



Fats

The facts about fats:

- There are four major dietary fats in the foods we eat: saturated fats, trans fats, monounsaturated fats and polyunsaturated fats. The four types have different chemical structures and physical properties.
- The bad fats - saturated and *trans* fats, tend to be more solid at room temperature (like a stick of butter), while monounsaturated and polyunsaturated fats tend to be more liquid.
- Fats can also have different effects on the cholesterol level in your body. The bad fats, saturated fats and *trans* fats raise bad cholesterol (LDL) levels in your blood. Monounsaturated fats and polyunsaturated fats can lower bad cholesterol levels and are beneficial when consumed as part of a healthy dietary pattern.
- Saturated fats are mainly found in foods from animals (like beef, lamb, pork, veal, chicken and from dairy products like milk, cheese, butter and cream) and also in some plants (like coconut oil and palm oils).
- Good fats are found in nuts, seeds, avocados and in cold-pressed vegetable oils like Olive and Flaxseed Oils. These are good sources of essential fatty acids Omega 3 and 6.
- Fats are essential to give your body energy and to support cell growth. They also help protect your organs, keep your skin soft and help keep your body warm. Fats help your body absorb some nutrients and produce important hormones.
- Food fat is stored as adipose tissue (fat tissue) if it is not required as energy source straight away.
- 100 calories of ingested fat can be converted to 97 calories of body fat by burning a measly 3 calories.
- Fat is very calorie dense – it contains more than double the calories per gram than carbs and proteins.
- Non-essential fats (such as hydrogenated and trans fats in most packaged products) are an appetite stimulant. The more you eat, the more you want!
- People who store fat mostly around their abdomen have a higher risk of heart disease than those who store fat mostly around their hips and thighs.
- Abdominal fat and fat in our liver is easier to get rid of than fat under our skin. When we exercise, it is the first fat to go.



Did you know?

Just a little extra fat around your waist interferes so much with insulin that an overweight person releases 2 to 5 times more insulin than a slim person!

Cooking with Oils

When you're cooking at a high heat, you want to use oils that are stable and don't oxidize or go rancid easily.

When oils undergo oxidation, they react with oxygen to form free radicals and harmful compounds that you definitely don't want to be consuming.

The most important factor in determining an oil's resistance to oxidation and rancidification, both at high and low heat, is the relative degree of saturation of the fatty acids in it.

Saturated fats have only single bonds in the fatty acid molecules, monounsaturated fats have one double bond and polyunsaturated fats have two or more. It is these double bonds that are chemically reactive and sensitive to heat.

Saturated fats and monounsaturated fats are pretty resistant to heating, but oils that are high in polyunsaturated fats should be avoided for cooking.

Remember that oil is a fat, and fat calories are still fat calories, no matter which type of oil you use. So, you should use the least amount of fat possible to prepare your foods while still getting the greatest amount of taste and health benefits.

Store oil in cool, dark places.

Olive Oil



Olive oil is well known for its heart healthy effects. It can raise HDL (the good) cholesterol and lower LDL (the bad) cholesterol.

Extra-virgin olive oil is also high in antioxidants called polyphenols that have been linked to heart health.

Studies on olive oil show that despite having fatty acids with double bonds, you can still use it for cooking as it is fairly resistant to the heat.

Make sure to choose quality Extra Virgin Olive Oil. It has much more nutrients and antioxidants than the refined type. Plus it tastes much better.

Avocado Oil



The composition of avocado oil is similar to olive oil. It is primarily monounsaturated, with some saturated and polyunsaturated mixed in.

It can be used for many of the same purposes as olive oil. You can cook with it, or use it cold.

Coconut Oil



Coconut oil is semi-solid at room temperature and it can last for months and years without going rancid.

Recent studies suggest, that a small amount of virgin coconut oil can have health benefits. It is particularly rich in a fatty acid called Lauric Acid, which can improve cholesterol and help kill bacteria and other pathogens.

However, no long-term studies have been done to determine its full effects. It is still very high in saturated fat – so like with all fats - use sparingly.

Not all coconut oils are created equal - make sure to choose virgin coconut oil.

Canola Oil



Canola oil is derived from rapeseeds. Rapeseed oil was originally used for industrial purposes. A few Canadian scientists turned rapeseed oil into an edible oil. Canola stands for Canadian Oil.

The fatty acid breakdown of canola oil is actually fairly good, with most of the fatty acids monounsaturated, then containing Omega-6 and Omega-3 in a 2:1 ratio.

However, canola oil is highly refined and needs to go through **very harsh** processing methods before it is turned into the final product. Canola oil is also of concern because of genetic engineering. Monsanto, a huge biotech company, has manufactured rapeseeds that are genetically engineered to be resistant to the herbicide RoundUp. Today, about 90% of the world's canola crop is genetically modified. Personally – I stay clear of it.

Butter



Butter was also demonized in the past due to its saturated fat content. Recent studies claim that there is no evidence that saturated fat increases the risk of heart disease. However, other experts still caution on using too much of it. The key is to use it in moderation. Avoid margarine – it's highly processed and is the truly awful stuff.

Butter contains Vitamins A, E and K2. It is also rich in the fatty acids Conjugated Linoleic Acid (CLA) and Butyrate, both of which have health benefits. CLA may lower body fat percentage and butyrate can fight inflammation and improve gut health.

There is a downside for cooking with butter - it does contain tiny amounts of sugars and proteins and for this reason it tends to get burned during high heat cooking like frying.

Make sure to choose butter from **grass-fed cows**. This butter contains more Vitamin K2, CLA and other nutrients, compared to butter from grain-fed cows.

Fish Oil



Fish oil is very rich in the animal form of Omega-3 fatty acids, which are DHA and EPA. A tablespoon of fish oil can satisfy your daily need for these very important fatty acids.

The best fish oil is cod fish liver oil, because it is also rich in Vitamin D3, which a large part of the world is deficient in.

However, due to its high concentration of polyunsaturated fats, fish oil should **never** be used for cooking. It's best used as a supplement, one tablespoon per day. Keep in a cool, dry and dark place.

Flaxseed Oil



Flaxseed oil contains lots of the plant form of Omega-3, Alpha Linolenic Acid (ALA).

Many people use this oil to supplement with Omega-3 fats. However, unless you're vegan, I recommend that you use fish oil instead.

Evidence shows that the human body doesn't efficiently convert ALA to the active forms, EPA and DHA, of which fish oil has plenty. Due to the large amount of polyunsaturated fats, flaxseed oil should not be used for cooking.

Pumpkinseed Oil



Pumpkinseed oil is very low in saturated fat with a good balance of mono and polyunsaturated fats, including the omega 3 type, but less than other specialist oils like hemp and flaxseed.

Its distinctive dark green color looks great drizzled over food and tastes amazing in salads.

Unfortunately it is expensive - and available only from specialist shops. The best pumpkinseed oil is produced in Styria, a region of Austria.

The oil doesn't contain the same high levels of zinc, iron or magnesium that the seeds themselves are famed for.

It is best used cold – do not use to cook.

Nut Oils



There are many nut oils available and some of them taste awesome.

However, they are very rich in polyunsaturated fats, which make them a poor choice for cooking.

There is one exception, however, and that is macadamia nut oil, which is mostly monounsaturated (like olive oil). It is pricey, but it tastes awesome.

If you want, you can use macadamia oil for low- or medium-heat cooking.