick margarine, and some animal products
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