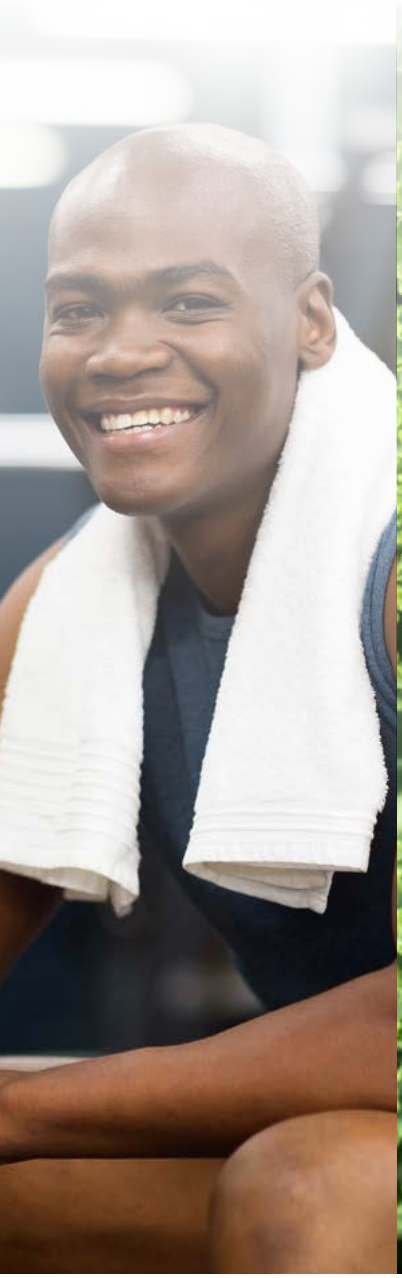
gems
Government Employees
Medical Scheme

Cardio Care Programme

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CARDIO CARE PROGRAMME

INTRODUCTION

What is coronary heart disease?

It is a disease that blocks or narrows the arteries that supply the heart muscle with the necessary blood and oxygen to function.

What blocks or narrows the arteries of the heart?

Arteries are blood vessels that carry vital oxygen-rich blood to the body. A disease called atherosclerosis narrows or blocks the arteries by hardening them.

This can be caused by factors such as your age or your genes or the following risk factors:

- Smoking
- High blood pressure
- High cholesterol
- Poorly controlled diabetes
- Being overweight
- Not exercising

These factors combine to result in cholesterol (a type of fat in the blood) being deposited within the walls of the arteries.

Cholesterol deposits are called plaques. In addition to narrowing the artery, plaques also damage the artery wall. Reducing or removing risk factors can stop these plaques from enlarging.

This means that heart disease can be prevented from getting worse.

AIMS

Prevent a heart attack

If you already had a heart attack, you can prevent another one by doing the following:

1. Don’t smoke.
2. Control your blood pressure, with medicine if prescribed.
3. Have your cholesterol checked and control it with diet and medicine if necessary.
4. Take aspirin daily (unless your doctor has instructed you not to).
5. Follow a low-fat diet.
6. Discuss your exercise options with your GP before starting with exercise.
7. Strive to maintain a healthy weight. Lose weight if you are overweight by following a healthy diet and exercise programme.
8. Keep diabetes under control if it is present.
9. Follow up regularly with your doctor and follow his or her instructions.
10. Report any changes in your condition promptly.

Your individualised treatment goals on pages 13 and 14 will identify areas that you need to focus on. Work at achieving these goals.

CORONARY HEART DISEASE

Angina

Even with a big blockage of the artery, there may still be enough blood flow to the heart when you are resting.

However, when your heart beats faster (for example, when you are active or under emotional stress), it needs more oxygen-rich blood than the narrowed artery can supply.

When this happens, you may feel pain, discomfort or tightness over your chest, which is called angina. Permanent damage to the heart muscle does not occur with angina.

Heart attack (Myocardial infarction – MI)

If an artery suddenly closes completely and there is no blood flow, part of the heart muscle supplied by the artery will die.

A heart attack occurs when blood flow to a section of heart muscle becomes blocked. If the flow of blood isn't restored quickly, the section of heart muscle becomes damaged from lack of oxygen and begins to die.

When the injured area heals, it will leave a scar which will affect how well the heart can pump afterwards. If there is enough good muscle left to pump properly, recovery can be almost complete.

Coronary artery disease can be managed by applying the following principles:

1. Stop smoking

A smoker is more than twice as likely to have a heart attack as a non-smoker as smoking is a major cause of blocked arteries.

Stop smoking now

The risk of heart attacks and sudden death drops by half within one year after quitting. After two years, the risk associated with previous smoking is almost zero!

2. Control high blood pressure

Untreated high blood pressure can lead to serious medical problems, such as:

Hardening of the arteries, coronary heart disease and strokes

High blood pressure makes the arteries thick and stiff. This speeds up the build-up of cholesterol in the arteries. High blood pressure may also cause arteries in the brain to burst.

Heart failure

High blood pressure causes the heart to work harder and weaken over time. Eventually the heart fails to pump normally causing fluids to back up into the lungs (causing breathlessness).

Kidney damage

High blood pressure can cause proteins to wrongfully leak into the kidney so that protein ends up in the urine. This is called proteinuria. Long-term proteinuria damages the filtering component of the kidney, which can rapidly lead to acute kidney injury.

Many of the cough/cold/sinus medicines, some painkillers and antacids that you can buy without a prescription, can increase your blood pressure. Tell your pharmacist that you have high blood pressure and find out which medicine is safe for you to use.

3. Manage high cholesterol levels

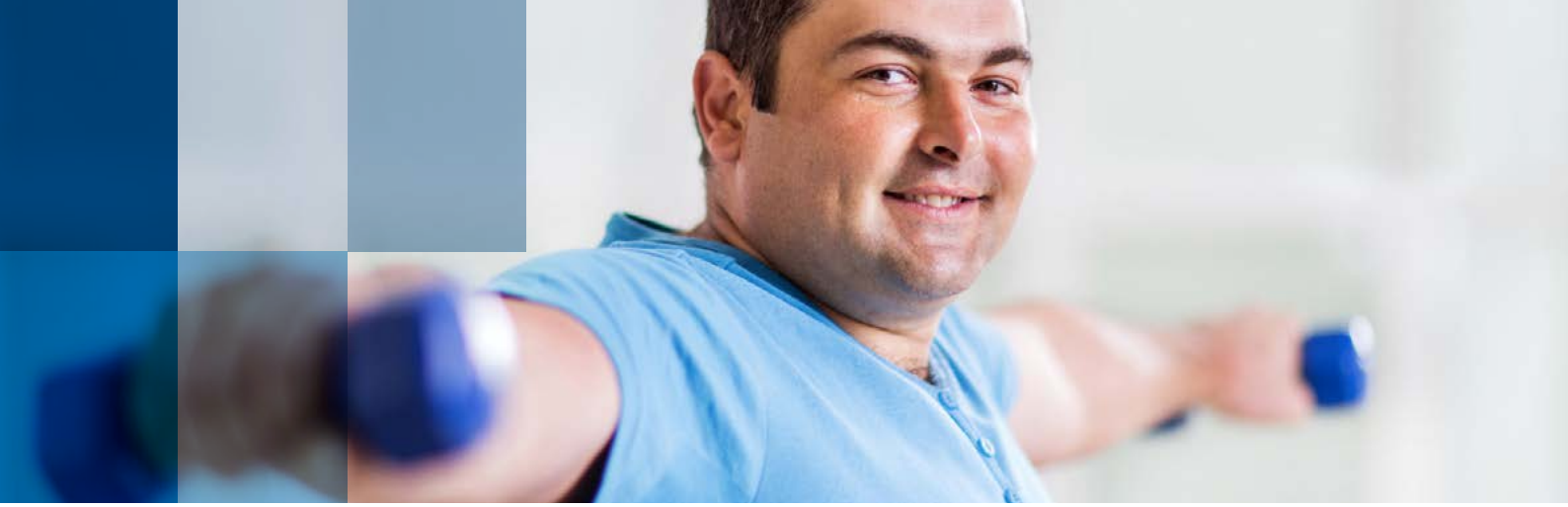
What is cholesterol?

Cholesterol is one of the fats in the bloodstream. There is both ‘bad’ cholesterol (LDL cholesterol), which causes blockage of the arteries, and good cholesterol (HDL cholesterol), which helps to prevent blockage of the arteries.

Everyone needs a certain amount of cholesterol, but the problem arises when there is too much ‘bad’ cholesterol in the blood.

Why should high levels of cholesterol be treated?

Death from heart attacks can be reduced in people with heart disease by lowering high cholesterol levels. Follow a low fat diet and, if prescribed, use cholesterol medicine.



4. Start exercising

Not exercising is a major risk factor for coronary heart disease. It also contributes to other risk factors. Lack of exercise can lead to:

- Putting on weight
- Developing high blood pressure
- Low levels of ‘good’ (HDL) cholesterol

Even moderate physical activity, such as walking fast, is good for you when done regularly. Work out up to a total of 30 minutes per day or longer, three to five times a week.

5. Eat for health

If you are overweight, losing 5 to 10kgs can drop your blood pressure, reduce ‘bad’ cholestrol levels and take the strain off your heart.

- Base meals around a starchy food (e.g. bread, cereal, oats, mielie meal, rice, pasta, and potatoes).
- Eat fruit and vegetables every day, especially green vegetables and salad.
- Avoid fat, especially animal fat. Cut all fat off meat and remove chicken skin. Eat more chicken and fish than red meat.
- Do not fry food – grill, steam, boil or bake it.
- Choose low-fat dairy products.
- Eat less butter, hard brick margarine and cheese.
- Cut down on sugar and sugary foods, such as sweets, chocolate, cake and biscuits. Buy sugar-free drinks.
- Eat less salt by eating less processed food. Try not to add salt to food after it has been cooked.

ASPIRIN

Aspirin helps to prevent blood clots from forming and 'thins' the blood when taken in low doses, such as 75-150mg (for example, half a Disprin).

People with coronary heart disease who take aspirin daily have fewer heart attacks and strokes. If you have coronary heart disease, you should be on aspirin or another type of blood thinner.

However, please note that some people cannot take aspirin because they are allergic to it or have a bleeding ulcer. You must therefore always speak to your doctor before taking aspirin.

When can I stop taking medicine?

Some illnesses can be cured, but problems like high blood pressure, high cholesterol, and diabetes can only be controlled. This means life-long management.

Medicine can be effective, but it only works while you're taking it. You may have to take this medicine for the rest of your life.

Changes in your lifestyle, such as weight loss and exercise, may make it possible to lower the dose or even stop certain medicine. However, this must only be done under the supervision of your doctor.

Also, do not change the dose of your medicine without telling your doctor. Speak to your doctor if you experience any side effects from your medicine.

Take pain or discomfort seriously. Symptoms of a heart attack are generally worse than when you are having angina.

- Chest pain is worse and lasts longer.
- There is often a feeling that something is seriously wrong.
- The angina pill or spray offers little relief.
- Sweating is common, and there may be nausea, vomiting and shortness of breath.

Remember that a heart attack may be confused with something else, such as indigestion that is "just a little worse than usual". The best time to treat a heart attack is as soon as possible to limit damage to the heart muscle. If you think you may be having a heart attack, get to the hospital immediately.

CARDIO CARE MANAGEMENT PROGRAMME

The objective of the Cardio Care Programme is to form a partnership between you, your family doctor and your other healthcare service providers. We will help you to learn more about health issues that can affect your heart.

How do you become involved with your treatment?

This booklet explains the basics about heart disease and is based on information from the latest clinical studies. It tells you how to prevent and live with heart disease.

Take this booklet to your doctor

- Discuss your individualised treatment goals with your doctor, completing page 12 and 13.
- Take this booklet along whenever you visit your doctor so that he or she can go through these results and see how you are doing.
- Your doctor will be able to record the results and tests he or she performs on page 10 to 12.

What will we do for you?

- We will contact you from time to time to ask about your health and to gather the monitoring information from your booklet.
- We will use the information your doctor has written in your booklet to decide how best we can help you.
- Our Cardio Care Programme nurses will help with any information you need to improve your health.
- Your Cardio Care team helps monitor your care. For day-to-day assistance with any queries, please call the Cardio Care number on 0860 109 900 (Member Care Line).

MONITORING

The following should be monitored with your doctor's help during follow-up visits:

Blood pressure and weight

This is done at every visit.

BP (sitting BP, after patient has rested for five minutes)	Date					
	Result					
Weight	Date					
	Result					

Cholesterol (mmol/l)

Preferably a 'fasting' level should be done yearly. Fasting is when you abstain from eating, drinking and taking medicine starting at least nine hours before taking the test.

	Total cholesterol (<5)	LDL cholesterol (<3)	HDL cholesterol (<0.9)	Triglyceride (<2.3)
Date				
Result				

Monitoring if you have diabetes

HbA1c

This is a test that shows the average level of blood sugar (glucose) and how well you are controlling your diabetes. An HbA1c is done two to three months after there has been a change in management/medicine, three to four monthly if you are on insulin, and six monthly if you are not and your glucose control is stable.

Date				
Result				

Foot checks

Thorough foot checks are advised at least yearly. A diabetic who experiences foot problems should visit a podiatrist.

Foot examination:	Date		Date		Date	
	Left	Right	Left	Right	Left	Right
Bone deformity						
Nails						
Skin						
Pulses						
Sensation						
Amputation						

Eye checks

Yearly eye checks (dilated eye examinations) are advised.

Booking dates		
Date	Time	Doctors

My individualised treatment goals to be filled in by my doctor:

S.A. guideline (optimal goals in brackets)	My goal	Notes
Blood pressure (<140/90 mmHg)		Aim for even stricter target BP e.g. <130/85 mmHG in those with diabetes, heart failure or renal insufficiency (Cr > 220 mmol/l)
Weight loss (kg)		Aim for a weight loss of 5-10% if overweight i.e. BMI > 25. If your BMI is over 25 you are overweight. BMI = weight in kilograms/height in metres X 2
Smoker Y / N		Stopping smoking reduces the risk of death from coronary heart disease by half

Fasting cholesterol

N.B. If you've previously suffered from a heart attack, lipids may take six weeks to stabilise. Lipids are oils that carry out the body's essential functions such as helping to clear blood vessels.

S.A. guideline (optimal goals in brackets)	My goal	Notes
LDL cholesterol (< 3)		Aim for reduction of at least 33% if the primary goal cannot be achieved
Total cholesterol (< 5)		Aim for reduction of at least 33% if total cholesterol (< 5) the primary goal cannot be achieved

If I have diabetes

S.A. guideline (optimal goals in brackets)	My goal	Notes
Finger prick blood glucose (goal = near normal)		
Fasting (4–6)		
Random (4-8)		
HbA1c (< 7)		Additional action must be taken to lower the HbA1c if it is > 8%

Targets for home glucose monitoring

1. When/how often?	
2. What time of day?	

It may sometimes be unwise or impossible to achieve all optimal goals set out in this guide

Visit **www.gems.gov.za** for more information
or call us on **0860 00 4367**

If you would like more information about cardio care please do not hesitate to call us on the **GEMS MEMBER CARE LINE 0860 109 900**.

Always discuss all health and treatment issues with your **doctor**.

Please note that this information provided by our Registered Healthcare Professionals is for educational, communication and information purposes only and is not intended to replace or represent medical advice or treatment.