



What is cholesterol? It is a waxy, fat-like substance that's found in all cells of the body and is made by the body, or you can eat it. Only foods from animal sources contain cholesterol and it is found in eggs, meat, dairy products and shellfish. If you eat cholesterol your body will simply make less.

Why do we need cholesterol? Our bodies make steroid hormones from cholesterol: oestrogen, progesterone, testosterone, aldosterone and adrenal corticosteroid hormones. Cholesterol is also used to make bile acids and vitamin D. It is essential for cell membrane integrity and is secreted by glands into our skin to protect against dehydration and cracking.

I am sure most of us have heard of **LDL and HDL**. They are not two different types of cholesterol, as is commonly thought, but two different ways of transporting the cholesterol around the body. As cholesterol is fatty it would not be good if it were transported around the body in its basic form. So it is wrapped up in lipoproteins, the most common being low density lipoprotein (LDL) and high density lipoprotein (HDL). LDL transports the cholesterol around the body to the tissues where it is needed and the HDL takes any excess or spent cholesterol back to the liver for recycling. HDL is also anti-inflammatory and an anti-oxidant as well as being an anti-coagulant. So you can see why HDL is seen as the 'good' cholesterol but this does not necessarily mean that LDL is the 'bad' cholesterol, although LDL is the type associated with coronary heart disease and blocked up arteries.

Why does LDL cause problems? Oxidised cholesterol can cause fatty material to build up in your artery walls, particularly if you have a high level of LDL against a low level of HDL. This can be caused by eating a diet that is high in saturated fat, smoking, lack of physical activity, eating processed foods and high alcohol intake. There is also an inherited condition known as familial hypercholesterolaemia which causes exceptionally high levels, despite a healthy lifestyle.

So how can you ensure that cholesterol does not cause health problems? You need to stop your LDL levels becoming excessively high and becoming oxidised. Our bodies cannot break down cholesterol so it is important to eat plenty of fibre-containing foods such as oats to aid its elimination and prevent an unhealthy build up. If there is a lack of dietary fibre, 94% of cholesterol and bile acids will be reabsorbed and recycled – that is why low fibre diets increase blood cholesterol levels.

Only consume moderate amounts of alcohol, don't smoke, get some exercise and eat a healthy diet. Remove empty and refined calories from the diet, eliminate sugar, soft drinks and cut down on alcohol. Keep your consumption of red meats to a minimum. Stay away from hydrogenated or partially hydrogenated fats.

Eat plenty of sources of omega 3 oil including oily fish (such as salmon, sardines, mackerel), flaxseeds and avocado. Fresh fruit, salads and vegetables contain fibre and anti-oxidants and vital vitamins and minerals. Beans and legumes contain fibre and plant proteins. Eat dark, leafy greens, whole grains and a few nuts and seeds each day.

Finally, try and stay stress free, relax and have fun whenever you can.

(Please note, this is for information only and is not intended to replace any health care or advice that you get from your doctor or other health care providers.)