

# UNDERSTANDING & LIVING WITH ANGINA

For patients, their families and friends





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## Introduction

Thousands of Australians have angina and have learnt to lead productive lives. The key to this quality of life is understanding the condition. This includes knowing how to make basic lifestyle changes and being aware of the various medical treatments for angina. We hope this booklet will provide you with some information to help you enjoy your life.



## The Heart

The heart is a muscular pump. It has two main pumping chambers. One pumps blood to the lungs to be oxygenated. The other pumps the oxygenated blood to the muscles and tissues of the body.

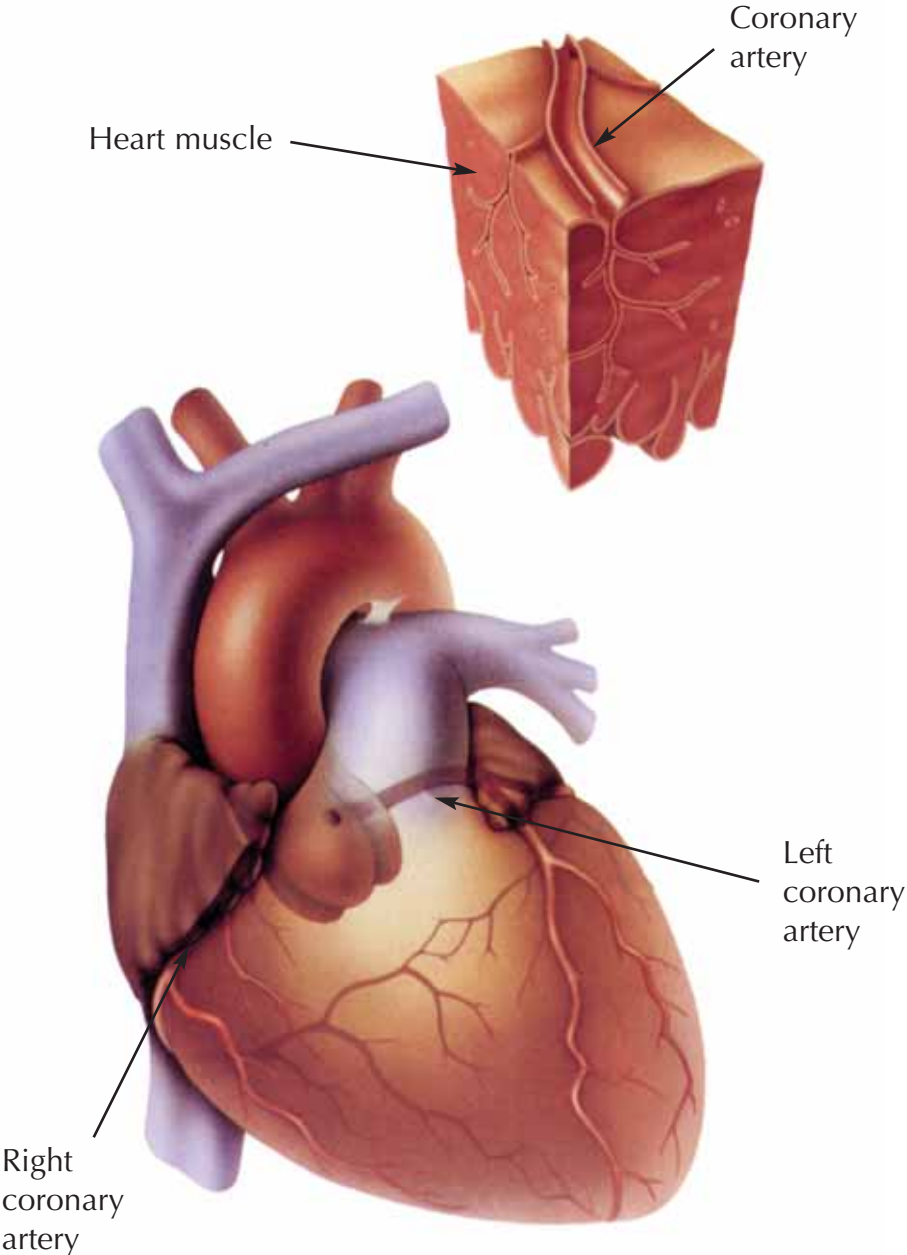
To do all this, the heart itself needs oxygen. It receives this oxygen from two special blood vessels called the right and left coronary arteries.

### What causes angina?

The main cause of angina is a narrowing of the coronary arteries which supply oxygen to the heart, see page 7. This is usually due to deposits of fats and cholesterol in the arteries. As a result of this narrowing of the arteries, sometimes the heart muscle cannot receive sufficient oxygen. This lack of oxygen causes pain in the chest.

This often happens when the heart needs more oxygen than usual, such as during physical exercise or times of emotional stress.

# A healthy heart



## What is angina?

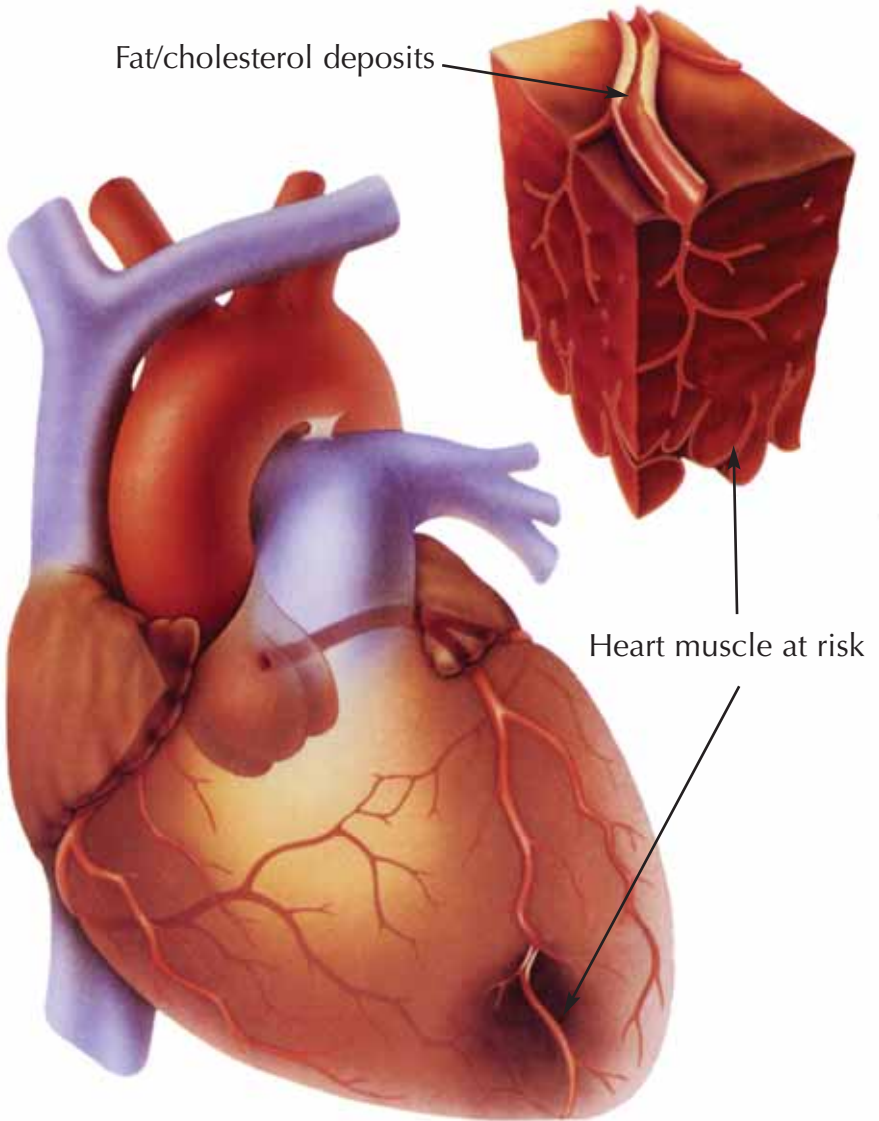
Normally, a person is not conscious of his or her heart but if the heart is not getting enough oxygen, discomfort is felt. This is called angina. Angina does not mean that your heart muscle is damaged, it is not a heart attack. The discomfort of angina has been described as "pressure", "tightness", "heaviness" or "like indigestion".

While it is usually felt across the chest, it can spread to the neck, jaw, back, shoulders and arms (usually on the left side of the body). It usually occurs with exercise or emotional upset and often goes away with rest.

Remember, though, that chest pain is not always angina. It may be caused by something else and have nothing to do with the heart.

To find out whether or not your chest pains are angina, your doctor will need to run some tests.

## An unhealthy heart



## Testing for angina

Your doctor will need to know exactly how and when you suffer pain or discomfort in the chest. He or she will also need to know what makes it worse and what keeps it at bay. The right diagnosis must be made before the correct treatment can be given so you must tell your doctor exactly how you feel. Several medical examinations are also needed to diagnose angina correctly. Your doctor may listen to your heart and lungs, take your blood pressure, take some blood tests and an ECG (ElectroCardioGram, a measurement of heart muscle performance). An ECG may be taken at rest or during exercise.

If your doctor feels it is necessary, he or she may also take an X-ray of your coronary arteries to see if they are clogged up. This is called an angiogram.

## Coping with an episode of angina

If your angina has been brought on by physical exertion, stop and rest immediately. This will often reduce the discomfort.

Your doctor may recommend you carry quick-acting angina tablets with you at all times. These tablets widen the coronary arteries, improving the blood flow to the heart muscle. They also reduce the heart's demand for oxygen.

When you feel an angina attack coming on, place one of these tablets under your tongue, then let it dissolve. Initially your doctor may recommend you take only 1/2 a tablet as some people experience dizziness or headache, which should disappear after the first few doses.

If taking 1 or 2 tablets (not taken both at once) and resting quietly over a period of 10-15 minutes does not relieve the chest pain, contact your doctor. Do not take larger doses in an attempt to obtain faster relief.

## Testing for angina

If you experience any of the following signs, do not hesitate

- CONTACT YOUR DOCTOR OR AMBULANCE.

- Angina pain that lasts more than 10-15 minutes
- Angina pain that is more severe than normal
- No relief from pain after putting quick-acting tablets under your tongue
- Angina becoming more frequent for no apparent reason
- Angina pain coming on at rest for the first time
- New symptoms such as sweating and shortness of breath



## Helping yourself

### To help reduce angina long term:

- Choose a healthy low-fat diet to help control your cholesterol, weight and blood pressure
- Have your blood pressure and cholesterol levels checked regularly
- Quit smoking if you are a smoker
- Lose weight if you are overweight
- Do not drink more than 2 glasses of alcohol a day
- Exercise regularly, moderate physical exercise can reduce angina
- Try yoga, tai chi or other relaxation techniques

## What about sex?

- Resume sexual activity slowly. When your angina is well controlled you can return to your previous level of sexual activity
- Try positions that require less exertion
- You can take a quick-acting tablet prior to having sex
- Avoid intercourse if you are very tired, have consumed too much alcohol or have just eaten a large meal

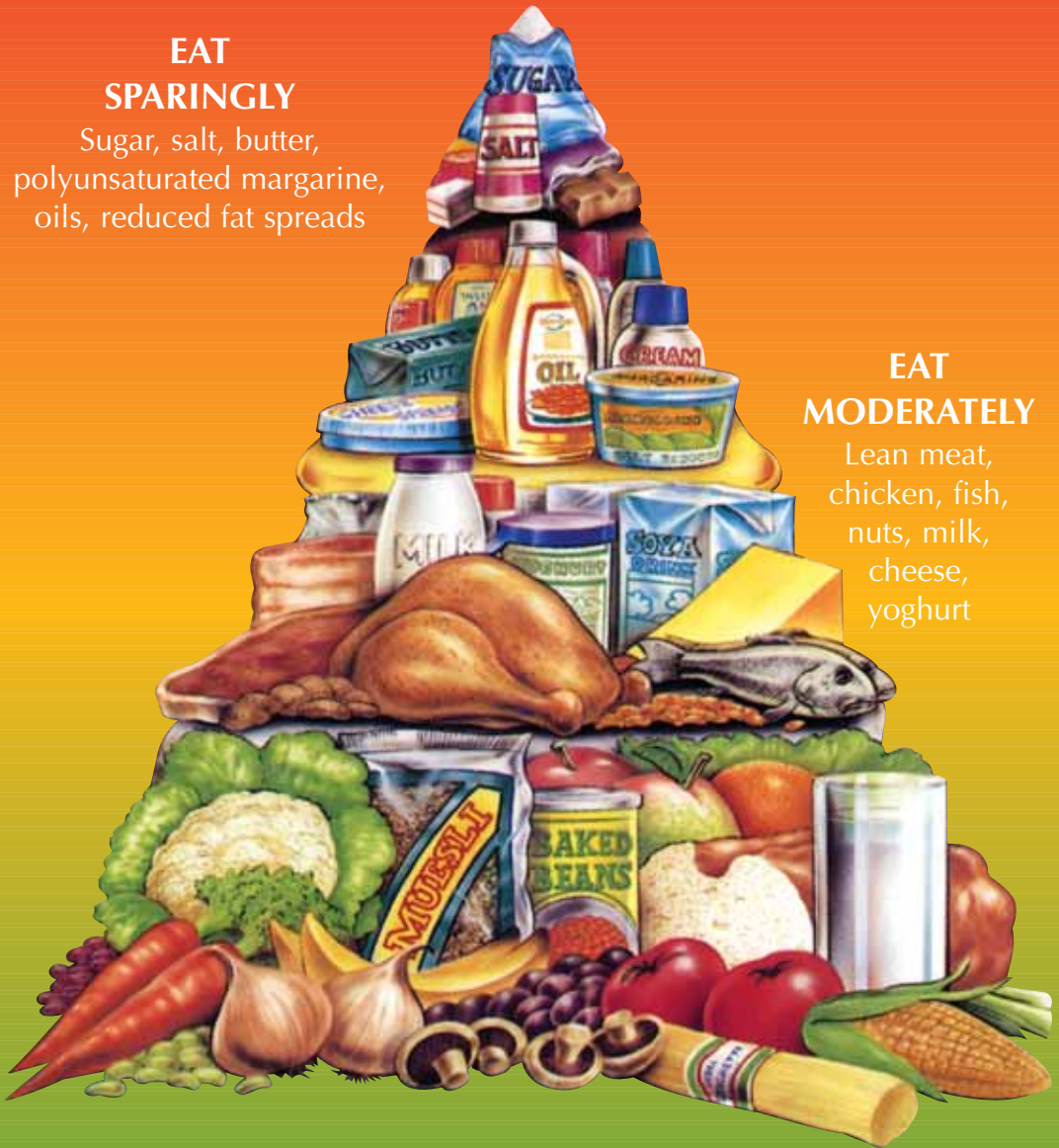
## A useful guide to selecting foods

### EAT SPARINGLY

Sugar, salt, butter,  
polyunsaturated margarine,  
oils, reduced fat spreads

### EAT MODERATELY

Lean meat,  
chicken, fish,  
nuts, milk,  
cheese,  
yoghurt



### EAT FREELY

Cereals, wholemeal bread, pasta, vegetables,  
legumes, fruit and plenty of water

## Medical treatment to help prevent angina

Your doctor will help you to choose the long-term treatment that suits you and your lifestyle best.

The choices are:

**Long-Acting Nitrates:** These widen the coronary arteries and improve blood flow to the heart. They are available as tablets, ointment or patches. They may be more effective when used with a drug free interval of at least 8 hours. With the patch, your doctor will probably advise you to take it off at bedtime and apply a new one in the morning. A large study of long-acting nitrates concluded that patients found patches convenient to use because:

- The patch reduces the number of pills you may need to take. It need only be applied once a day.
- It releases the nitrate into your body at a steady rate.
- You can see the patch, which is reassuring. It is easier to remember that you have taken your medication.

**Beta-blockers:** These make the heart beat slower, so it pumps less blood per minute, its workload is reduced and it needs less oxygen.

**Calcium antagonists:** These widen the coronary arteries to help improve oxygen supply to the heart.



## Coronary angioplasty

This is where a long tube (catheter) is threaded through your arteries from a small incision in your leg or arm. The tip of this tube is positioned, using X-rays, into the coronary artery where the narrowing is situated. A small balloon at the end of the catheter is blown up, flattening the build-up of fats and cholesterol against the wall of the artery so that the vessel opens up. When the tube is removed, the previously narrowed section is clear and blood flow is improved. It can and does happen that the artery will become blocked again within 6 months, in which case, the procedure can be repeated.

# Coronary angioplasty



1. Clogged artery



1. Balloon catheter inserted



1. Balloon catheter inflated  
compressing fats and cholesterol



1. Fats and cholesterol compressed,  
blood flow near normal

## Coronary bypass surgery

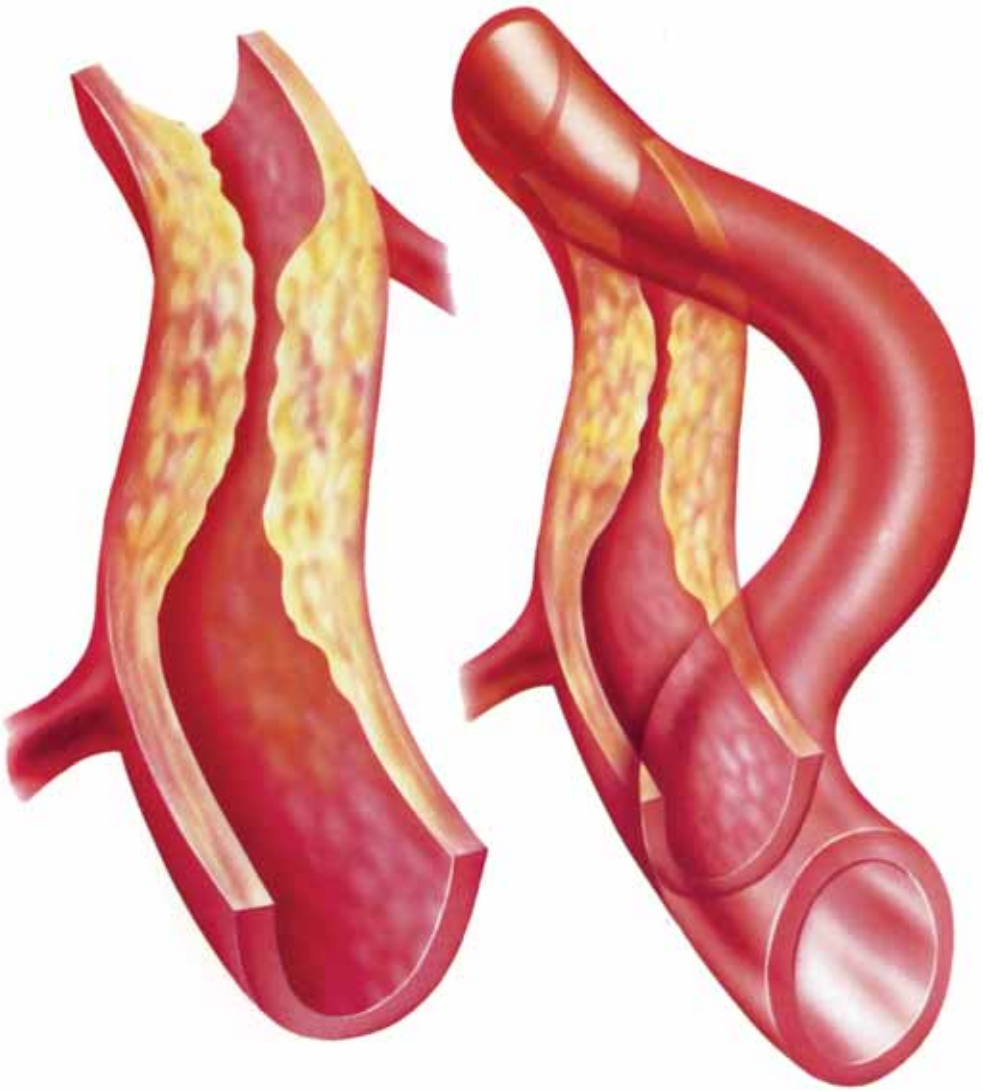
If medication or angioplasty does not reduce your angina attacks, or if your ability to be physically active is severely restricted, your doctor may advise you to undergo surgical treatment.

This is successfully performed on thousands of Australians each year. A piece of vein (or mammary artery) is sewn into the clogged artery before and after the obstruction to produce a bypass. This improves the oxygen supply to your heart.

If you have angioplasty or bypass surgery, you should pay extra attention to your lifestyle, level of physical activity and diet (refer to section titled "Helping Yourself, page 12). You will also need to consult your doctor or cardiologist about when you can safely resume driving your car and when to return to work.

A full and complete life is possible regardless of whether your doctor chooses medical, angioplasty or surgical intervention. The long-term benefits come from you making the effort to change your lifestyle.

## Coronary bypass surgery



1. Clogged artery

2. Clogged artery bypassed

For more information on angina, talk to your doctor,  
or contact the National Heart Line.

**National Heart Line: 1300 362 787**

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