

Lowering Cholesterol

Here is some information to help with understanding about the effect of a high cholesterol on your body and how to lower your cholesterol through diet. Please consult a dietitian for more specific and personalised advice.

Cardiovascular Disease (CVD)

Cardiovascular disease, such as heart disease, stroke and blood vessel disease, is the leading cause of death in New Zealand. There are many risk factors that lead to cardiovascular disease.

- ☹ Some factors we cannot change, e.g. our genes, our sex and getting older.
- ☺ There are many lifestyle factors we *can* change, e.g. enjoying a healthy diet, being a healthy weight, keeping fit, managing stress and not smoking.

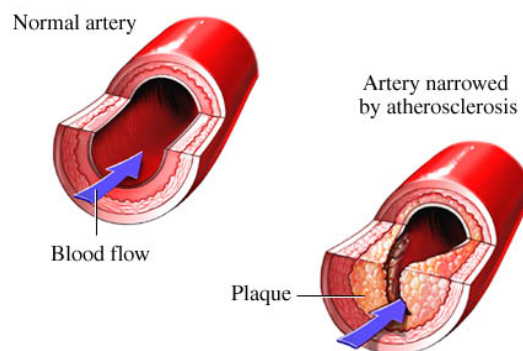
Artherosclerosis

Your arteries are the major blood vessels that carry blood and nutrients around your body. It is important to avoid clogging up your arteries with cholesterol, fatty deposits and plaque. This hardening and narrowing of the arteries is known as **atherosclerosis** and can cause high blood pressure. Symptoms of heart disease include;

Angina - chest pain caused from the heart not getting enough blood.

Claudication - a blocked blood supply to the leg making it difficult to walk.

Arteries become damaged as they clog, like a rusty pipe blocked with scale and sludge. Eventually an artery can fully block up and cause a **heart attack** or **stroke**.



High cholesterol (hyperlipidaemia)

Cholesterol is a white, waxy substance found in all animals (including humans) and foods made from animals. The body needs some cholesterol to make hormones, cell membranes and bile acids. The liver acts like a control centre and can make cholesterol from what's already in our body or from the food we eat.

Too much cholesterol in the body becomes a problem.

Cholesterol can be divided into different types, according to how it is moved around the body.

LDL cholesterol

“**Lousy cholesterol**” known as low-density lipoprotein. LDL cholesterol moves slowly around the body, clogging artery walls. In our diet saturated fat increases LDL cholesterol.

HDL cholesterol

“**Helpful cholesterol**” known as high-density lipoprotein helps excess cholesterol to be processed and excreted out of the body. Healthy monounsaturated fat and exercise increase HDL cholesterol.

Triglyceride

“**The other cholesterol**” makes most of the fats in our diet. Things that can increase triglyceride include a high saturated fat or high carbohydrate diet, a high waist measurement, high blood glucose levels or by drinking excess alcohol. To lower your triglyceride level moderate your portion sizes, be a healthy weight, eat regular oily fish, keep fit and stop or cut right back on alcohol.

Eating for a Healthier Heart

- ♥ **Moderate your fat intake, especially saturated fat.** Eat less red and processed meats, full fat dairy products such as butter, cream, ice cream or cheese, processed foods containing palm oil, pastries, chocolate, biscuits, cakes, coconut cream and take-aways.
- ♥ **Use seed and nut oils** in small quantities, e.g. olive, avocado, canola, sunflower, rice bran, soya bean, sesame, peanut oil and spreads made from these oils. Some spreads contain **plant stanols or plant sterols** that can actually lower cholesterol absorption.
- ♥ **If you're overweight lose 10% of your body weight** and keep that weight off. Have a belly button waist circumference under 100 cm for men and under 85 cm for women.
- ♥ Include more fish, especially **oily fish** (sardines, salmon, tuna) for healthy **omega-3 oil**.
- ♥ Include more **beans**, peas, pulses, lentils and chickpeas for a low fat, high fibre alternative to meat.
- ♥ **Eat 2+ servings fruit and 3-6 servings of vegetables every day.** Choose a range of colours for a variety of protective antioxidant nutrients.
- ♥ **Eat small servings of “smart carbs”,** i.e. **whole grain breads and cereals** as they've been shown to be protective against heart disease.
- ♥ **Unsalted nuts are heart-healthy** – choose just ½ handful for a snack if you're trying to lose weight.
- ♥ The **Mediterranean Diet** is rich in fresh fruits and vegetables, fish and olive oil and has a small daily dose of fine red wine. There is no processed food. This diet is thought to be one of the healthiest in the World.



Information prepared by Sharon Carey, Dietitian