

# Dietary Fat and Cholesterol

## Information:

Cholesterol is a fat-like substance that is produced naturally by the liver from fats and the breakdown of carbohydrate and protein. It is used in the body for making cell membranes & some hormones.

Because the body makes cholesterol, very little is needed from foods eaten.

*Cholesterol is only found in animal products!*

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Eating a diet high in saturated fat can increase the body's total cholesterol which may increase the risk for coronary heart disease, stroke etc.

There are different types of cholesterol with LDL (low density lipoprotein) and HDL (high density lipoprotein) being the two predominant ones.

LDL cholesterol leads to build up of cholesterol in the arteries and the higher the LDL level in your blood the greater your risk of developing heart disease.

HDL cholesterol carries cholesterol from other parts of your body back to your liver. High levels of HDL can lower your chance of developing heart disease.

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Fats and lipids play critical roles in the overall functioning of the body, such as in digestion and energy metabolism. Specifically, human fat stores are a major source of energy for skeletal muscle during aerobic exercise.

Fats and lipids also have important structural roles in maintaining nerve impulse transmission, memory storage, and tissue structure. It also helps to maintain body temperature and protect body organs from trauma

Fat soluble vitamins A, D, E, and K and carotenoids depend on fat for appropriate delivery and absorption. veggies and legumes.



## OPTIMAL PERFORMANCE AND HEALTH:

Maintain a moderate overall fat intake and be very cautious when offered products marketed to athletes claiming to "improve fat oxidation." Research clearly documents that exercise training is the best method to improve usage of fat---a trained individual is a better fat user than an untrained individual.

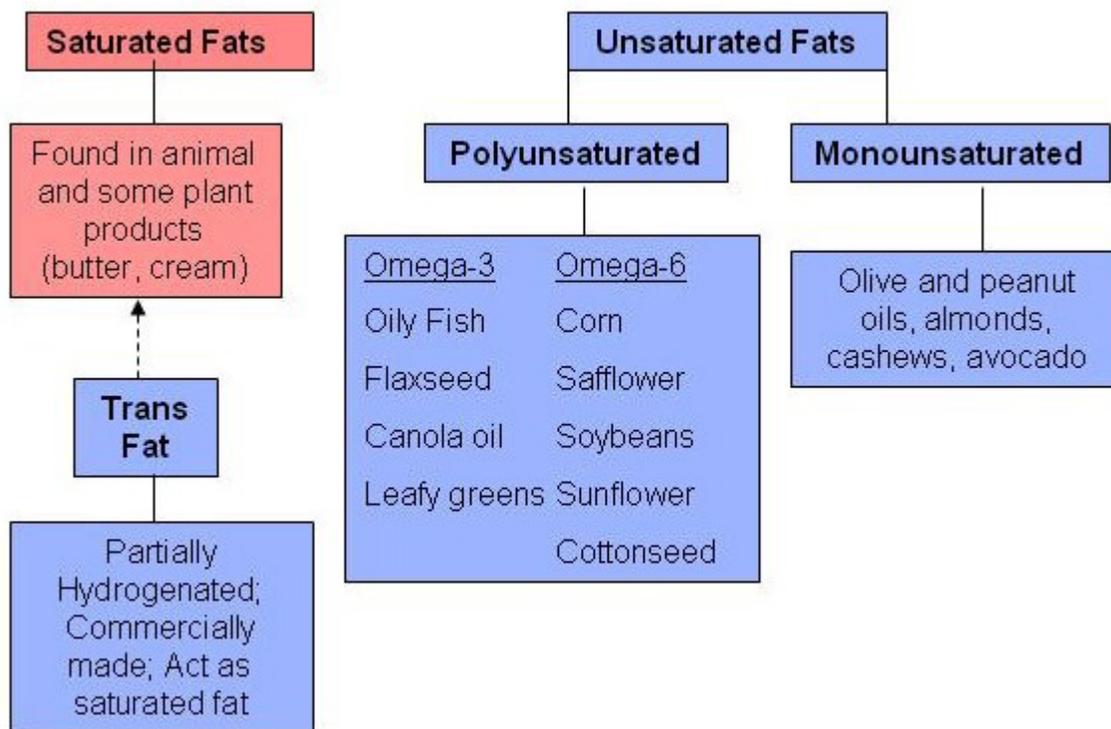
*This material was developed by professional sports nutritionists at the United States Olympic Committee. For more information and additional sport performance resources, visit:*

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## Application:

- Eat a lower saturated fat diet (less than 7% of total calories) by having no more than 1 gram of saturated fat per 100 calories.. Limit foods high in saturated fats such as fast food, commercial baked goods, snack foods and full fat meats and dairy products.
- Eat more monounsaturated and polyunsaturated fats.
- Eat foods with plant sterols and sterols which are found in fruits, vegetables, nuts, seeds and commercially prepared butter-like table spreads.
- Dietary fat is classified according to it's chemical structure. Short chained fatty acids are considered saturated fat and are usually solid in structure. Medium chained fatty acids are monounsaturated fats and tend to be more liquid in structure and long chain fatty acids are polyunsaturated fats and liquid in structure.
- Chain length and degree of saturation are important to consider because it determines function within the body, effect on health and determines method of digestion and absorption.

Begin to recognize where different types of fat occur within your food choices:



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