



# Your guide to heart failure

## Important phone numbers

Family doctor

---

Cardiologist

---

Heart failure nurse

---

Pharmacist

---

Hospital

---

Rehabilitation Program

---

# Contents

### The Basics

Live a full life	1
How does the heart work?	2

### The Essentials

What is heart failure?	4
What are the symptoms of heart failure?	5
What causes heart failure?	7
How is heart failure diagnosed?	8
How is heart failure treated?	14
Medications	15
Some commonly prescribed medications for heart failure.	18

### Your Life

Making lifestyle changes	22
Activities of daily living – Exercise	28

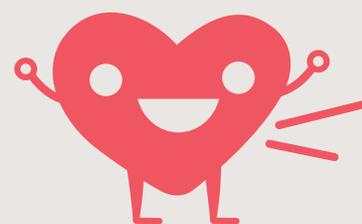
### Last But Not Least

Important notes	31
Heart failure action plan	32
Useful resources	33

A diagnosis of heart failure is serious, however safe and effective treatments are available.

Early diagnosis and treatment can prevent problems and slow progression. In many cases, this will lead to significant improvement in your quality of life.

## Live a full life



Heart failure, also known as Chronic Heart Failure or CHF means your heart muscle is weaker than normal and unable to pump blood around the body as well as it should. Heart failure can cause a variety of symptoms that may make it hard for you to complete your normal daily activities.

A diagnosis of heart failure can bring many changes to your life. Initially you may be shocked and find it hard to understand what it will mean to you. This guide details many important aspects of heart failure including diagnosis, investigations, treatment options and self management.

### **Heart failure is treated by:**

1. Seeing your doctor for regular appointments.
2. Taking medications.
3. Making lifestyle changes.
4. Using special pacemakers if appropriate.
5. Surgery in selected cases.

### **What your doctor can do**

Make an accurate diagnosis, organise tests, prescribe treatment, including: medications, procedures, devices and surgery if required

### **What you can do**

Participate in a self-managed heart failure plan including diet, exercise, medications and monitoring of your signs and symptoms. Attend all appointments with doctors and allied health workers.

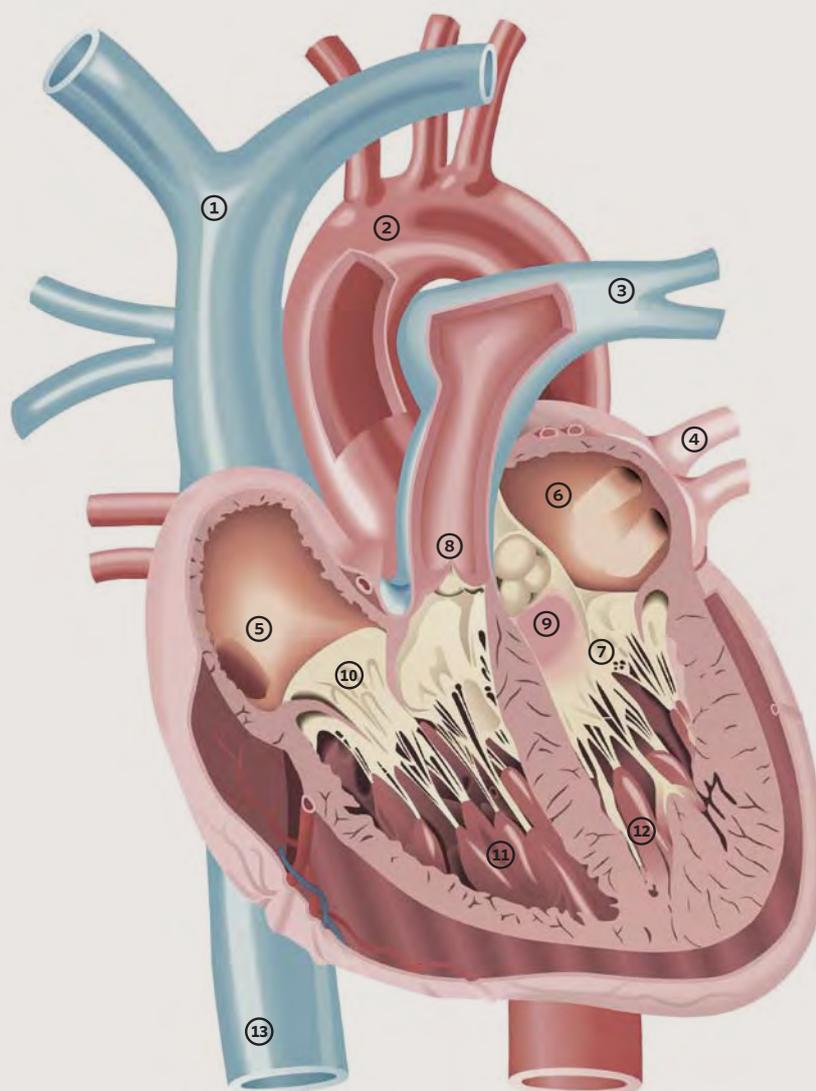
By learning about heart failure, you and your heart failure team can work together to ensure you live a full and more active life.

# How does the heart work?

The heart is a muscle which pumps blood to every part of the body. Blood provides the body with the oxygen and nourishment needed for energy and growth. To do this properly, the heart muscle needs to be strong and have its own unobstructed supply of blood.

The heart muscle comprises two pumps: one on the left side and one on the right side.

- 1 Superior Vena Cava
- 2 Aorta. Blood goes to the body
- 3 Pulmonary artery. Blood goes to the lungs where it collects oxygen
- 4 Pulmonary vein
- 5 Right Atrium
- 6 Left Atrium
- 7 Mitral Valve
- 8 Pulmonary Valve
- 9 Aortic Valve
- 10 Tricuspid Valve
- 11 Right Ventricle
- 12 Left Ventricle
- 13 Inferior Vena Cava



### The pump on the right side

The pump on the right side is called the **right ventricle**. It receives blood back from the body and pumps it to the lungs where it is enriched with oxygen. The blood then flows back to the pump on the left side. If the right pump is not working well, a back pressure of the blood returning from the body builds up, causing fluid to collect in areas, such as the ankles, feet and abdomen.

### The pump on the left side

The left side pump is called the **left ventricle**. It returns blood to the heart from the lungs. The blood travels through a valve called the **mitral valve** into the **left ventricle**. The **left ventricle** pumps blood through an outlet called the **aortic valve** into the main artery of the body, the **aorta**, and then into the rest of the body. If the left side pump is not working well, a back pressure of blood can cause fluid to collect in the lungs, making it difficult to breath.

Both the left and right pumps need to work together for normal heart function.

### Heart Rhythm

In order for the heart to pump blood throughout the body it needs an electrical impulse to generate a heart beat. This electrical impulse normally generates a heart beat in the range of 60 to 100 times per minute. Patients with heart failure may experience abnormal heart beats. Your doctor will discuss this with you and prescribe treatment if necessary.

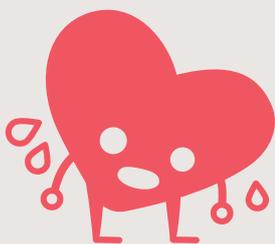
### The normal heart:

- Is the size of a clenched fist.
- Pumps about four to six litres of blood each minute at rest, and even more with activity.
- Pumps blood to all parts of the body.
- Beats about 70 times a minute.

# What is heart failure?

Heart failure means the heart is not pumping well enough to meet the body's needs, especially during exercise.

---



The pump may not work for two reasons:

1. The muscle of the heart is too weak to pump well – called Systolic Heart Failure, or
  2. The muscle of the heart is too stiff to relax – called Diastolic Heart Failure.
- 

In this Guide to Heart Failure, we will focus on Systolic Heart Failure.

Changes occur to the weakened heart to help pump blood throughout the body.

### **At first:**

The heart may become larger. As more blood enters the chambers, this allows more blood to be pumped out with each heartbeat. At this stage, you may have no symptoms at all.

### **Over time:**

The heart muscle weakens and may not be strong enough to pump enough blood to meet all your body's needs, particularly during exercise. It is at this stage that you may notice symptoms with activity.

The heart keeps pumping, but with much less power and efficiency.

The heart may beat faster to pump more blood out of the heart to the body each minute.

Either the left or the right or both pumps may be affected.

# What are the symptoms of heart failure?

## Symptoms

Your symptoms may range from nothing to mild to severe depending on how weak your heart is and how well your heart failure is controlled.

**Symptoms are due to the weakened heart pump. The pump can no longer pump blood forward as efficiently and you may feel:**

- Tired and unable to carry out normal daily activities.
- Dizzy and weak.
- Your heart pounding or a fast or irregular rhythm at times.

## Signs

Fluid may build up as a result of the weak pump and sit in tissue where it does not belong.

**This fluid may be:**

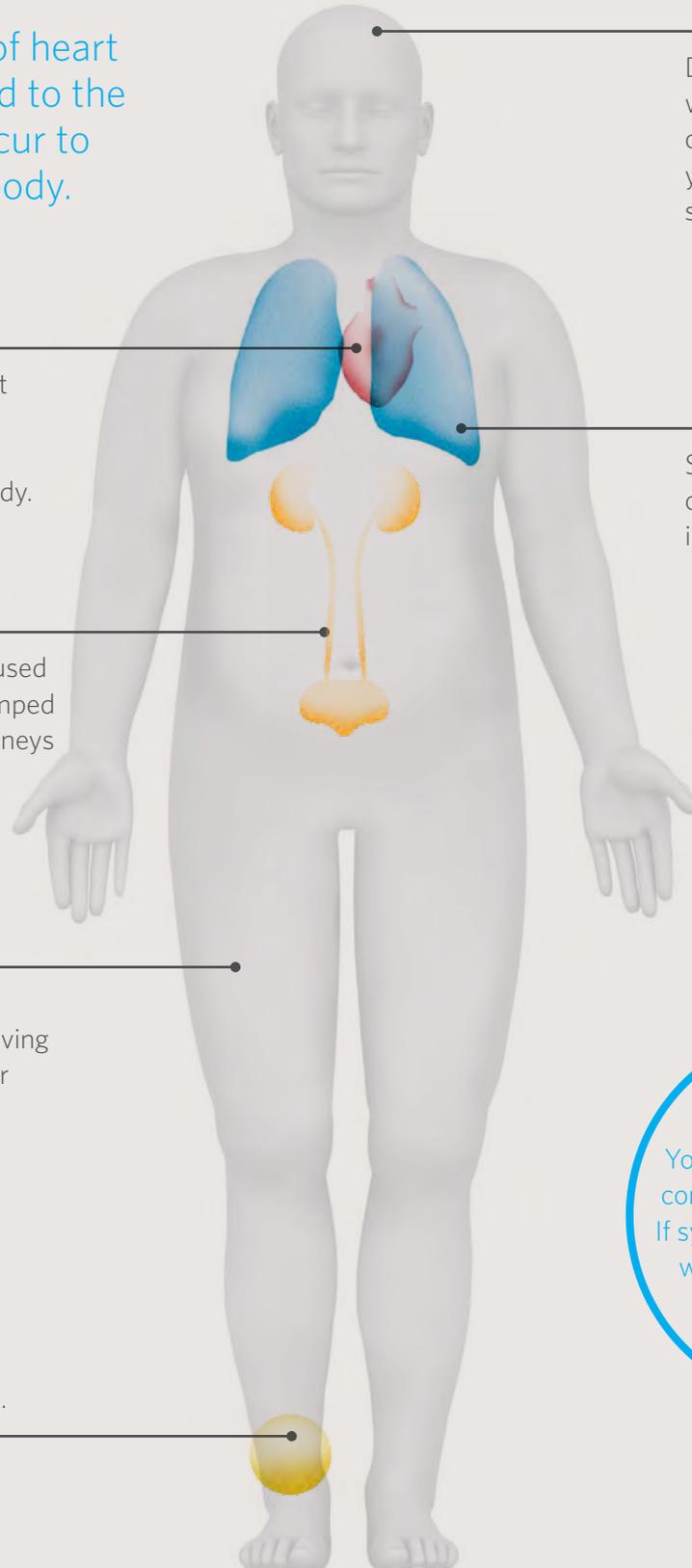
- In the lung tissue making you short of breath, even at rest or when lying flat. You may need to sleep on two to three pillows to breathe comfortably at night.
- In the legs and ankles causing swelling.
- In the abdomen causing loss of appetite, bloating or constipation. Your abdomen may also feel tender and you may have some nausea.
- The cause of weight gain.

You may have all the symptoms or you may have none at all. Diagnosis of heart failure should always be made by your doctor.

**Remember:**  
one litre of fluid weighs one kilogram.

## What are the symptoms of heart failure?

The symptoms of heart failure are related to the changes that occur to your heart and body.



Dizzy and weak (especially when standing quickly) caused by less blood to your brain. Disturbed sleep is very common.

Awareness of heartbeat caused by the heart beating faster to pump enough blood to the body.

Short of breath even at rest, caused by fluid backing up in your lungs (congestion).

Sudden weight gain caused by less blood being pumped to the kidneys (your kidneys hold salt and water).

Tired, especially with activity caused by receiving less blood to your major organs and muscles.

Swelling (oedema) of feet, legs and abdomen.

Your treatment is aimed at controlling your symptoms. If symptoms return, become worse or more frequent, **call your doctor.**

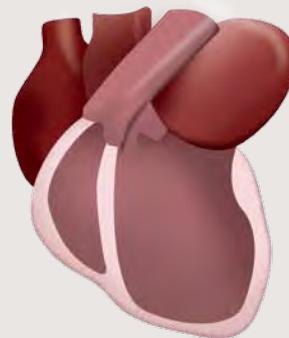
# What causes heart failure?

Heart failure is caused by conditions that damage or overwork the heart muscle. Common causes are coronary artery disease, high blood pressure and cardiomyopathy. Heart failure is relatively common and may affect up to 10% of Australians over the age of 60.

## Cardiomyopathy

A disease which directly affects the heart muscle, resulting in a 'weak pump.' Cardiomyopathies can be caused by viruses, alcohol abuse, drugs or genetic abnormalities.

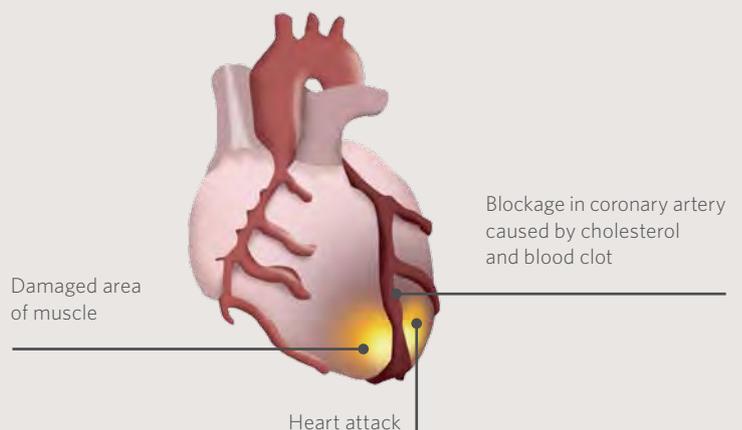
Dilated Cardiomyopathy



## Coronary Artery Disease

A blockage in a coronary artery can lead to a heart attack causing damage to an area of the heart muscle. The damaged area of the heart muscle is scarred and not able to contribute to the pumping action of the heart. Large or recurrent heart attacks in particular may cause heart failure.

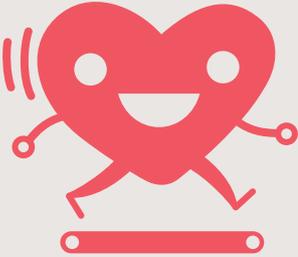
Coronary Artery Disease



## Other conditions that overwork the heart muscle include:

- Severely narrowed or leaky heart valves.
  - Uncontrolled high blood pressure called hypertension.
  - Heart defects from birth.
  - Restrictive cardiomyopathy.
- Often heart failure is seen when someone has more than one of these conditions.
- In some cases the cause is unknown.

# How is heart failure diagnosed?



Your doctor will ask you about your symptoms and examine your heart and body for signs of heart failure. You will be asked to have certain tests to help determine the extent of your condition and the cause.

## Blood tests

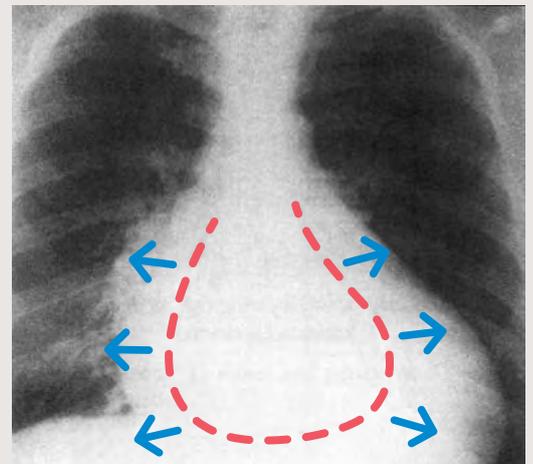
Your doctor will have your blood tested to check:

- Kidney, liver and thyroid function.
- Cholesterol and triglycerides.
- Signs of increased strain on your heart (Brain Natriuretic Peptide or BNP).

Depending on your symptoms, you may have other blood tests as well.

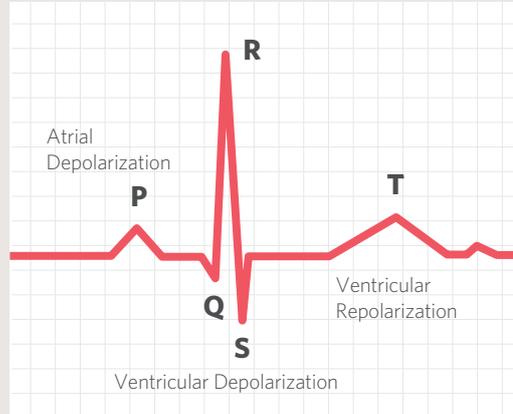
## Chest x-ray

A chest x-ray creates a photo of your ribs, heart and lungs which will show the size of your heart. An enlarged heart can be a sign of heart failure. The heart becomes bigger when it has to work harder to pump blood around the body.



### Electrocardiogram (ECG)

An ECG is a test that picks up the electrical activity of your heart. It shows the doctor your heart's rhythm and/or the timing of your heartbeats. It may show features of previous heart attack.



## How is heart failure diagnosed? *Continued*

### **Echocardiography**

Echocardiography uses sound waves to show a picture of how your heart is working. It is completely safe and does not use radiation. It is the most common test to assess how your heart is working.

The test shows:

- If the heart muscle is not working properly.
- If any of the heart valves are leaking.
- If the heart walls are normal, thin or thick.

Any of these problems could cause your heart to work harder than normal.

The following tests may be done if appropriate to your particular problem:

### **Cardiac MRI**

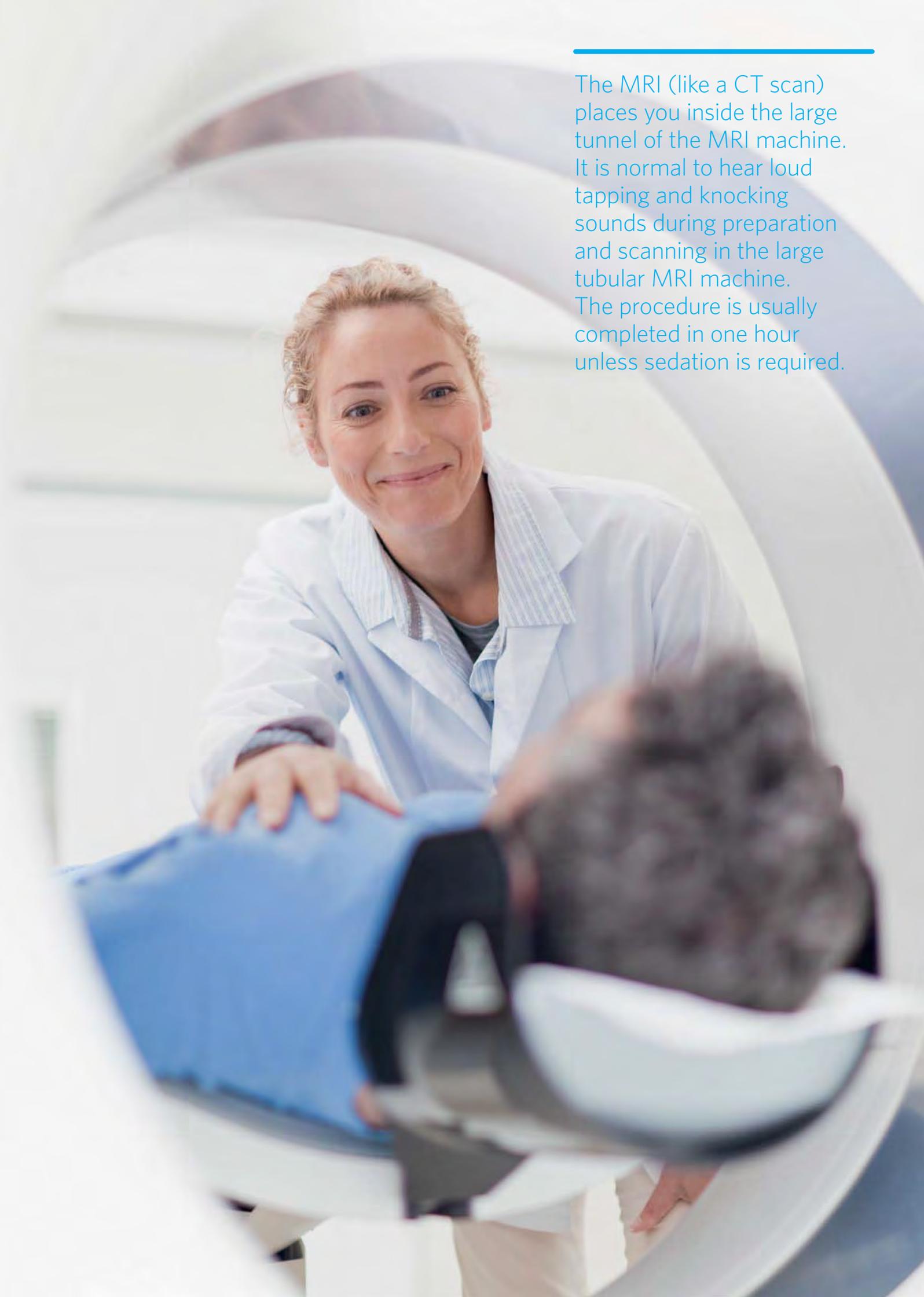
Cardiac MRI is a special technique that can obtain high quality pictures of the heart, as well as identify areas of heart damage or scarring. It adds to the information obtained from the echo and is now becoming common for people with heart failure. The examination includes administration of contrast via an intravenous cannula in the hand, which is removed at the end of the study. Like echo it does not use radiation. It uses a very powerful magnet to form pictures of the heart. If you do have metal internally (brain clips, pacemakers etc.) please inform your doctor before the test is organised as this may mean you are unable to take this test.

Echocardiography  
is the most  
common test to  
assess your heart.



---

The MRI (like a CT scan) places you inside the large tunnel of the MRI machine. It is normal to hear loud tapping and knocking sounds during preparation and scanning in the large tubular MRI machine. The procedure is usually completed in one hour unless sedation is required.

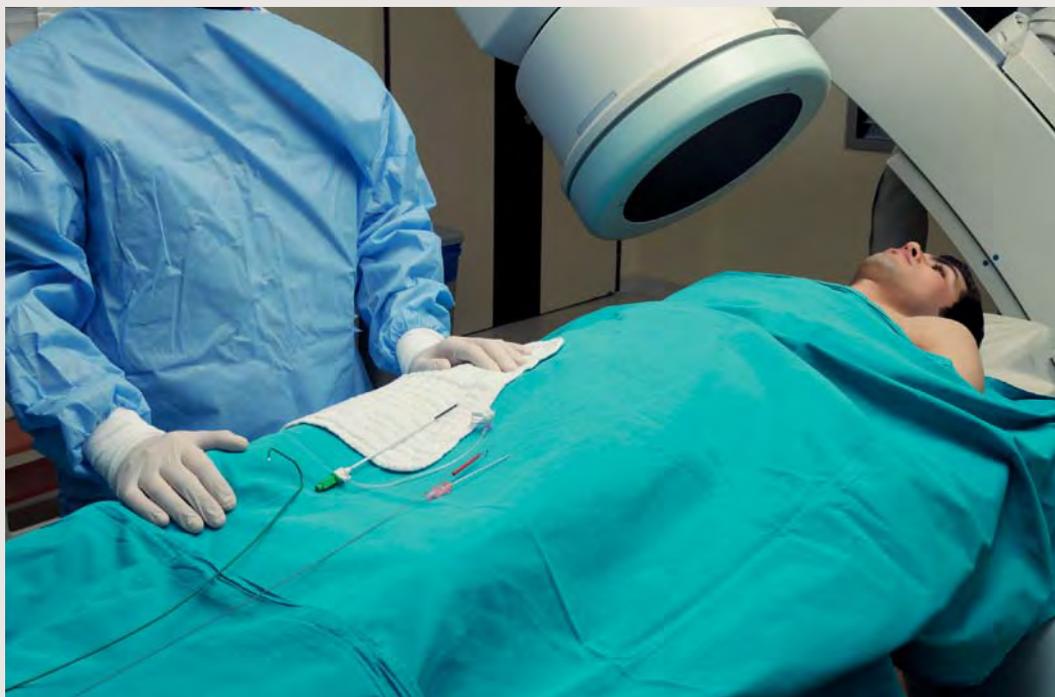


## How is heart failure diagnosed? *Continued*

### **Angiogram**

An angiogram is a special type of x-ray which shows if there is narrowing of the coronary arteries. These arteries supply the heart with blood. Narrowing in these arteries can cause chest pain (angina) and a blockage can cause a heart attack. The test can also determine if there are problems with either the heart valves, or the pumping action of the heart. The results of the test will help plan the best treatment for you.

The test is performed in the Cardiac Catheter Laboratory by a Cardiologist, an assisting doctor, nurses and technicians. The laboratory looks like a small operating theatre. You will be given a mild sedative for relaxation but you will be awake during the test. After injecting local anaesthetic into the skin, a small tube called a catheter is inserted into an artery, usually in the groin or sometimes your wrist. The catheter is guided up through the major artery of the body (called the aorta) until it reaches the coronary arteries which run over the surface of the heart. Once in position, a special dye is injected through the catheter and x-rays are taken.



### Right heart catheterisation

A right heart catheter is typically a day procedure that is performed to evaluate the blood pressure in your heart and lungs. This is often recommended in the evaluation of people with heart failure or pulmonary hypertension. Different drugs and sometimes exercise may be tested while the catheter is in place and this may require an overnight stay.

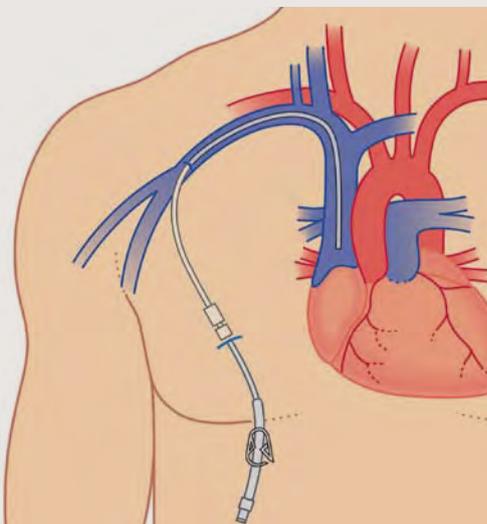
This test may be done at the same time as your angiogram. You will be awake during the test. After injecting local anaesthetic into the skin, a catheter is inserted through a large vein, usually in

the right side of the neck but sometimes in the arm or leg. The catheter is passed into your heart and lungs to measure the blood pressure as well as how much blood your heart pumps. The position of the catheter is confirmed by x-rays.

### Sleep study

This test is done in hospital where your sleep is monitored overnight. Abnormal sleep patterns and sleep apnoea are very common in people with heart conditions. Treatment of these disorders may improve your sleep and your heart function.

Catheter entrance



Sleep Study



# How is heart failure treated?

Heart failure is treated by:

- Seeing your doctor for regular appointments.
- Taking medications.
- Making lifestyle changes.
- Using special pacemakers if appropriate.
- Surgery in selected cases.

## Seeing your doctor

The success of your treatment plan will require a team effort. Your family doctor and specialist cardiologist, together with other key members of your heart failure team, will manage your treatment including medications, and other medical problems. Other team members may include specialist heart failure nurses, dietitians, pharmacists, occupational therapists, physiotherapists, psychologists and social workers to help you manage your condition.

It is up to YOU to take your medications, keep your follow up appointments, follow healthy living guidelines and be an active member of the management team.

A growing number of hospitals have specific heart failure management programs. These programs provide assessment and management by a specialised heart failure service, and offer a wide range of treatment options.

These programs are often coordinated by a Heart Failure Nurse who will:

- Provide ongoing education for you and your family.
- Be available for you to report worsening symptoms of heart failure and what action to take.
- Liaise with your specialist and GP.
- Outline the benefits of heart failure rehabilitation programs and refer you to one closest to home.
- Refer you to appropriate allied health staff.



# Medications

## Treatment aims to:

- Prevent progression of your heart failure.
- Maintain or improve your quality of life.
- Help you live longer.

## Medications

It is important to know:

1. The names of your medications.
2. What they are used for.
3. How often and at what times to take them.
4. Common side effects and potential interactions.

Your doctor, nurse or pharmacist will review this information with you. Medication needs may vary for each person. Your doctor will work with you to find the right medications to relieve symptoms and improve your quality of life.

## Medication for people with heart failure

Treatment of heart failure has changed with the development of new medications. Medications now control the symptoms of heart failure and slow the progression of the disease, helping you to feel better for longer.

Taking your medication correctly is crucial for the management of your condition.

Your local or hospital pharmacist can help you with your medication by:

1. Explaining your medication to you.
2. Teaching you how to use a special container, called a dosette box or blister pack. These are specially designed to store your medication and help if you are worried about forgetting to take your medication.

3. Preparing a '**Medication List**' specifically for you, listing all medication prescribed. This list also contains a table of dosages and times when to take each medication, explaining their purpose and stating any special instructions.

## In all cases:

- Read directions carefully.
- Do not change treatment unless directed by your Doctor.
- Do not give your medication to other people or use for other illnesses.
- Store medications away from children.
- A medication list can help you remember the names of your medications. **It is essential you take this to every appointment with your doctors.** Knowing the names as well as the brand names is important to avoid taking double doses of the same medication. For example, Potassium Chloride is manufactured as Slow K, KSR, Span K, Chlorvescent.
- Talk to your doctor or pharmacist first before taking any over the counter drugs, non-steroidal anti-inflammatory drugs, cancer drugs, cough mixtures, herbal or alternative medications. Some of them may have an effect on your heart failure medications and cause side effects.
- Do not leave medications in the car or in the bathroom. They may become too hot or cold and lose their effectiveness.

It is important to keep a medication list with you at all times. They are an essential part of your care and lifelong treatment.

# Medications

## Continued

### Example of Medication List:

Patient's Name:  
Medication from (date):

Pharmacy Department:  
Telephone:

#### Time to take

Name of medication	Other names	Morning	Lunch	Evening	Night
Perindopril 2.5 mg tablets	Coversyl	one			
Furosemide 40 mg tablets	Lasix Urex Uremide	one	one		
Digoxin 62.5 micrograms	Lanoxin PG	two			

Prepared by: (name of the pharmacist)

#### In all cases:

- Read directions carefully.
- Store medication away from children (best in a locked cupboard).
- Do not change treatment unless directed by your doctor.
- Do not give your medication to other people or use for other illnesses. If you need further assistance, **call the phone number at the top of your medication list.**

#### Questions to ask your pharmacist about your medication:

1. What is the medication for?
2. How does it work?
3. When is the best time to take it?
4. What are the main side effects?
5. Is the medication going to interact with any other medication I am on?
6. What signs should I report to my doctor?
7. What should I do if I miss a dose?

**Remember:** Do not be alarmed when you read about the side effects of medications as you may not experience any. However, always tell your pharmacist or doctor if you suspect any side effects.

Purpose for medication	Special instructions
To improve pumping of the heart and lower blood pressure.	Take regularly on an empty stomach (at least half an hour before food.) Do not take potassium supplements unless prescribed by your doctor. Tell your doctor if you develop a dry persistent cough or a disturbance of taste (metallic sensation in mouth or inability to taste food).
To remove excess fluid from the body.	Take Frusemide on an empty stomach. For example, one hour before food or two hours after food. Avoid rising quickly from sitting or lying position to standing. Avoid excessive sun exposure (use 15+ sunscreen).
To improve pumping of the heart or to control heart rate.	It does not matter if you take Lanoxin before or after food. Tell your doctor if you develop nausea, vomiting, stomach upset, diarrhoea, loss of appetite, blurred vision, slow or uneven heart rate, depression or confusion.

### Side effects of medications

Every medication has the potential to cause some unwanted side effects in a small number of people. Your doctor carefully considers the risks of a medication and only prescribes it if the benefits to be gained from its use outweigh the risk of side effects. Dangerous side effects are very rare. Some side effects may be unpleasant but rarely dangerous. Many of them only occur when the medication is first started and may disappear after a few weeks.

Your pharmacist can advise on how to avoid and minimise some of the side effects.



# Some commonly prescribed medications for heart failure

Medication	Example	How it works	Potential side effects
Angiotensin converting enzyme inhibitors (ACE inhibitors)	Perindopril – Coversyl Ramipril – Tritace Lisinopril – Zestril	ACE inhibitors widen blood vessels to lower blood pressure, improve blood flow and decrease the workload on the heart.	Cough Dizziness Nausea
Angiotensin II receptor blockers	Candesartan – Atacand	These drugs are sometimes used instead of ACE inhibitors. They also widen blood vessels to increase blood flow reducing the workload on the heart.	Runny or stuffy nose Gastric upset headache Dizziness, feeling light-headed
Diuretics	Frusemide – Lasix	Often called ‘water pills’ they help remove fluid from the body via your kidneys. They prevent fluid building up in your lungs, abdomen and legs.	Dry mouth Thirst Nausea Skin rash
Aldosterone antagonists	Aldactone Spironalactone	Aldosterone antagonists are potassium sparing diuretics (water pill) which prevent your body from absorbing too much salt and keeps your potassium levels from getting too low.	Stomach upset Dizziness Headache
	Eplerenone – Inspra	It works by blocking the hormone aldosterone which lowers the amount of salt and water the body retains.	Stomach upset Tired feeling Dizziness feeling light-headed
Potassium and Magnesium	Slow k – Potassium Magmin – Magnesium Aspartate	These supplements are given to maintain normal levels in your blood which may be lost when taking diuretics. Normal levels help control the heart rhythm.	Nausea Gastric upset Diarrhea
Beta blockers	Bisoprolol – Bicolor Carvedilol – Dilatrend Metoprolol – Toprol XL Nebivolol – Nebilet	Blocks excessive stimulation of the heart by the nervous system, helping to relax the blood vessels, slowing the heart rate and protecting the heart from further damage.	Tiredness Dizziness, feeling light-headed Wheezing in people with asthma
Digoxin	Lanoxin	This drug, also referred to as digitalis, increases the strength of your heart muscle contractions. It also tends to slow the heartbeat. Digoxin reduces heart failure symptoms.	Stomach upset, loss of appetite Tiredness Confusion Heart rhythm problems
Vasodilators	Isosorbide Mononitrate- Imdur – Duride	These lower blood pressure by relaxing the arteries and allowing more blood and oxygen to reach the heart and reduce the work of the heart.	Headache Flushing of the face dizziness Feeling faint Fatigue
Antiarrhythmics	Amiodarone – Aratac Sotalol – Sotacor	These are used to help control heart rhythm. These medicines help the heart to beat slower and at a more regular pace.	Headache, difficulty sleeping, decreased appetite, nausea constipation, salty or metallic taste, increased skin sensitivity to sun.
Selective heart rate lowering agent	Ivabradine – Coralan	Ivabradine reduces the heart rate which has been found to help heart function.	Visual symptoms, slow or fast heart beat, headache, dizziness.

Medication	Example	How it works	Potential side effects
Anticoagulant antithrombotics	Warfarin – Coumadin, Marevan	Warfarin is used to thin the blood to prevent or treat blood clot formation in people who have an irregular heart rhythm, have had a mechanical heart valve or have previously had blood clots.	Bleeding, which can result in red or dark urine and/or bowel motions, nosebleeds, bleeding gums, bruising, vomiting or coughing blood, increased menstrual period, fatigue.
	Aspirin	Low doses of aspirin 75–150mg are used to thin the blood.	
Lipid lowering medications Statins	Atorvastatin – Lipitor Simvastatin – Zocor	These drugs decrease the amount of cholesterol made by the liver and lower the levels of ‘bad’ cholesterol. At the same time, the drugs produce a small increase in the level of ‘good’ cholesterol. They also reduce the risk of heart attack and stroke by other mechanisms even if the cholesterol level is normal.	Muscle pain, cramps or muscle weakness due to muscle damage.
Other medicines reducing lipids	Ezetimibe – Ezetrol	Reduces cholesterol by interfering with its absorption from the gut. It is prescribed for people who can’t tolerate statins or when statins alone are not effective.	Headache Muscle cramps Rash



## Other options

A small number of people may not improve, even with the best available care. If this is the case for you, your doctor will discuss other treatment options which may include heart surgery or the insertion of special pacemakers

### Surgical options

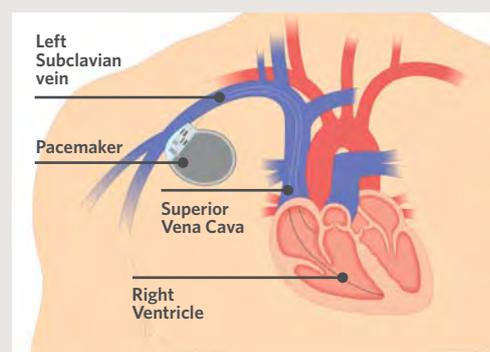
- Heart bypass surgery for blocked or narrow arteries.
- Valve replacement for leaky or narrowed valves.
- Heart transplantation or mechanical heart implantation when all other treatment options have been explored.

A key part of the success of CRT is continuing the tablets. CRT is not a substitute for tablets. They work together.

### Pacemakers

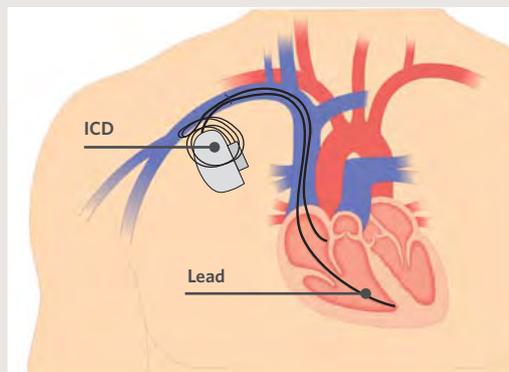
#### Biventricular pacemakers and defibrillators

- People with heart failure often have hearts that pump in a disorganised way. Cardiac resynchronisation therapy (CRT) can improve CHF symptoms by improving the timing of the heart's contractions resulting in a more powerful heart beat, pumping more blood to the body.
- The key part of biventricular pacing (CRT) is a lead placed into a branch on the left side of the heart. This is a more complicated procedure than a standard pacemaker or ICD insertion.
- In suitable patients, 80% respond to the procedure. This means the patient may gain relief from their symptoms of breathlessness and fatigue, and require less hospitalisation.



### Implantable cardioverter defibrillators

- An implantable cardioverter defibrillator (ICD) is a device that can detect and treat life-threatening ventricular rhythms (fast heartbeats from the pumping chambers of the heart).
  - If such a rhythm is detected, the ICD sends an electrical shock (called defibrillation) to the heart to change the rhythm back to normal.
  - An ICD has two major parts – a generator which usually sits in the left upper chest and a number of leads which connect from the generator to the heart.
- The major reasons for implanting an ICD are weak hearts (patients at high risk) or where life-threatening rhythm problems have already been diagnosed.
  - If your ICD discharges it is important to have it checked in a hospital.



### Palliative care

Some people with severe heart failure experience increased symptoms despite receiving the best care.

Palliative care has the potential to play an important role in relieving suffering and distress and improving quality of life both for the patient and their carers.

Palliative care is provided by a team of health professionals who assist with relief of pain, other distressing symptoms, and offer a support system to help people live as actively as possible. This approach also addresses the psychological and spiritual aspects for the patient and their carer, during the illness and into bereavement.

### Advance Care Planning

Advance Care Planning (ACP) is a process that all people and especially those that are at risk of deterioration in health, can benefit from. It provides a person the opportunity to discuss with their doctor and family members as well as, plans for their future medical treatment and other care when too unwell to make these decisions.

ACP ensures that a person's expressed wishes remain the focus of decisions made about their care. Discussions may result in documenting wishes on a legally recognised document such as an Advanced Care Directive.

# Making lifestyle changes



Being overweight means the heart must work harder to pump blood around your body and can lead to further damage.

## Diet

A dietitian can assist you with making changes to your diet. To manage your condition, you will need to decrease your salt intake and in most cases, restrict fluid as well.

## Healthy eating

Eating a healthy diet rich in fruits, vegetables, wholegrain foods and fresh foods helps maintain your wellbeing, and for most people, can help to maintain a healthy weight.

## Reach your healthy weight and stay there!

Being overweight means the heart must work harder to pump and can lead to further damage. Being underweight increases your risk of hospitalisation and complications. People with heart failure should aim to maintain a healthy weight. Please consult a dietitian if you need help to achieve this.

## Eat less salt (sodium)

Most Australians eat much more salt than they need. Most comes from processed foods, rather than salt added in cooking or at the table. Eating too much salt increases your thirst and causes fluid retention. This means your heart has to work harder to pump the extra fluid around your body. The recommended daily intake of salt for people with heart failure is less than 2000mg per day.

Eating a healthy diet rich in fruits, vegetables, wholegrain foods and fresh foods helps maintain your weight and wellbeing.



**Hints to lower your sodium intake:**

- Base your diet around fresh unprocessed foods in their natural state. This includes, fresh fruit, vegetables, meat, fish and chicken, grains such as rice and pasta, milk and yoghurt. These foods are all low in salt.
- Avoid using salt in cooking and remove the salt shaker from the table. Start by using half the usual amount and then cut that in half again. Your taste buds will adjust - usually within a few weeks!
- Instead of using salt, try fresh or dried herbs, spices, garlic, onions or lemon juice to flavour your food.
- Use less processed food, including breads, cereals, processed meats and cheeses.
- Choose items that are labelled 'salt free' or 'low in salt' or 'reduced salt'.
- Salt may also be listed in the ingredients list as rock salt, sea salt, vegetable salt, garlic salt, celery salt, flavour enhancer, MSG (mono sodium glutamate ), booster or stock.
- Read the labels carefully on food packages and choose the products which are lowest in sodium (see panel below).
- Check the label to see the salt content of all packaged foods.
- Choose foods in the lower numbers.
- Aim for less than 400mg/100g of the food wherever possible.

Salt is shown in the Nutrition Information panel on food labels as 'sodium'.  
one teaspoon of salt = 2000mg sodium.

### Buy 'low salt' and 'no added salt' food.

- Check the 100g column.
- Look for sodium.
- Different brands of foods can vary widely in their sodium content: choose the products which are lowest in sodium. As a general guide, try and avoid any foods which contain more than 400mg sodium per 100 grams of the food.

<b>NUTRITION INFORMATION</b>		
SERVINGS PER PACKAGE: 8.5		
SERVING SIZE: 60g		
	PER 60 g serve	PER 100g
ENERGY	870kJ	1450kJ
PROTEIN	6.6g	11.0g
FAT	5.0g	8.4g
CARBOHYDRATE		
—TOTAL	35.6g	59.3g
—SUGARS	11.8g	19.7g
DIETARY FIBRE		
—TOTAL	7.9g	13.2g
—WATER SOLUBLE	2.1g	3.5g
CHOLESTEROL (*)	NIL	NIL
<b>SODIUM</b>	12mg	20mg



## Making lifestyle changes

### Continued

#### Avoiding salt

The key to avoiding salt is realising that most of the salt you eat comes from the supermarket and take-away foods.

For most people:

- 10% of salt occurs naturally in fresh foods.
- 15% is cooking or table salt.
- 75% is in supermarket and take-away foods.



#### Check labels on these foods to find lowest salt varieties

Foods high in salt	Low salt alternative
<b>Canned/preserved foods</b> Soups Foods canned in salt/ brine Tomato juice	<b>Canned/preserved foods</b> Homemade soups - low salt Low salt canned or frozen vegetables Low salt tomato paste/puree Low salt baked beans, spaghetti
<b>Sauces and condiments</b> Commercial sauces, pickles, chutney Stock cubes, powders, liquid stock Yeast, meat extracts Spreads eg vegemite, peanut butter Gravies, stir fry sauces, pasta sauces	<b>Sauces and condiments</b> Low salt chutney and sauces Home made stock, gravy or low salt stock/ cubes, curry powder Jam, low salt spreads or low salt peanut butter
<b>Breads and cereals</b> Bread Breakfast cereals Biscuits	<b>Breads and cereals</b> Choose grain or rye breads low in salt Untoasted muesli, porridge Low salt dry biscuits, rice cakes, plain rice crackers
<b>Dairy foods</b> Hard cheese, mature vintage, blue and rinded cheeses Cheese slices Cheese spread Margarine, butter	<b>Dairy foods</b> Mozzarella, ricotta, swiss cheeses (But check the label for lower salt content)
<b>Meat/fish products</b> Sausages Processed, smoked or pickled meats i.e salami, bacon, ham Take away meals i.e pizza, pies, souvlaki, chickens, hamburgers Tinned fish in brine, fish pastes/spreads	<b>Meat or fish products</b> Tinned fish in springwater Fresh meat, poultry and fish Meat without gravy
<b>Snack foods</b> Salted nuts, chips, popcorn	<b>Snack foods</b> Choose unsalted varieties
<b>Miscellaneous</b> Baking powder Some medications, vitamins Tonic water, mineral water, soda water, sports drinks	<b>Miscellaneous</b> Check medications with pharmacist Mineral water i.e Schweppes, Deep Spring

### Watch your fluid intake

For severe heart failure you may need to limit the fluid you drink. If your doctor says to limit your fluid intake, you will need to monitor how much fluid you drink, including in the food you eat. All fluids and fluid containing foods should be counted in your fluid allowance. This includes soup, jelly, ice cream, yoghurt and custard. Your doctor will advise you how much fluid to drink, usually 1.5 to 2.0 litres per day. Often this fluid restriction is lifelong.

### Hints for controlling fluid intake

- Keep a daily record of the amount of fluid you drink so you know when you have reached your allowance.
- Measure your fluid allowance into a jug daily.
- Use small glasses and cups for drinks.
- Ice may be more satisfying than water or other liquids. Cold water in a little spray bottle may be helpful. Freeze a small bottle of water which only allows sips. These need to be included in your daily allowance.
- Fruit has a high fluid content so be aware not to eat more than three pieces of fruit per day.

### Limit alcohol

Alcohol can contribute to heart failure by further damaging the heart muscle. If you have heart failure you will be advised not to drink alcohol.

### Weigh yourself each morning

To help keep track of your fluid balance weigh yourself on the same scales daily, after urinating and before eating or drinking.

It is important to remember that one litre of fluid weighs one kilogram. Writing your weight in a diary daily will help you manage your fluid intake. Call your doctor or nurse immediately if your weight increases one kilogram/day or more over two consecutive days.

**Remember to bring your diary to all your doctor's and dietitian appointments.**

Self Monitoring Record							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Date							
My weight today is...	79	80	80	81	81	82	82
I have taken all my medication today	Yes <input type="checkbox"/> No <input type="checkbox"/>						
If no, which one?							
State reason, for example: Nausea, forgot, felt unwell, didn't want to, ran out of pills, other.							
Fluid intake tally							
Total daily intake							
Please weigh yourself each morning before breakfast and record it in the Self Monitoring Record							

## Making lifestyle changes

### *Continued*

#### **Dietary fats and cholesterol**

Reducing intake of some kinds of fat can improve your weight, reduce cholesterol, blood pressure and other risk factors.



Saturated fats should be avoided:

- Reduce the amount of butter, vegetable margarines and oils used in foods and cooking.
- Choose reduced fat or low fat dairy products.
- Choose lean meats and skinless chicken.
- Limit high fat processed meats such as sausages and salami.
- Limit pastry products, baked foods, snack foods and most takeaway foods.
- Use small amounts of unsaturated olive oil for cooking and dressings along with olive oil spreads.
- Don't eat saturated or animal fats, such as butter, cream, full cream dairy products and fatty meats.

---

#### **Stop smoking**

Smoking causes abnormal heart rhythms, heart attacks, lung disease and lung infections.



### Emotions and feelings

A new diagnosis of heart failure may come as a shock. Heart failure may affect your ability to work, carry out normal daily activities or maintain relationships with family and friends. This may result in a variety of different emotional responses including, disbelief, anger, isolation, loneliness, sadness and the thought of becoming a burden. All these feelings are common but should be discussed.

If needed, services are available to assist with emotional concerns, sexual relations, financial problems, accommodation and planning for the future. These can be discussed with your doctor or the hospital you have been referred to.

### Activities of daily living

#### Pace yourself

If your daily activities are too tiring, you may need to conserve your energy. Cutting down on some of the heavier activities and using energy saving techniques may help.

Participating in regular activities and exercise can lead to:

- A decrease in the symptoms of heart failure.
- An increased ability to manage everyday tasks.
- Improved mood and relaxation.

An occupational therapist can help with energy saving tips and advice for modifying a task or your environment to help you cope with your condition. They can also provide advice regarding your return to work.

#### Tips for managing your daily activities:

1. You will have good days and bad days. Try to minimise these fluctuations by planning your activities and breaking tasks down into more manageable steps.
2. Do not schedule too many things in one day. Allow adequate time to carry out activities to avoid rushing.
3. Rest before and after activities. Frequent short breaks are more effective than large rest periods when you're feeling tired.
4. If you become tired during any activity, stop and rest. It is better to go slower for longer than go too fast and need to constantly stop to rest.
5. Do not plan activities immediately following a meal.
6. Avoid extreme physical exertion. Do not push, pull or lift heavy objects that quickly tire you.
7. Sexual intercourse can be resumed as soon as cardiac rehabilitation is undertaken or a target level of exercise tolerance is achieved. It is wise to discuss with your doctor.

# Activities of daily living – Exercise

## Cardiac rehabilitation

### What is cardiac rehabilitation?

Muscles, particularly in the legs may become weak in heart failure and may slow you down as much as your heart. Cardiac rehabilitation is highly recommended as it can partially reverse some of the muscle deconditioning that occurs. It also provides further opportunity for you to learn more about your heart failure.

You will receive education to assist with lifestyle changes and exercise guidelines while being supervised by health care professionals. Your heart failure nurse will provide you with information about programs in your area.

Participating in a cardiac rehabilitation program is:

- A step in the right direction.
- Commences when the doctor thinks it is safe and you are medically stable.
- Eight to 12 week program.
- Recommended for all ages.
- Helps to establish a lifelong active lifestyle and provides advice about continuing a structured exercise program at home.

Some tips to follow if you have not exercised for some time:

1. Choose an exercise you enjoy doing, such as walking, cycling or any safe exercise that keeps you continuously moving for at least 10 minutes.
2. Walking is the simplest and best exercise to begin with, if you are not currently exercising.
3. Start off gradually and aim to increase your time spent exercising per day by 10 minutes per week until you are able to do 45–60 minutes per day. This may take eight to 12 weeks to achieve.

4. Initially, you may need to do several short sessions over the day (for example 10 minutes of walking, twice a day.)
5. Try to walk on flat ground. If you live in a hilly area you may need to drive to a local park or shopping centre.
6. You should be able to walk and talk. Don't worry if your walking pace is slow, you will get faster as your fitness improves.
7. Try to exercise at least five days per week.
8. Try to include some resistance exercises two days of the week. Your physiotherapist can advise on which exercises are safe to include in your home program.
9. Wear comfortable clothes and shoes.
10. Avoid exercising in temperatures below five degrees and above 30 degrees or after meals.
11. Avoid heavy lifting.

## Exercise

A structured exercise program will significantly increase your exercise capacity. Please seek advice from your doctor or physiotherapist if you are starting an exercise program.

An exercise program will also:

- Give you more stamina to keep up with your daily activities.
- Help to maintain weight by burning calories.
- Help strengthen muscles and bones.
- Help manage cholesterol, blood sugar levels, stress and mood which will lessen symptoms.
- Give you a sense of well-being and improve your quality of life.



Signs of exercising too hard:

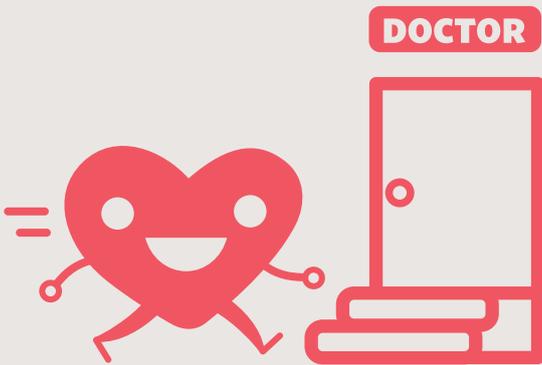
- Excessive shortness of breath and/or palpitations.
- Dizziness.
- Chest discomfort.
- Exhaustion after exercising.

If these symptoms occur, stop the activity and rest. Notify your doctor or heart failure nurse if symptoms last longer than 20 minutes or if they occur on a regular basis.



# Important notes

1. See your doctor and specialist for regular follow-up appointments.



2. Carry a list of all your medications with you and take them as prescribed. Remember to report any side effects.

3. Monitor your fluid intake and avoid salt.



4. Weigh yourself every morning and record in a diary. Seek help if weight gain is more than two kilograms in two days and discuss with your doctor, nurse or cardiologist.

5. Regular low level exercise helps the heart to work better; follow your recommended exercise guidelines.

6. Modern treatment has transformed the management of heart failure with most patients experiencing significant improvements in quality and quantity of life.

# Heart failure action plan

**Please discuss this plan with your partner**

## Emergency

- Severe chest pain > 15 minutes (not responding to three anginine).
- Severe shortness of breath.
- Blackouts.



**Call ambulance  
immediately  
Dial 000**

## Semi-urgent

- Sudden weight gain (more than one kilogram per day for two days).
- Palpitations with light-headedness.
- Swelling of abdomen and ankles.
- Worsening shortness of breath especially at night or rest.
- Increase frequency of chest pain.



Rest and reduce activity

**Seek medical  
attention within  
24 hours**

If symptoms get worse, see a doctor immediately or call an ambulance

# Useful resources

## **Alfred Health**

*Your Guide to Heart Failure*

[alfred.org.au](http://alfred.org.au)

---

## **Heart foundation**

Living with Chronic heart Failure

[www.heartfoundation.org.au](http://www.heartfoundation.org.au)

[www.heartfailurematters.org](http://www.heartfailurematters.org)

## **Cardiomyopathy**

**Association Australia**

[www.cmaa.org.au](http://www.cmaa.org.au)

## **Carers Australia**

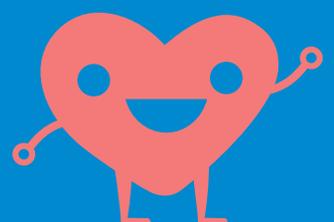
[www.carersaustralia.com.au](http://www.carersaustralia.com.au)

## **Palliative Care Australia**

[www.palliativecare.org.au](http://www.palliativecare.org.au)

## **Advance Care Plan**

[www.racgp.org.au/guidelines/  
advancecareplans](http://www.racgp.org.au/guidelines/advancecareplans)





Produced by the Heart Failure Unit  
at The Alfred, Melbourne

**AlfredHealth**

Proudly sponsored by Servier as a service to medicine.  
Servier Laboratories (Aust) Pty. Ltd. Hawthorn, Victoria 3122

