

The Importance of Healthy Fats

What is fat?

Fat is one of the macronutrients and is necessary for survival. Fats, also referred to as lipids, are organic compounds made of carbon, hydrogen and oxygen. They are insoluble in water and chemically grouped into saturated, monounsaturated and polyunsaturated. The difference between the three types are in the chemical structure of their molecule, which results in solid saturated fats, liquid at room temperature and solid in cold temperature monounsaturated fats, and liquid at any temperature polyunsaturated fats. We need all three types of the fats for optimal health. Trans-fats are the denatured fats and are very unhealthy for us.

Essential Fatty Acids

These are the fatty acids that we cannot make in our body and must obtain them from diet. Those are: **Omega-6 and Omega-3 fatty acids.** In today's world people get too much of Omega-6 and not enough of Omega-3s. The ratio of the two should be around 3:1, but most people have 20:1 mostly due to the use of vegetable oils. This creates chronic inflammation and leads to many chronic health problems.

What are good sources of healthy fats?

Avocados	Fatty fish
Nuts	Coconut oil*
Seeds	Butter from grass-fed cows*
Extra Virgin Olive oil	Lard*
Grass-fed meat	Beef tallow*
Vegetables	Duck fat*
Pastured eggs	Ghee*
Full fat dairy	

* Saturated fats - excellent choice for cooking with, as they are very heat stable and do not get damaged while cooking. Use the rest of the fats that are liquid at room temperature for salad dressings and store them away from sources of heat, and light, as they get damaged easily. Never consume rancid oils.

Why do we need fats?

Digestion and satiety - stomach, duodenum, liver, gallbladder, pancreas and small intestine are involved in digestion. Fat slows digestion and stays around longer providing feeling of satiety and curbing sugar and simple carbohydrate cravings.

Energy - fats provide 9 calories/g as compared to proteins, which provide 4cal/g. Unlike carbohydrates, which need to be supplied constantly for energy, fat provides sustained energy release.

Cell membrane - they are essential for healthy cell membranes, which are responsible for all life

supporting processes and for protecting DNA.

Nervous system - myelin sheath, a protective layer of neuron axon is made of roughly 80% fats. Axons are responsible for transmitting electrical signals from the brain to the rest of the body to



make it function. Recent research has shown that healthy fats can help prevent stroke.

Vitamin absorption - all fat soluble vitamins that are essential to health such as A, D, E and K need fat for assimilation.

Mineral assimilation - saturated fats are needed for the calcium assimilation into bones.

Heart health - heart prefers fat for energy over carbohydrates.

Immune system - fats aid white blood cells in combating bacteria, viruses and fungi.

Hormone production - fats are the raw materials for hormone production and balance.

Insulation - helps control body temperature and adds padded protection around vital organs.

References:

HelpGuide.org (October, 2015). Choosing healthy fats. Retrieved from <http://www.whfoods.com/genpage.php?tname=faq&dbid=7#what>

Paleo Leap. (2015). The importance of fat. Retrieved from <http://paleoleap.com/the-importance-of-fat/>

The World's Healthiest Foods. (2015). A new way of looking at proteins, fats and carbohydrates. Retrieved from <http://www.whfoods.com/genpage.php?tname=faq&dbid=7#what>