



## Cholesterol

High blood cholesterol is one of the major risk factors for Coronary Artery Disease (CAD), a disease affecting the arteries of the heart, leading to Angina and Myocardial Infarction (heart attack). CAD is a leading cause of death in South Africa and is directly related to a Western lifestyle and diet. Fortunately it can be controlled and decreased to avoid a major event such as a heart attack.

### What is Cholesterol?

Cholesterol is a fatty substance produced mostly in the liver but it is also supplied by our diet. Cholesterol is important for our bodies as it helps build cell membranes and is a key component in hormones. However, too much cholesterol increases your risk of CAD. Cholesterol is a hydrophobic substance – this means that it is not water soluble and cannot dissolve in our blood but rather collects in your arteries and blocks them. In order for it to be carried in our blood, there are special carriers to do this. The two main types of carriers are LDL cholesterol and HDL cholesterol.

### LDL (“Bad”) Cholesterol

LDL cholesterol brings cholesterol to the body’s cells. The cells take the cholesterol they need and the excess cholesterol remains in the blood. Because cholesterol cannot dissolve in the blood, it builds up on the artery walls and gradually clogs up and blocks the artery. This can eventually lead to a heart attack.

### HDL (“Good”) Cholesterol

HDL cholesterol takes excess cholesterol the body doesn’t need back to the liver where it is eliminated. This type of cholesterol is considered good because it doesn’t clog up your arteries and block them. HDL cholesterol is important for keeping your heart healthy.

### Why Should I Care About My Cholesterol Levels?

High cholesterol levels are very common and can be attributed to low physical activity, smoking, being overweight, age and family history. High blood cholesterol levels can cause blood vessels to narrow or gradually block up. This build-up of cholesterol can happen very slowly. As the blood vessels become narrower, the flow of blood to the heart muscle is reduced. When blood flow is restricted, chest pain (angina) can result. When blood flow to the heart is severely restricted or stops completely, a heart attack can occur.

### How Can I Tell if I Have High Cholesterol Levels?

Unfortunately, high cholesterol levels are very common with 60-70% of urban South African adults having moderate to high total cholesterol levels (>5 mmol/L). There are very few symptoms and most people don’t know their levels. The only way to find out what your

levels are is to have them checked. This will be done during your Kaelo Health Screening. Recommended cholesterol levels are as follows:

- Total cholesterol <5.2 mmol/L
- LDL- cholesterol <4mmol/L
- HDL- cholesterol >1 mmol/L.

### How Can I Reduce My Cholesterol Levels?

Fortunately, you can improve your cholesterol levels and keep them at the right level by eating a healthy diet, exercising, stopping smoking and living a healthy life. A healthy diet is probably the most important component of this.

An important aspect of a healthy diet is a low intake of saturated and trans fats (bad fats). Polyunsaturated or monounsaturated fats (good fats) can be used to replace bad fats. Plant sterol enriched spreads (like some margarines) have been clinically proven to lower LDL cholesterol levels.

Saturated and trans fats include fats found in fatty meat, full fat milk, cheese, butter and junk food. Polyunsaturated fats include vegetable oils and spreads made with sunflower and corn oil and oily fish like herring, mackerel, tuna, sardines and salmon. Monounsaturated fats are found in olives and avocados.

A healthy diet is not the only way to decrease cholesterol. You should also stop smoking, lose weight and exercise regularly. It's important not to try and change all aspects of your health simultaneously. Rather take small steps to make lasting changes.

### Familial Hypercholesterolaemia

Familial Hypercholesterolaemia (FH) is the inheritance of high blood cholesterol levels, leading to a very high risk of heart disease in middle adulthood years. It's a very common inherited condition, especially in certain groups such as Afrikaans, Indian and Jewish communities. On average, one in 100 people in these communities will have FH. If you fall into one of these groups, it's important for you and your family to know your cholesterol levels and to receive treatment if necessary.

### **Healthy Tips**

- Eat less saturated and trans fats
- Choose soft vegetable-based spreads that are rich in plant sterols and oils
- Choose low-fat or fat-free dairy products and lean meat
- Eat less pre-prepared biscuits, pastries and cakes
- Try eating fish regularly – aim to eat oily fish at least twice a week
- Eat plenty of fruit, vegetables and legumes (like butter beans, red kidney beans and lentils) – choose at least five portions each day
- If you drink alcohol, do so in moderation (a maximum of one drinks a day for women and two drinks a day for men)
- Stop smoking
- Get more physically active – aim to do at least 30 minutes of moderate activity regularly
- Learn to control your stress and take time out to relax.

Source: Kaelo (Pty) Ltd