CU SPORTS MEDICINE

FAT Facts

For a while now, fat has been frowned upon due to its role in promoting weight gain, obesity, and increased risk for heart attack, stroke, cancer, and diabetes. Fat helps food taste better, making these foods the ones we crave. Fat also performs many important functions in the body related to energy, vitamins, and hormones. Like all other nutrients you eat, moderation is the key. Eating too little or too much fat will lead to health problems in the end. It’s critical to meet your daily needs in terms of amount and type of fat. Yet it’s also important to avoid excess intake to prevent unnecessary weight gain, increased cholesterol levels, and greater risks for chronic disease.

Why do we need dietary fat?

Our bodies require a certain amount of fat every day to function properly. Fat is important because it:
- Gives you energy (9 calories per gram).
- Carries fat-soluble vitamins (vitamins A, D, E, and K) throughout your body.
- Is important for normal functioning of hormones and enzymes and a critical part of cell membranes.
- Provides essential fatty acids to your body.
- Promotes satiety (making you feel full longer), since fats take longer to digest than other nutrients.

What kinds of fat are there?

There are 3 main types of fat in foods: monounsaturated, polyunsaturated, and saturated. Not all fats are created equal, so it’s important to understand the differences between them, including the types of foods in which they are found. Unsaturated fats may have a protective effect against heart disease. Saturated fat (the “bad” fat) has been known to increase risk of heart and other diseases. Our bodies are equipped to process some saturated fat. It is when we eat too much that health risks increase.

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<tr>
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<th>Monounsaturated Fat</th>
<th>Polyunsaturated Fat</th>
<th>Saturated Fat</th>
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<tbody>
<tr>
<td><strong>What it does</strong></td>
<td>Decreases total cholesterol and lowers “bad” cholesterol (LDL), leaving HDL (good cholesterol) constant.</td>
<td>Decreases total cholesterol and lowers “bad” cholesterol (LDL). It may lower protective HDL.</td>
<td>Increases total cholesterol, which leads to increased risk of heart disease.</td>
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<td><strong>Common foods</strong></td>
<td>Olive oil, canola oil, peanut oil, nuts, olives, avocados</td>
<td>Fish (salmon, sardines, tuna, mackerel, herring), vegetable oils (corn, safflower, sunflower sesame, soybean)</td>
<td>Butter, animal fats (whole milk cheese, meat), baked goods, chocolate, fried foods, tropical oils (coconut, palm kernel)</td>
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What are trans-fats?
Trans-fatty acids, or trans-fats, are created through a process known as hydrogenation. This process makes an unsaturated fat act like a saturated one. Small amounts of trans-fats also occur naturally in some foods, especially animal products. It is believed that trans-fats increase total cholesterol in the body. This in turn raises the risk for heart disease, cancer, and other chronic diseases. Research on the long-term effects of trans-fats is not conclusive. Therefore, it is best to avoid excess intake of these fats. Trans-fats are mostly found in processed foods, mainly in margarine, cookies, crackers, and fried foods. They are often not listed on a food label as trans-fats. Instead look for “partially hydrogenated oils” or “vegetable shortening” in the ingredient list. Margarines or spreads with a liquid oil listed as the first ingredient are the healthiest choice. Tub margarine contains less trans-fatty acids than stick margarine!

What are essential fatty acids?
Essential fatty acids (EFA) are commonly known as omega-3 and omega-6 fatty acids. They must be consumed through food, since we do not make them ourselves. Our bodies rely on EFAs to maintain cell structure and to produce nerve cells and hormones. They are also needed to help regulate blood pressure, blood clotting, blood lipid levels, and your immune response to injury and infection. We also use them for skin maintenance and normal hair growth. If you do not take in enough EFAs in your diet, it is likely you will develop an EFA deficiency. This could lead to skin lesions, kidney and liver disorders, reproductive failure, neurological problems, and visual problems. Therefore, it is very important to meet your daily requirements for this fat. The two most important fatty acids are linolenic and linoleic acid. The main food sources for these fats are seafood, nuts, seeds, and vegetable oils.

Omega-3 fatty acids have been recognized for their potential health benefits. These include possibly lowering blood cholesterol and helping in the prevention and treatment of heart disease, cancer, and hypertension. They may also help reduce the inflammation and swelling of rheumatoid arthritis and lupus. Omega-3 fatty acids found in fish may have additional protective effects against disease. These omega-3s may help prevent blood clots (lowering chance of a heart attack). They may also have positive effects on the brain, including benefits in mental health and possible lowered rates of depression. Omega-3 fatty acids are found in shellfish and cold-water fatty fish, (salmon, tuna, sardines, trout, mackerel, and herring). Eating fish 2 to 3 times a week may be sufficient to reap benefits over time. Non-meat sources of omega-3 fatty acids include canola oil, flaxseed, walnuts, and soybeans.

Some everyday tips for eating fat:
- The average person should aim to get 20 to 30% (and no less then 15 to 20%) of their daily calories from fat, about 60 to 70 fat grams/day. Ideally this should be divided between monounsaturated (10 to 15%), polyunsaturated (10%), and saturated fat (less then 7% to 10%).
- Use fats containing unsaturated sources such as nuts, seeds, vegetable oil, and fish.
- Limit your intake of foods containing trans-fats such as fast food, hydrogenated products, stick margarine, or commercial baked products.
- Include food sources of essential and Omega-3 fatty acids in your diet (see above).
- Be careful about using fats and oils (salad dressings, fried foods, creamed sauces or gravies).
- Choose lean versions of saturated fat sources such as lean meat and low fat dairy products.
- The benefits of fish oils and other fat supplements are not clear. It is best to get these important nutrients from whole foods whenever possible.