



Fat and Cholesterol



Health Promotion & Disease
Prevention Directorate

Cholesterol is a fatlike substance, found in animal products. Most of the cholesterol needed in our bodies is made in our liver but most people also get it from food. Even though most of us think that cholesterol is bad for health, our bodies need a certain amount of cholesterol everyday to make hormones and digest fat.

The chemical substance of the blood cholesterol is the same. However cholesterol in our blood is transported by different carriers the main ones being LDL (Low Density Lipoprotein) and HDL (High Density Lipoprotein).

Characteristics of HDL and LDL:

	LDL	HDL
What it does:	Takes cholesterol to the rest of the body including arteries.	Primarily takes cholesterol from the blood back to the liver for excretion.
Effect on risk of heart disease:	Excess amounts increase risk	High amounts reduce risk
Nickname:	“Bad” cholesterol	“Good” cholesterol

A high blood level of total cholesterol is one of the major risk factors for heart disease. The higher the levels of LDL cholesterol the higher the risk whilst high levels of HDL are protective.



Eating a small to moderate amount of fat in our diet is necessary. Fats are an important source of essential fatty acids and are important in the transportation of fat-soluble vitamins A, D, E and K.

However too much dietary fat leads to weight gain that in turn increases the risk of being overweight or obese. Obesity increases the risk of heart disease, atherosclerosis diabetes and some forms of cancer besides other health and psychological problems.

In foods there are different types of fat mainly monounsaturated fat, polyunsaturated fat, saturated fat and trans fat.

Monounsaturated and **polyunsaturated fats** are known as “heart healthy” fats. Olive oil, canola oil, dry-roasted almonds and cashews are all an important source of monounsaturated fats. Vegetable oil (good source of omega-6) and oily fish (good source of omega-3) for e.g. salmon, tuna and mackerel are rich in polyunsaturated fats.

Saturated fat is mainly “animal fat”. Research suggests that saturated fats may increase LDL “bad” cholesterol. When buying food products from the supermarket make it a habit of reading food labels and make sure to buy products low in fat, especially saturated fat.

Food Labelling

	High per 100g	Medium per 100g	Low per 100g
Fat (total)	Over 20g	between 3g - 20g	3g and below
Saturated Fat	Over 5g	between 1.5g - 5g	1.5g and below

N.B. A product containing a high level of fat and especially saturated fat should be avoided as much as possible. A product in the medium range can be taken occasionally whilst a product in the low range can be eaten in moderate amounts.

Sources of Saturated Fat	Healthier Options
Sausages, burgers, red meat and bacon	Rabbits, fish or poultry (without skin) e.g. chicken or turkey
Butter	Olive oil
Whole Milk	Semi-skimmed or preferably skimmed milk
Eggs*	Egg white
Cheese	Low fat or reduced fat cheese
Ice cream	Frozen yoghurt
Seafood	Fish (preferably oily)

* People suffering from a high blood cholesterol level when cooking with eggs should consider the possibility of reducing egg yolk compared to total egg-white used.

Trans Fats are artificially produced fats. They are formed when liquid oils are processed and turned into solid fats. Research shows that trans fats increase LDL (“bad”) cholesterol and decrease HDL (“healthy”) cholesterol and thus trans fats should be avoided as much as possible. A product is likely to contain trans fats if the food labelling list contains partially hydrogenated vegetable oil and hydrogenated vegetable oil.

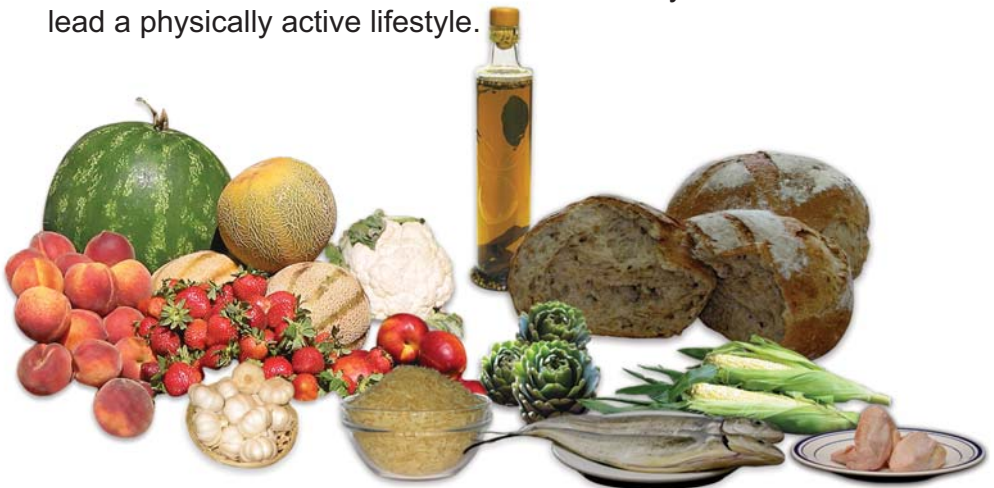
Trans fats are mostly found in fast foods, ready-made meals, fried foods, donuts, muffins, cookies, and other sweet and savoury pastries (even those locally produced) – unless otherwise stated by the manufacturer.

How are fats related to blood cholesterol?

Research shows that the type of dietary fat consumed in our diet can affect blood cholesterol. Total blood cholesterol levels and LDL cholesterol can be lowered by eating less fat, especially saturated and trans fats in meals and snacks while replacing the consumption of saturated and trans fats with polyunsaturated and monounsaturated fats. An important note is that high total blood cholesterol levels and LDL cholesterol levels increase risk of heart disease while lower levels reduce risk.

Quick ways to reduce cholesterol, saturated fats and trans fats in our diet:

- Increase intake of whole grain products, legumes, fruit and vegetables.
- Eat less sweet or savoury pastries, cookies, ice cream, cakes, fast foods and other high fatty foods.
- Use liquid vegetable oils, like olive oil instead of using solid fats such as butter.
- Substitute full-fat milk and dairy products with their low-fat counterparts.
- Eat red meat only occasionally, choose leaner cuts and reduce the portion size.
- Substitute red meat with other white meat like poultry and fish.
- Remove the visible fat prior to cooking.
- Remove the skin from poultry after cooking.
- Flavour foods with herbs instead of using topping or creamy sauces rich in fats.
- Exercise at least 30 to 60 minutes on most days of the week and lead a physically active lifestyle.



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