

# The importance of lowering cholesterol

**R**esearch shows a strong relationship between high cholesterol and heart disease. It is now clear lowering cholesterol levels in the blood has significant health benefits. This applies not only to people who have had a heart attack or stroke but to those who want to avoid such an event happening.

Cholesterol is a fatty substance in the blood and too much of it can block arteries. If coronary arteries are blocked a heart attack may occur. If arteries to the brain are blocked it may be a stroke, or if arteries to the penis are involved, the result may be erectile impotence.

High cholesterol is a main risk factor in heart disease. Other major risk factors are:

- *smoking*
- *high blood pressure*
- *a family history of heart disease*

Lesser risk factors are:

- *diabetes, obesity*
- *lack of physical activity*
- *stress*

We can't do anything about the genes we are born with, but we can reduce the other risk factors, which all add to the risk of heart disease.

## Measuring cholesterol

To measure cholesterol, your GP will organise tests on a sample of your blood. The best time to give a sample is early in the morning before you eat breakfast.

*Four types of fatty substance are measured:*

1. Total cholesterol
2. HDL (high density) cholesterol (The Good Fat)

3. LDL (low density) cholesterol (The Bad Fat)

4. Triglycerides (now also thought to be an important risk factor if too high)

The aim is to keep the total cholesterol down within normal limits while also keeping LDL cholesterol down. HDL cholesterol has a protective effect on the heart and higher levels are better.

## Lowering cholesterol

There are two ways of lowering cholesterol: dietary change and medication. Reducing cholesterol through diet is preferable as it reduces the need for medication. However, some people may do all the right things with their diet and still have high cholesterol due to their genetic makeup. They will require medication to reduce the risk of heart disease and will be helped by exercising.

## Cholesterol lowering diet

Reducing total fat intake in the diet will lower blood cholesterol.

However, some fats in the diet are hidden, and recent evidence suggests that some fats can be helpful in lowering cholesterol. So when it comes to fats (and that includes oils) there are goodies and baddies.

## The baddies

Saturated fats are the fats found in meat and dairy products but also quite surprisingly in coconut and palm oil. So be careful at Asian restaurants with food cooked using these oils. Asian food is otherwise

usually low in fat.

- Cut the fat off meat before eating and grill or barbeque rather than fry in oil.
- Avoid the skin on chicken.
- Use low fat dairy products.
- Major fast food companies fry chips in highly saturated beef or palm oil fat, so avoid where possible.

## The goodies

Unsaturated fats can be divided into mono and poly unsaturated fats.

## Monounsaturated fats

Found in olive oil and canola oil, these fats reduce heart risk when used instead of saturated fat. It is well known the Mediterranean diet, which is high in use of olive oil, is associated with low heart disease risk. This diet also uses plentiful vegetables, fruit, legumes and whole-grains, which are also recommended.

## Polyunsaturated fats

Examples of these are oils found in sunflower, safflower, corn, sesame and soy bean.

The other good news is that polyunsaturated fats are found in generous quantities in all seafoods and these foods are recommended. This is contrary to advice from the past when prawns and other shellfish were avoided because of their cholesterol content. But they are also high in a polyunsaturated fat called omega 3 fatty acid, which is good for you. Cholesterol in prawns is

not thought to raise blood levels of cholesterol. Saturated fats can raise cholesterol.

So don't forget that all the good can be undone if the seafood is battered and fried in saturated fat or smothered in mayonnaise.

Because all fats are high in energy, we should use even good fats such as olive oil sparingly, particularly if overweight or obese.

## Medication

Several medications are available, but a group of drugs called statins are commonly used, as they are effective at reducing cholesterol. They are usually free of side effects. They involve taking a tablet every day on a long term basis. They can help prevent heart disease and protect people who have had a heart attack or have angina (heart pain) from further complications.

## Exercise

Exercise is also an important weapon in the fight against heart disease. It raises the good HDL cholesterol in the blood. It is now recommended that walking at a comfortable pace for 30 minutes every day (not necessarily all at once) is beneficial.

Add to this as much incidental exercise as possible, for example, walking to the shop, up the stairs, gardening, and so on. Not only does this improve cholesterol levels, it helps control weight.