

## **HYPERCHOLESTEROLAEMIA (HIGH CHOLESTEROL)**

***This information sheet is for your information and is not a substitute for medical advice. You should contact your doctor or other healthcare provider with any questions about your health, treatment or care.***

### **What is cholesterol?**

Cholesterol is a waxy, fatty substance in the blood which plays an important role in our cells and hormones. The liver produces all the cholesterol that the body needs, but is encouraged to produce excess amounts by the fat (particularly saturated fat in meat and dairy products) that we eat.

### **Why is high cholesterol bad for you?**

A high cholesterol level is seen as dangerous to our health because excess amounts of fat are deposited on the inside of arteries. If blood cholesterol continues to be high, more fatty material is deposited, narrowing the artery even more, resulting in restricted blood flow to the heart and other areas of the body. The restricted blood flow encourages formation of a blood clot, which may cause the final blockage. If blood flow is blocked off completely, it can result in a heart attack or stroke.

### **'Good' and 'bad' cholesterol**

High-density lipoprotein (HDL) cholesterol, also known as the 'good' cholesterol helps clear excess cholesterol from the blood back to the liver. The lower the HDL level, the higher the risk for heart disease.

Low-density lipoprotein (LDL) cholesterol, the so-called 'bad' cholesterol is found in the fatty deposits in the arteries and can contribute to heart disease.

If you have high total cholesterol, it is important to know what type of cholesterol is high. It is better to have a normal or low LDL and high HDL cholesterol than a high LDL and a low HDL. Your doctor can perform this simple test.

### **What are the causes of high cholesterol?**

For most people, their cholesterol level is determined by both hereditary and dietary factors. Some people have naturally high blood cholesterol levels, due to a hereditary trait known as familial hypercholesterolaemia. In South Africa this is very common in the Afrikaner, Indian and Jewish communities. It is estimated that about 1 in 75 individuals in these groups may be affected. These people often have a family history of premature heart disease (heart attack or sudden death before the age of 55 in men and before 65 in women).

### **What are the risk factors for high cholesterol?**

- *Genetics* – family medical history (especially of heart attacks or very early heart-related deaths).
- *Age* – between the ages of 20 and 65 years, total cholesterol level steadily increase, whereafter they decrease slightly in men and tend to plateau in women.
- *Sex* – women have a higher HDL cholesterol level than men and therefore have less risk of developing heart disease. With menopause however, the LDL increases and their risk equals that of men.
- *Diet* – a diet too high in saturated fat, cholesterol and refined sugars e.g. white bread, cake and sweets, can increase cholesterol levels.
- *Weight* – overweight people tend to have higher LDL and lower HDL levels and thus have an increased risk.
- *Exercise* – the more active you are, the higher your HDL levels (and the other way around). Exercise also helps control weight and blood pressure.
- *Smoking* – can contribute to increased levels.
- *Stress* – has been associated with increased levels.
- *Alcohol* – excess intake may contribute to increased levels.

**How is high cholesterol treated?**

- Lifestyle modification that involves dietary changes and physical exercise
  - Please discuss the appropriate dietary changes with your dietician.
  - In general, reduce your fat intake.
- Lipid-lowering medication
  - There are criteria that assist the doctor in the decision to commence treatment with this type of medication.
  - Your doctor will advise the most appropriate medication for your treatment.

Talk to your doctor if you have any questions regarding the correct use of medication or any aspect of your condition.

**Reference**

1. MOMENTUM HEALTH SOLUTIONS. Clinical Policy Unit. *Hyperlipidaemia – dyslipidaemia policy*.

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