

# BLOG.SQD

## What is Fat?

It was once thought that fat made you fat which stemmed from some misguided research done in the 1980s, which linked high fat diets to obesity, heart disease, and all manner of other health issues. It soon became common belief that anything with an ounce of fat in it would make your heart freeze up, clog your arteries and make you fatter and sicker than ever before.

Nowadays people are becoming more and more knowledgeable on the topic and fat is no longer the demon it was once held to be. From today's research it's plain to see that not all fat is bad for you and in fact, it's absolutely vital for good health, performance and body composition.

For instance, did you know that there are certain fat-soluble vitamins, which can only be absorbed in the presence of fat? These vitamins are A, D, E and K and play an important role in the body such as, but not restricted to: bone growth, bone strength, tooth development, regulation of the immune system, controlling the growth of your cells and producing protein for the blood and kidneys.

Fat is a macronutrient. All this means is that it's a nutrient you need a lot of. The other two macronutrients are carbohydrates and protein. However, fat contains 9kcal per gram, which is a lot when you compare them to carbs and protein, which only contain 4kcal per gram. Thus, portion size is key.

Fat comes in four types: saturated, monounsaturated, polyunsaturated and trans. The difference between them comes down to the structure of the lipid. A saturated fat will be hard at room temperature where as unsaturated fats will be liquid.

Saturated fats are found in foods such as dairy, meats and coconut. While the media may have you believe otherwise, research has shown small amounts of saturated fat to actually be very good for you due to it's role in hormone function and production, especially with the sex hormones like testosterone. A diet rich in saturated fats can drive up total cholesterol, and tip the balance toward more harmful LDL cholesterol, which prompts blockages to form in arteries in the heart and elsewhere in the body. For that reason, most nutrition experts recommend limiting saturated fat to fewer than 10% of calories a day. Saturated fats are very stable at high heats, which means that they do not go rancid, burn or smoke easily so it's best to cook with these over unsaturated fats.

Unsaturated fat is the type that you find in large amounts of Mediterranean style foods such as avocado, olives and fish. The downside is that these fats tend to be quite unstable at high heats, which is why it is strongly recommended not to cook with them.

Polyunsaturated fats are essential fats. That means they're required for normal body functions but your body can't make them. So you must get them from food. Polyunsaturated fats are used to build cell membranes and the covering of nerves. They are needed for blood clotting, muscle movement, and inflammation. They contain omega 3's and omega 6's. As you will know, omega 3's are very important for brain function and

overall health. We should aim to have a 1:1 or at least 2:1 ratio of omega 6:omega 3 in our diet.

Unfortunately there is a bad side to polyunsaturated fats in the form of vegetable oils. These oils don't actually come from vegetables and are extremely unstable at low levels of heat meaning that they go rancid quickly. This can dramatically affect the health of your body. Common vegetable oils are soybean, corn and sunflower.

The worst fat is trans-fats but I think of them more of Franken-fats, as they really are a science experiment. They're chemically classified as unsaturated fats but have been altered to act like saturated fats in the body. The manufactures have chemically changed the structure of the fat to make it a solid at room temperature. While this provides very cheap cooking oil, it's extremely counter-affective for our health. Once consumed, trans fats replace the normal saturated fats in our cells but without the same properties, which are why, they have been linked to heart disease, cancer and obesity. If the packaging says, "hydrogenated oil" then it contains trans fat so avoid it at all costs.

Fats are a very healthy thing to include in your diet as long as you get them from the right nutrient dense and vitamin rich sources. Remember to include a wide variety of foods on your plate and not to think that one specific thing will kill you. At the end of the day, moderation is key and the devil is in the dose.

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