# Fat - the fuel of metabolism. How to eat so that your body burns fat more efficiently.

We’ve come to the third big macronutrient - fat. This is a very important topic because fats give you more calories than other macronutrients and there is a big difference from which sources you’ll get your fat calories from. We usually don’t think about fat in our diet, because it comes naturally with and inside the food we eat. Fat is kind of hiding amongst carbs and protein. We only consciously eat fat when we put butter on our bread or oil onto the pan to fry something. In this chapter, I want to make you conscious about fats, because in the long run it may have an important effect on your health. That’s where most low carb enthusiasts are wrong and make the mistake that may cost them much later on.

First of all, we need to understand what kind of fats there are. You have probably heard about the saturated fats and unsaturated fats. The first one is harder, the second one softer. You may have heard that one or the other is good or bad for your health. Let’s break it down a little.

Saturated fats are the fats that are solid at room temperature - butter, bacon fat, coconut fat, etc. This is because of the long and straight molecule of the fatty acids that it consists of. Saturated fats come mainly from animal sources.

Then there are unsaturated fats that are soft or even liquid at room temperature. This comes from their curvy fatty acid molecule structure. Unsaturated fats come mainly from plant and sea life (fish) sources.

So which one should you eat, which one is dangerous, and which one is healthy? Both and neither! Let me explain. In the studies during the last two decades we’ve come to know that it isn’t dietary fat at all that causes cardiovascular diseases. It is metabolic syndrome and inflammation in the body. So, we can eat both kinds of fat without getting any sicker. That being said, there is a difference. Unsaturated fats have some very cool health and metabolic benefits that saturated fats don’t. We’ll go over those in a second. The other thing to take into account is that there rarely is just fat in natural sources. Fat comes with protein and carbohydrates. So there is a difference if you’ll get the fat with bacon full of antibiotics and hormones or from seeds that have amazing micronutrients and fiber in addition to good fats.

So, what does unsaturated fat do that saturated fat doesn’t? Unsaturated fat has proven to lower inflammation, boost metabolism, and improve brain function, the hormonal system, and the autonomic nervous system. The most useful unsaturated fats are omega-3 fats, especially those that come from cold-water fish like salmon, mackerel, herring, cod, and tuna. Omega-3 is one of nature's most amazing nutrients. It boosts metabolism, lowers inflammation, improves brain function, makes blood clotting harder, and lowers the risk of many diseases like cardiovascular diseases, dementia, and even cancers. We don’t have enough omega-3 fat in our diets nowadays, because we eat fish so much less than we used to. It is time to return to this diet. If it isn’t possible to eat that much fish, you should consider taking omega-3 as a food supplement. Even better - do both. How much omega-3 do you need? At least 2 grams of pure omega-3 a day, ideally 4-10 grams.

Are there any other kinds of fats? Yes. There are processed fats. Those are the worst of all. Processed fats are added as a shelf life extension to processed foods. Those are sausages, biscuits, ice-cream, cakes, sweets, chips, fries, dressings, and many more. Those are the fats I suggest you try to keep at a minimum. No - small amounts from time to time won’t do you any harm, but you’d rather get your fat calories from better sources.

So what kind of fat to eat? As we get saturated fat with our protein and carbohydrates by default, we should aim to eat as much of our fat calories from unsaturated sources as we can. Ideally, I suggest aiming to get at least half of your fat calories from unsaturated sources, of which at least 2 grams (4+ grams is better) come from omega-3’s. That guarantees you’ll get the maximum positive effect on your metabolism and health from the third macronutrient. What other good sources are there for unsaturated fats:

* Extra virgin olive oil (in salads, for baking, or just a spoonful just as is)
* Seeds and nuts (try to eat different kinds)
* Avocado and olives
* Eggs
* Cold-water fish

How many calories from fat? Basically, all the calories that don’t come from protein or carbohydrates come from fat. Just like protein or carbohydrate - eating more fat than your body can consume as energy can build up as fat tissue in your body. This is one mistake low carb enthusiasts often make. They think that as long as they eat fat, they can eat as much and whatever kind they want. This often leads to a slowed metabolism, risen cholesterol levels, insulin resistance, cardiovascular diseases, and other nasty surprises.

One last question I get asked a lot: what kind of foods to avoid or what to eat to lower cholesterol levels? The answer is that it doesn’t matter. All the so-called bad cholesterol that we have circulating in our system comes from our liver and is caused by visceral fat. So the only thing that matters in this case is to get your visceral fat as low as possible. Even if you'd only eat nothing but eggs all day for a year and lose visceral fat while doing so, your cholesterol levels would go down. That being said, there is a small subpopulation of people who have a mutation in their liver genes that start generating cholesterol in response to lots of saturated and processed fats (especially fat with fast carbohydrates). Those people should take their fat sources more seriously and monitor cholesterol levels more often.

To bring it all together: fat is the third most important macronutrient. It fills your body’s caloric needs in addition to primary protein and carbohydrate. You should aim to eat more unsaturated fats because saturated fats come “automatically with food” and don’t have those kinds of benefits that unsaturated fat does. You should give special attention to omega-3 fats that you’ll get from cold-water fish. Even in small amounts, their effect on your body’s natural ability to burn fat is amazing.