Cardiac Surgery

Patient and Family Education Handbook
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INTRODUCTION

This booklet supplies you with information about your surgery and hospitalisation. It is normal to have fears and doubts regarding your heart surgery and hospital stay. We therefore encourage you to express these fears to family or friends rather than ‘bottling up’ your anxieties. In addition, the health care team caring for you is happy to listen and answer questions about your concerns at any time.

The average length of stay after heart surgery is about 5-6 days. It is essential to have someone around at home for the first few weeks to help you with lifting and the general activities of daily living. To help you with your recovery we aim to begin planning for your discharge from the time you arrive.

Patient Rights

You have the right to:

- Be treated with respect and dignity, and have your privacy respected.
- Information about your condition, treatment options, and risks.
- Information about effects on your health if you decide to withdraw your consent or refuse further treatment.
- Be involved in decision making about your treatment, discharge or transfer.
- A second opinion, if you request.
- Free, professional, confidential interpreters (including sign language).
- Access to your medical records.
- Decide whether or not you will take part in clinical research, and/or student education.
- Choose to be treated as a public or private (chargeable) patient, and be provided with an estimate of costs (on request) before treatment begins.
Your responsibilities are to:

- Treat staff and others with respect.
- Know your own, & your family’s medical history if possible.
- Tell staff of any medicines that you are (or have been) taking, and any medicines that you are allergic to or cannot take.
- Tell staff about your health, and anything that you think may affect your health.
- Tell relevant staff if you are unable to attend your appointment(s) or if you need to leave the unit at any time.
- Participate in negotiating your treatment by St Vincent’s health care providers.
- Tell your doctor if you are receiving treatment from another health practitioner.
- Discuss with your doctor before reviewing or stopping treatment.
- Understand that if you are not covered by Medicare or overseas reciprocal arrangements, you will be liable to pay all relevant fees and charges.

Making Compliments and Complaints

We appreciate compliments and complaints. If you have any concerns, please contact your nurse, doctor, or department manager. You can also contact the Patient Liaison Officer on telephone (02) 8382 2559.

Alternatively, you can write to: Executive Support Manager, Executive Office, St Vincent’s Hospital, Victoria Street, Darlinghurst NSW 2010.

If you are not satisfied with how your complaint was managed, you can write to: Office of the CEO, SV&MHS, St Vincent’s Private Hospital, 406 Victoria Street, Darlinghurst NSW 2010 or email feedback@stvincents.com.au

You may also contact the Health Care Complaints Commission, Locked Mail Bag 18, Strawberry Hills NSW 2012, Telephone
(02) 9219 7444 or toll free 1800 043 159 or TTY service for the hearing impaired: (02) 9219 7555.

Help with Travel

The NSW Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS) provides some financial assistance to those who need to travel more than 100kms one way to the nearest appropriate specialists. For further information phone (02) 8382 2213.

Interpreter Service

A free interpreter service is available to patients who do not speak English as a first language. Please ask your nurse to book an interpreter if you require this service.

ADMISSION TO HOSPITAL

What to bring

- Pyjamas
- Toiletries
- Glasses case
- Denture case
- Any medication you are taking
- Less than $50 cash
- IPTAAS form if you live more than 100km away from St Vincent’s
- Clothes to wear home on discharge
- Contact details for your local Doctor and next of kin

Please Note: The use of mobile phones in the ward area is prohibited. Phone Cards are available from a vending machine at the entrance to the ward.

St Vincent’s Hospital is a No Smoking facility.
WHAT IS CORONARY ARTERY DISEASE?

Coronary Artery Disease is a disease of the arteries that lie on the surface of the heart and supply blood to the heart muscle. There is a progressive build up of plaque inside these arteries, which causes the arteries to harden and become partially or completely obstructed \((\text{Figure 1})\). This causes a reduction in the amount of blood with oxygen reaching the heart muscle which can result in pain. This pain is called Angina Pectoris. Complete obstruction of an artery can cause damage, which occurs when you experience a heart attack (myocardial infarction).

![Figure 1](image)

TYPES OF HEART SURGERY

It is important to have an understanding of the surgery you are having. The following pages provide a summary of the different types of surgery.
Coronary artery bypass and valve surgery are the two most common types of heart surgery. Valve surgery may be required on the aortic, mitral and/or the tricuspid valves. Other types of heart surgery include:

- Repairing of aneurysms of the heart or aorta, (the large blood vessel which pumps blood from the heart to the rest of the body).
- Correcting congenital defects in the heart.

To allow access to the heart an incision needs to be made through your sternum (breast bone). The surgeon will sew up the sternum with wire at the end of the operation. This wire provides support and does not need to be removed. The surgery involves using the bypass machine which does the work of the heart and lungs whilst the surgeon operates on your heart.

**Coronary Artery Bypass Surgery**

This operation uses blood vessels from other areas of the body to bypass the obstructions in the coronary arteries. The surgeon may elect to use an artery from inside your chest (internal mammary artery graft) (*Figure 2*), veins from your legs (saphenous vein) or an artery from your forearm (radial artery) (*Figure 3*). The decision depends on your individual case.
Figure 3

Coronary Artery Bypass

Figure 4
Valve Surgery, Artificial Valves

There are four valves inside the heart that are responsible for allowing blood to flow in one direction, acting as one way doors.

![Heart Diagram](image)

Certain conditions such as infection, rheumatic fever and birth defects, can lead to either obstruction (stenosis) or leakage (re-gurgitation or insufficiency) of the valve. This means that the valve does not open and close efficiently. The valves most commonly damaged are the aortic and mitral valves.

When the valve is malfunctioning the heart must work harder to pump the blood around the body. As a result, the heart can become weak. Chest discomfort, dizziness and shortness of breath can develop.

**There are two types of artificial valves:**

- Mechanical
- Tissue

Your surgeon will discuss with you which is the most appropriate.
Aortic valve replacement with a tissue valve

The surgeon opens the aorta and removes the aortic valve

The artificial aortic valve, in this case a tissue valve, is stitched into place

Figure 6

Mitral valve replacement with a mechanical valve

The surgeon opens the heart and removes the mitral valve

The artificial mitral valve, in this case a mechanical valve, is stitched into place

Figure 7

Depending on the cause of your valve disease, it may be possible to repair rather than replace the valve. This applies particularly to the mitral valve. Your surgeon will fully discuss the surgical options for your individual circumstances.
Mitral valve repairs by quadrangular resection

The surgeon removes a section of excess tissue from the leaflet and uses sutures to repair it. An implanted ring (or band) is used to reduce the size of the annulus.

Anuloplasty

The implanted ring or band reduces the enlarged annulus and allows the valve leaflets to close completely.

Figure 8

Atrial and Ventricular Septal Defects

The heart is divided into four chambers. Some people are born with a hole (defect) in the wall of one of the chambers. The hole allows the blood to flow in the wrong direction inside the heart. As a result, the person may feel tired and breathless. The hole may be repaired by stitching or by patching it with a biological or synthetic material.

Heart Aneurysms

An aneurysm is bulging of part of the heart muscle, which may occur as a result of a heart attack. This bulging will decrease the heart’s ability to pump sufficient blood around the body. This may lead to weakness, dizziness, chest pain and breathlessness.

Aneurysms can be repaired. Your surgeon will discuss the techniques that can be used. There are many other types of heart disorders and only the more common ones have been mentioned in this booklet. If you have any questions please ask the medical and nursing staff.
THE HEALTH CARE TEAM

The health care team is available to talk with you about your condition, hospitalisation and any support you may need. There are many health professionals available to help you during your hospital stay.

Doctors – A team of Doctors are involved in your care on the preoperative/postoperative ward. The team consists of your Surgeon and Cardiologist as well as the Registrar and Resident. Other specialists, such as the Anaesthetist and the Perfusionist, will visit you the evening before the surgery and will be involved in your care during the operation. Intensivists will take part in your care in the immediate postoperative period.

Care Coordinator – A Nurse Consultant coordinates your admission to St. Vincent’s Hospital and your discharge after the surgery. By helping to identify any potential problems and liaising with appropriate members of the Health Care Team, the Care Coordinator will ensure that your specific needs are dealt with efficiently to promote your recovery and timely discharge.

Nurses – The nursing staff will care for you during your stay and will assist you with any problems to facilitate a trouble free recovery.

Social Worker – Depending on your pre-operative condition, home support and post-operative recovery, you may be faced with significant lifestyle changes following your discharge from hospital. Where necessary, the hospital will provide a Social Worker who can offer individual and family counseling. Social Workers have expert knowledge of community resources and can assist and advise with Social Security benefits, financial problems and with discharge arrangements from hospital.

Pastoral Care – The pastoral care members of the healing team are available to help you in your personal or spiritual needs and response to your ill health. Time in hospital can be traumatic,
and suffering often leads us to reflect on our life and its meaning. Chaplains and pastoral care staff are available to spend time with you and are happy to contact any religious person with whom you would like to speak.

**Dieticians** – The dietician is available for individual dietary consultations if requested by yourself or deemed necessary by your physician.

**Occupational Therapist** – The occupational therapist can advise you about your return to normal activities after your surgery, including return to work.

**Pharmacist** – The pharmacist will ensure that you have an adequate understanding of your medications and is happy to answer any questions.

**Physiotherapist** – The physiotherapist will help you get moving and regain your strength after surgery. This will speed up your recovery and reduce the risk of post-op complications.

**Cardiac Rehabilitation Nurse** – During your stay in hospital you will be visited by a cardiac rehabilitation nurse. They will provide you with the details of a cardiac rehab program available to you in your local area once you have been discharged home. We recommend you commence this program within 1 week after returning home.

**Heartline** – A dedicated telephone service that provides you with the information and support you need to reduce your risk of heart disease. Call **1300 362 787** or visit **www.heartfoundation.com.au**

**Daily Routine of the Ward**

- Meal times are usually:
  
  *Breakfast*  7am–7:30am
  *Lunch*  12noon–12:30pm
  *Dinner*  5pm–5:30pm

- The times you take your medication may be altered. Please ask your nurse to explain the routine.
There is a call bell at each bed area and in the bathrooms. Please use the bell if you require assistance.

Visiting hours are: **10am–1pm, 3pm–8pm**. For safety reasons we recommend that no more than 2 visitors can visit at any one time and they are asked to sit on the chairs provided.

The rest period for patients is **1pm–3pm** daily. Visitors are not permitted to the ward area during this time.

There is a phone at each bedside where you can receive calls. It is possible to purchase a phone card from the vending machine at the entrance to the ward to make out going calls from this phone. Mobile phones are not to be used within the ward.

**Before Surgery**

When you are being admitted, the nursing and medical staff will ask you a number of questions which they will record as your own ‘case history’.

**It is important to inform them of the following:**

- Any allergies that you may have.
- Medications you are taking – the doses and how many times a day you take them, and any ‘over the counter’ medications you may take.
- It is especially important to tell the staff that you are on any type of medication that thins your blood (anticoagulants) including aspirin, clopidogrel (Plavix, Iscover), warfarin and drugs for arthritis.
- Any special diet you may be on.

There are a number of tests and investigations that need to be performed before your surgery. These can be attended to by your local doctor or at the pre-admission clinic; however it is important that tests are performed no more than 4 weeks prior to the date of surgery. The tests are:
**ECG (electrocardiograph)** – An Electrocardiograph (ECG) is a recording of the electrical activity in your heart. This is done as a baseline so that it can be compared to any changes which may occur during your hospitalisation.

**Chest X-ray, +/- Dental X-Ray** – Chest X-rays are performed to exclude any pre-existing condition of the lungs. Dental X-Rays are performed on all patients requiring valve surgery and assist in the diagnosis of dental problems which must be treated prior to your surgery. This will minimise the possibility of the transfer of infection from your teeth to your blood stream and then on to the new valve.

**Carotid Dopplers / Ultrasound** – A scan of the blood vessels in the neck to measure the circulation that supplies the brain.

**Blood tests** – Blood tests are taken to check the function of your organs. These include:
- Liver and kidney function
- Hepatitis B & Human Immunodeficiency Virus (HIV) status
- Full blood count
- Coagulation studies

**Please note:** Prior to surgery, please seek medical advice as to whether you should stop taking anticoagulants or non-steroidal anti-inflammatory painkillers, such as:
- Warfarin (*Coumadin, Marevan*)
- Clopidogrel (*Iscover, Plavix*)
- Ticlopidine (*Ticlid*)
- Aspirin (*Astrix, Cardiprin, Cartia, Disprin, Solprin*)
- Ibuprofen, Indomethacin, Naproxen, Celebrex

**Nasal and groin swabs** – These are performed to identify any abnormal bacteria on your skin that may affect the wound healing following your surgery.
Informed Consent

The doctor will ask you to sign a consent form. This form, when signed, gives your permission for anaesthesia, the operation to be performed and for any necessary transfusions of blood products. Sufficient information should be provided for you to make an informed decision. It is your right to have a clear appreciation of the nature of, and the risk associated with, any proposed treatment or investigation. If you have any doubts at all concerning your operation please ask the staff questions.

PREPARING FOR SURGERY

Preparing your body for Surgery

**Skin preparation** – On the afternoon before surgery, the nurse will use a hair clipper to remove hair on your chest, arms and legs. This is to reduce the potential for infection after surgery.

**Washing & showering** – Antibacterial soap is located in dispensers in each bathroom. It is advisable that you use this to shower with before your surgery and for the duration of your stay in hospital. The antiseptic soap helps to reduce the number of bacteria on your skin. Talcum powder or body sprays should not be used.

**Bowels** – You should have your bowels open the day before surgery. This reduces the likelihood of abdominal discomfort after surgery. Your nurse can give you medication to assist if your bowels have not been opened.

**Fasting** – It is essential that your stomach is empty for surgery. You must not have anything to eat or drink from 12 midnight the night before surgery.

**Questions commonly asked by people having Heart Surgery**

This section of the booklet provides you with the questions most commonly asked by people who have undergone heart
surgery. If you have any other questions, please ask your health care team.

Q: Is there much risk in this operation?
A: There are risks associated with all procedures. Your surgeon will inform you if there are any special risks with your case.

Q: Can I walk around the ward before surgery?
A: As a general rule mobility is encouraged and most patients walk about the ward. Your level of activity depends on your condition prior to surgery.

Q: What can I do to help prepare for surgery?
A: Practise your deep breathing, coughing and leg exercises prior to surgery. This will enable you to perform the exercises with greater ease after surgery. These activities will help to reduce the potential for developing pneumonia.

Q: How long will I be in the operating theatre?
A: The average time is 3-5 hours, but this varies with the type of surgery. You will not be aware of time during your surgery. While you are in the Intensive Care Unit time will lack perspective. What seems like a day to you may only be a few hours. Time will regain normal perspective again after about three days.

Q: Will I come back to the same room after surgery?
A: No – You will first go to the Intensive Care Unit, Level 5, Xavier building. When your condition is stable you will be transferred to the ward.

Q: Will the tubes hurt when they come out?
A: You may feel some pain and a strange pulling sensation when the tubes are removed. Pain relieving medication can be given before the tubes are removed. You will be told the most effective way to position yourself and breathe during the procedure. It is important to follow these instructions.

Q: How is my breast bone held together after the surgery?
A: There are wires in your breast bone that are inserted during surgery. These stay in for the rest of your life and rarely cause any problem. The bone takes 6–8 weeks to heal.
Family Responsibilities

We realise that this is also a very stressful time for your family. The surgery usually takes 3-5 hours. There is a waiting room outside the Intensive Care Unit for relatives which is located on Level 5, Xavier Building. Your family may find it less stressful if they can organise to do something away from the hospital during this time.

The staff in the intensive care unit are happy to answer telephone enquiries. Please nominate one spokesperson from your family who can then contact your relatives and friends to inform them of your condition during your hospitalisation.

Cancellation of Surgery

Unfortunately there is always the possibility of a last minute cancellation or change to your scheduled time of surgery. This may be due to a shortage of beds and/or staff in the intensive care unit or the need to perform emergency surgery on other patients.

The staff are aware that this is a very stressful time for you and will inform you of any problems as soon as possible. In the event of such delays we will do everything within our power to ensure that you have your surgery as soon as possible.

THE DAY OF SURGERY

On the morning of surgery you will be woken and asked to shower with antibacterial soap. The nurse will supply you with a gown and hat to wear to the operating theatre. You should remove the following:

- Make-up and nail polish
- Jewellery
• Contact lenses/glasses
• Personal underwear
• Hair pins
• Rings

You do not need to remove your dentures.

Your nurse will help you to pack necessary items such as your toiletries and glasses. These items will be transferred to the Intensive Care Unit during your surgery. If necessary, the rest of your belongings can be taken home by family or friends and brought back in when you return to the postoperative ward. If this is inconvenient an area is available on the ward in which these items can be securely stored.

Please Note: The hospital takes no responsibility for lost or stolen property.

Pre-medication

The anesthetist will visit you before your surgery, usually ordering a pre-medication to be given prior to surgery. You will be given an injection or some tablets (or both). The pre-medication will relax you and may make you very drowsy. It may dry your mouth, but this is quite normal.

You should empty your bladder (pass urine) before you receive your pre-medication. You must remain in bed after receiving the injection or tablets, as you may become very dizzy when you stand. You will also be required to wear an oxygen mask after your pre-medication. If you require any assistance after you have received your pre-medication, please use your call bell to alert one of the nurses. A nurse and porter will escort you to the operating theatre after your pre-medication.

Your relatives can stay with you during this time on the ward and can accompany you to the theatre suite entrance.
Operating Rooms

When you arrive at the operating theatres you will be met by an anesthetic nurse. The nurse will ask your name and will check the type of operation that is to be performed. This nurse will escort you to the anesthetic room, where the anesthetist will take your blood pressure. An intravenous (IV) drip will be placed in your arm. You will be given drugs through this which will make you drowsier.

You will then be taken to the operating theatre. The staff will lift you onto the theatre table. The anesthetist will give you oxygen to breathe through a mask and she/he will give you an injection to put you to sleep. You may find that you have no memory of arriving in the anesthetic room or going to theatre. This is the effect of the medication.

AFTER YOUR SURGERY

Cardio-thoracic Intensive Care Unit

After the operation you will awaken in the Intensive Care Unit and will be aware of noises such as beeping alarms and machinery. These are normal sounds made by the machinery around you.

You will also hear people speaking. They will tell you that your operation is over. You will have a tube in your mouth which is attached to a ventilator that helps you breathe. The tube will prevent you from swallowing, speaking or drinking temporarily.

If the staff wish to communicate with you, they will call you by name and speak directly to you. You will be asked ‘yes’ and ‘no’ questions so that you can nod or shake your head to answer.

Equipment used

Many types of equipment are used to monitor and assist your body after the surgery. The purpose of this equipment is to:
- help you breathe
- watch your heart rate, blood pressure and heart function
- monitor your kidneys
- check your blood pressure
- ensure you have enough fluid during the time you are not eating or drinking

**Breathing (endotracheal) tube** – During your surgery an ‘endotracheal’ or breathing tube will be placed via your mouth through the vocal chords into your windpipe. You will be unable to speak while this tube is in place.

The tube will be attached to a ventilator, which helps you to breathe. Usually you will require ventilation for approximately 4 hours, however in some circumstances this may extend to overnight. Ventilation allows you to rest and get stronger before you begin to breathe independently again.

When you first wake up the tube may feel very uncomfortable, as though you cannot breathe. It will help if you relax and do not ‘fight’ the ventilator.

On a few occasions the nurse will need to remove any build up of mucous in the endotracheal tube. This involves putting a small suction tube down the endotracheal tube. This procedure can make you cough and may be uncomfortable; however, it is performed quickly.

**Arterial line** – An arterial line is a small needle usually placed in your wrist by the anesthetist. It is used to monitor your blood pressure continually. Blood samples can also be taken from this site. It is usually removed the morning after your surgery and the removal is usually painless.

**Central lines and Intravenous lines** – A special central venous line will have been inserted by the anesthetist into the front of your chest or lower neck whilst you were asleep. These lines are inserted to allow you to receive fluids and medications and monitor the heart pressure. The central line is usually removed on the second postoperative day.
Heart monitor – The monitor leads are connected to your chest by sticky pads to allow a continuous reading of your heart and enables us to see any changes in the rhythm and/or rate. Sometimes when you move around in bed it can cause the machine’s alarms to go off. Try not to let this worry you as there is a nurse checking the alarms.

Urinary catheter – The urinary catheter is a small tube placed into your bladder. It drains your bladder continuously and allows the nurse to monitor your kidney function by keeping an accurate measure of how much urine you have passed. Sometimes the tube can make you feel as though you want to pass urine. Relaxing may help the feeling to pass. The catheter is usually removed on the day after your surgery.

Drainage tubes – A number of tubes, usually two or three, may be placed around your heart and brought through your skin, at the lower end of your chest during surgery. The tubes prevent any accumulation of blood and fluid around the heart and lungs during the initial stages after the operation. The tubes are usually removed the morning after surgery. The removal is usually slightly uncomfortable, but it is preceded by an injection of a pain relieving drug.

Temporary pacemaker – You may need to have pacemaker wires inserted during your operation. These wires are attached to a machine which assists your heart to beat regularly if necessary. The fact that you are attached to the pacemaker does not mean you have experienced an unusual complication. It is a common practice. The wires are usually removed on the fourth postoperative day.

Elastic stockings (TEDS) – You will need to wear elastic stockings if you have had veins removed from your legs. These stockings help the remaining veins to return the blood to your heart. You will need to wear them for approximately 4 weeks.
There are a few points to remember:

- You will need assistance for the first two weeks to put on the stockings, as the effort can cause strain on your breast bone.
- Ensure that the stockings do not wrinkle as this causes a tight band that decreases the blood flow back to your heart.

You may notice that, even with the help of the stockings, you still have some swelling around your ankles and feet. To relieve this you should try to keep your legs elevated whenever you are sitting for long periods of time and avoid crossing your legs.

As you become stronger after your operation you will not require such intensive monitoring and care. The remaining pieces of equipment will be removed over the two days, as you progress satisfactorily. You should be able to sit in a chair at the bedside and take a few steps around your bed area on the first day after your operation.

Pain Relief

Everyone experiences pain after surgery, although the extent to which people experience it differs. The first few days are usually the most uncomfortable, during which time your doctor will order pain relief for you. Initially you will automatically receive pain relieving medication continuously via the central line until the morning after your surgery. Usually after the first two days you will be given tablets.

It is very important to take your pain relief regularly and when it is needed. If you ‘put up’ with the pain you will be unable to move around and breathe deeply. Deep breathing and coughing exercises are essential to your full recovery.

Family Visits

Your family is able to visit you in the Intensive Care Unit. Visitors are limited to two at any one time and should preferably be members of your immediate family. If they have any questions they should consult the nursing and medical staff (surgeons and intensivists) who are caring for you. The surgeon will speak to
your family as soon as possible following your surgery. The postoperative ward also requests that visitors are limited to two at the bedside.

**Transfer to the Ward**

When you are no longer in need of intensive care treatment you will be transferred back to the ward.

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**CARE AFTER SURGERY**

**Wound care** – A daily shower with antibacterial soap should be taken to decrease your risk of infection. Your nurse will assess your wounds daily. Please check with your nurse before you have a shower as some wounds need to be covered by a waterproof dressing. When visiting your local doctor after discharge, ask them to review your wounds.

**Bowel function** – Many people have trouble opening their bowels after major surgery. This is due to a combination of decreased activity and the medications given to relieve pain. Please let your nurse know if you are having any problems so that you can be given medication to help. If you let the problem persist, it can be extremely uncomfortable and can make you feel quite unwell.

**Stitches and wires** – You will have stitches at the bottom of your chest wound that are securing your drains. Some people may also have metal pacing wires. These wires will normally be removed on the fourth day, and the stitches on the fifth day after your operation. Sometimes they remain longer, however they must be removed by the day before you are discharged.

**Tightness of chest and shoulders** – During surgery your chest wall is pulled open to allow access to your heart. This retraction may cause stiffness of your ribs, shoulders and back. Changing your position frequently and maintaining good
posture will relieve some of your discomfort. Your nurse or physiotherapist will demonstrate some arm and shoulder exercises which may help.

**Fever** – It is common to have a slight fever for a few days until your lungs are cleared of the excess secretions. Bouts of heavier perspiration may occur during the first few postoperative days. Do not let this concern you. These symptoms are signs that the body is healing itself. Medications for pain relief can also cause excessive sweating.

**How might I feel?**

People differ greatly in their response to illness and operations. Positive thinking and optimism are a great advantage. It is common to experience up and down days, or mood changes during your recovery. Some people may experience depression. Having a bad day after one or more good days does not mean that your condition is deteriorating. Your body is merely resting and healing.

Altered sleep patterns and vivid dreams are also common experiences. This is due to effects of the operation and the use of the bypass machine during surgery. Sleeping habits usually return to normal after a few weeks. Sleeping tablets have a limited effect.

**Please note:** Some people can become confused or experience difficulty with their memory for a while after the operation. If this occurs it is only temporary. It often helps to see your family and friends and talk about familiar experiences. Writing things down and keeping a diary may also help you.

**PHYSIOTHERAPY ROUTINE**

**Activity in hospital** – The level of activity you attain in the postoperative week will depend on many factors. Your nurse and physiotherapist will work with you to find the level of activity appropriate for you.
Bed Mobility

- After the operation, it takes 6-8 weeks for your breastbone to heal.
- During this time you must be very careful with what you lift and how you use your arms.
- This is a guide to protecting your chest after the operation. If you have any questions speak to your physiotherapist.

Rolling in Bed

- When rolling in bed keep your entire body straight and keep your hands crossed over your chest.
- Bend your knees and move to the opposite side of the bed to the way you want to roll while still on your back (Figure 9).
- Keep your knees bent, push with your feet to help you to turn onto your side keeping your body straight (Figure 10).
If you need to sit up on the edge of the bed, use the uppermost arm and hand to gently push yourself up into sitting (Figure 11).

**Sitting up in Bed**

- Don’t use your arms—keep them folded across your chest at all times.
- Use your legs: bend your knees up and use your feet to push across the bed.
- Walk on your bottom to move back up the bed. **Remember, don’t use your hands, keep them folded across your chest.**
**Precautions**

- **Do not** put both arms behind you at the same time for 8 weeks
- **Do not** lift more than 5kg with your arms for the first 8 weeks

*If you develop any clicking in your breastbone you should tell your doctor and your physiotherapist.*

- Breathing and coughing are very important after the operation.
- Walking and moving your arms and legs is also very important. This will also help with your recovery as well as preventing blood clots.
- If you are in pain ask your nurse for pain relief medication. This will help with your breathing, coughing and walking.

**Breathing Exercises**

**Deep breathing exercises** – Take a deep breath in as far as you can and keep your shoulders and neck relaxed. Breathe out quietly.

**Inspiratory hold** – Take a deep breath in, then hold your breath for 3 seconds.

**Huff** – After taking a medium-sized breath, keep your mouth open and rounded and squeeze the air out hard and fast, as if trying to fog a mirror / glasses.

**Cough** – Very important and is done with arms crossed over the chest for support.

**Walking** – Walking is very important after the operation and will initially be done with the physiotherapist until you are strong enough to manage yourself. The distance will increase each day.
Discharge Planning

It is recommended that you do not live alone for the initial few weeks after surgery. It is important for us to establish early during your stay whether you will need help at home or assistance organising your transport home.

Please advise your nurse if assistance is required as discharge planning is an important part of your care. The Care Coordinator and Social Worker can also assist you with your discharge planning and travel arrangements.

Education Sessions

There are education sessions on ongoing care such as exercise and resuming normal activity. These sessions are held in the ward during the week. Please ask your nurse for the days and times that the sessions are held. We welcome any family members who also wish to attend, especially those who will be caring for you in the first few weeks after discharge.

Cardiac Rehabilitation Program

After discharge we strongly recommend you attend a Cardiac Rehabilitation Programs.

Cardiac Rehabilitation Programs are recommended for people who have had a heart attack and/or heart surgery. The 2 main components are:

- Supervised exercise classes
- Education sessions

The aims of the program are to help you: resume your normal activities, to regain your confidence, improve fitness and help you identify and control your particular risk factors. You will also have the opportunity of gaining support from other people going through the same experience.
A Cardiac Rehabilitation Nurse Consultant will visit you during your hospital stay in regard to your rehabilitation and explain the program and its benefits.

There is a Cardiac Rehabilitation Service near you wherever you live in Australia. Cardiac Rehabilitation can be conducted from Hospitals, Community Health Centers or your local doctors’ surgery. Some may include telephone support or a home visit from a health professional and others may require you to attend sessions.

Please ring the Cardiac Rehabilitation contact number within 1-2 days of returning home from hospital to book in.

Remember, if you are experiencing problems you should contact your Local Doctor, or your Cardiologist/Physician. You can also contact the Clinical Nurse Consultant at the St Vincent’s Hospital Cardiac Rehabilitation Program, telephone (02) 8382 2321. If the office is unattended call the switchboard on (02) 8382 1111, quoting pager number 6367,

or

The National Heart Foundation on (02) 9211 5188.

LEAVING THE HOSPITAL

Discharge from the Hospital

You will be required to vacate your bed by 9am on the morning of discharge. If you haven’t received your discharge medication by this time you can wait in the reception area outside the entrance to the ward. This enables us to admit patients from the intensive care unit and accept new admissions.

Your discharge check list:

- 4 days supply of medications
- Private x-rays returned  *(if applicable)*
- Valuables returned  *(if applicable)*
- Follow-up appointments, Local Doctor, Cardiologist, Cardiac Surgeon  
  *(if applicable)*
- All stitches/pacing wires have been removed
- IPTAAS form  
  *(if applicable)*
- Referral to a cardiac rehabilitation program
- Certificate of fitness for air travel  
  *(if applicable)*
- Medical certificate for work  
  *(if applicable)*

*Please Note:* A discharge letter summarizing your hospital stay will be faxed to your local doctor.

**Discharge Medications**

The hospital will supply you with enough medication to last you **only 4 days** (unless otherwise indicated). The nursing staff and/or pharmacist will explain your medications and how often you should be taking them. It is very important that your local doctor reviews your medications when you visit him/her for your check up within 4 days time following discharge from hospital.

If you are prescribed **Warfarin**, please ensure you are aware of your dosing requirements and subsequent blood tests *(see page 41 for more information)*.

**Pain Management**

You will need to take pain medication as wound and muscle pain can occur for a number of weeks. We advise you to take Paracetamol tablets regularly. If the pain persists please visit your local doctor.

**Travelling Home**

When you are leaving the hospital ensure that a member of your family or a friend can carry your bags to the car. You must wear your seat belt, or you may be fined. Place some padding between the belt and your chest to make your journey more comfortable, if necessary.
It is possible to purchase a seatbelt cover from the Occupational Therapist – please alert your nurse if you would like to do this.

You are advised to take a break from sitting every 2 hours or so if you have a long journey home. This will reduce stiffness and improve circulation.

**CARING FOR YOURSELF AT HOME**

**Medical follow-up**

It is important for you to make appointments to see your family doctor within 4 days after discharge. Please see your heart specialist (cardiologist) four to six weeks after discharge.

If you are experiencing any problems consult your local doctor. Some patient’s may require an appointment with their surgeon. If this is necessary you will be required to make this appointment for 6 - 8 weeks after discharge.

**Wound Care after Discharge**

Your wound will heal completely in a couple of months. Wash your wound with warm soapy water daily during your shower. The soap should be mild and not highly perfumed to reduce irritation to the healing tissue.

Do not apply lotion directly to the wound until it has completely healed and any scabs have fallen off. Non-perfumed lotion may be applied to the skin around the wound. This may help to reduce the dry skin and itching that normally occurs with healing. **Do not use powder on or near the wound.**

Some swelling and redness is normal. If you notice an increase in redness, swelling, tenderness or ooze develops, please contact your local doctor. It is normal for the skin on either side of your leg and chest wound to feel slightly numb.
EXERCISE PROGRAM AFTER DISCHARGE

Walking Program

- You need to exercise regularly after you leave hospital
- You can walk as much as you like as long as you feel comfortable
- If you have any questions about exercise ask your physiotherapist or occupational therapist

Reasons to exercise:

- to increase fitness
- to help control blood pressure, weight and cholesterol
- to help in the healing of leg wounds
- for relaxation

The Walking Program:

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Nothing, getting home is enough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>5 to 10 minutes of walking, on flat ground, twice a day</td>
</tr>
<tr>
<td>Week 2</td>
<td>10 to 15 minutes of walking, on flat ground, twice a day</td>
</tr>
<tr>
<td>Week 3</td>
<td>15 to 20 minutes of walking, with some slopes and stairs twice a day</td>
</tr>
<tr>
<td>Week 4</td>
<td>20 to 25 minutes, with increasing speed, twice a day</td>
</tr>
<tr>
<td>Week 5</td>
<td>25 to 30 minutes walking, twice a day</td>
</tr>
<tr>
<td>Week 6</td>
<td>FOR THE REST OF YOUR LIFE: at least 45 minutes of walking once a day (5 minutes comfortable to commence then 20 minutes brisk walking so you are slightly short of breath, then 5 minutes ‘cool down’ or comfortable)</td>
</tr>
</tbody>
</table>
Have a break if you get:

- Very short of breath or sweaty
- Nauseous
- A headache
- Inappropriate tiredness
- Muscle cramp

Do the following exercises in the morning and the afternoon. Do 5 of each of these exercises. If you get clicking in your chest see your physiotherapist or doctor.

**Neck Exercises**

**Flexion and extension:** put your shin to your chest, then look up to the ceiling

[Figure 13]

**Rotation:** turn your head to the left, then right

**Neck side flexion:** ear to your shoulder, left and right

[Figure 14]  [Figure 15]
Shoulder Exercises

Shoulder shrugging up and down, forward and backwards

Shoulder circling backwards and forwards with or without your hands on your shoulders

Shoulder abduction:
lift your arm straight out to the side and above your head

Shoulder flexion:
lift your arm forward in front
Trunk Exercises

**Trunk rotation:** with your arms crossed rotate your body as far as possible to alternate sides

![Figure 20](image)

Posture

Try to maintain a good posture in both standing and sitting position (*Figure 21*). Avoid protecting the incision by adopting a slouched posture as this leads to a stiff and painful thoracic spine.

![Figure 21](image)
Complications are not expected after discharge; however consult your doctor if any of the following occur:

- Persistent chest pain which is not related to your wound (angina pain is rare, but possible)
- Irregular heart beat, or palpitations
- Persistent fever over 38 degrees Celsius
- Chills
- Rapid weight change over 2kg in 24 hours
- Dizziness or fainting
- Excessive tiredness or weakness
- Severe shortness of breath or shortness of breath which is increasing
- Nausea and vomiting
- Wound Infection; signs include ooze, redness or swelling
- Weight loss or appetite change
- A cold or sore throat

**Infection**

Guarding against infection is another important consideration. Infection can lead to damage of the valves and other structures of the heart. Infection enters the body in a number of different ways. If there is a broken area from brushing or any other dental work, bacteria can enter through the gums. Diagnostic and surgical procedures can damage the tissue lining of other parts of the body and also allow bacteria to break the body’s natural defence barriers.

**How do I protect myself?**

Make routine visits to your dentist and doctor. Inform each doctor/dentist caring for you if you have had heart valve surgery. They can prescribe the appropriate antibiotics for you to take before any procedure. **This is very important.**

Brush your teeth and gums with a soft bristled toothbrush.
ACTIVITIES YOU CAN DO AND HOW SOON?

Hobbies and Leisure Activities

Prior to commencing an activity it is important to think about lifting, straining and the amount of energy required to perform the task. The principle of starting with the shortest and simplest and then upgrading slowly is also important. The occupational therapist will discuss your return to normal activity during the ward education session.

Golf – Keeping it simple initially with putting practice at home from four weeks, chipping and full swings at about six weeks, a 9-hole game at eight weeks (two months). By 12 weeks (three months) a full competitive 18-hole game should be possible.

Bowls – A good starting point is to practice swinging the ball at six weeks. At eight weeks you could attend a roll up, and by three months you should be back to a full competitive game.

Tennis – You could begin practice with hitting the ball and gentle serving at six weeks. A leisurely game of doubles should be appropriate at 8-10 weeks and a full competitive game at approximately three months.

Driving – The RTA enforces no driving for 4-6 weeks, except on the advice of your doctor. Concentration, reflex time and eyesight are often affected for 6 weeks. All of these factors are vital for safe driving.

Sex – Sex requires about the same amount of energy as walking up two flights of stairs, so if the stairs are not a problem, you may engage in modified sexual activities generally from week 3. Since straining is not recommended for six weeks, you will need to re-think how you do the task and consider some alternative positions. It is normal after heart surgery to lose interest in sexual activity for a while; however, like other activities you should be back to normal at 3 months.
Work – You can return to work related activities as soon as your concentration, confidence and physical abilities allow. A general rule of thumb is that most people involved in light office work return approximately 6 weeks and for heavy work, back to full duties at three months. You can return earlier if you reduce your work hours and seek light duties. As with any other activity it is always a good idea to make the first attempt as simple as possible. This often means working at home on a file or job, away from distractions and demands of the office. Gradually build up your involvement and working hours: a gradual return will allow you to be more successful and hence to build confidence.

All jobs are different in the physical and psychological demands they place on the person. The Occupational Therapist will make time to discuss your individual plans for return to work prior to your leaving hospital.

Gardening – The garden is a source of pleasure for many of us. A gradual return to gardening might follow this time frame:

- Hosing the garden is okay at week one
- Short bursts of light weeding and pruning with hand held clippers can be done in week three
- Digging soft soil can commence in week six
- Trimming the hedges can begin at week eight

Mowing the lawn is quite a strenuous task and should be left until three months.

Housework – Making the most of your energy includes starting with the activities that you like to do the most. If you enjoy cooking, you can start with some meal preparation at week one. Keep it simple and sit whenever possible. Flower arranging, tidying up, dusting, washing up and clothes washing can all be started early. However, for the first six weeks remember to delegate the heavier tasks to your family. A roster can save you having to give constant reminders that:
 the floor needs vacuuming or sweeping
 the washing needs hanging on the line
 the bathroom needs cleaning
 the bed linen needs changing

After six weeks you can gradually return to your normal responsibilities.

For example your first six weeks at home may look like this:

➔ **Week 1** – Activity level as in hospital, light activities for a short duration. Avoid lifting. Arm and shoulder strain, bending or stooping may cause discomfort. Limit visitors and have an afternoon rest. Stairs are okay if you go slowly and rest frequently. If appropriate to your life style you may enjoy table games, cards, light craft, reading and computer operating as your concentration allows and other similar activities.

➔ **Week 2** – Activities from week 1 may be upgraded in both time and effort. Walking 5-10 minutes twice a day. Limit outings to approximately two hours, you may still need an afternoon rest. New tasks can include light meal preparation and watering the garden with the hose.

➔ **Week 3** – Continue to upgrade all previous activities using greater body and arm movements. Walking 15-20 minutes twice a day, your outings can be extended to half a day. Activities like pottering the garden for 15-20 minutes, light weeding and going to the cinema / restaurant can be included in your weeks program. Sexual activity can be resumed if modified.

➔ **Week 4-5** – You will be able to tolerate a full day’s activity by now, but may still appreciate your afternoon rest most days. Walking 20-25 minutes twice a day you can now plan major outings like picnics. Do all the things you have been meaning to do for ages, but have never had time to do!
**Week 6** – Start the gradual process of resuming more physical activity eg getting back into the house work like vacuuming, sweeping, raking leaves, shopping and driving the car. You may return to work, if your job is physically demanding, this will need to be on light duties and reduced hours/days.

**By Week 12** – You should be back to normal, you will probably be fitter than you have been for sometime and you should have resumed all activities that are appropriate to your life style. However, it may be six months before you feel the full benefits of surgery.

### MEDICATIONS

This section talks about general guidelines of medication use after Coronary Artery Bypass Surgery (CABGS) or Valve Surgery (AVR, MVR, TVR or PVR). If you have any questions about any medication you are taking, please ask to see the ward pharmacist.

Following cardiac surgery, many of the medications you were taking before may have changed.

**Always consult your doctor before starting or stopping any of your medication**

**Aspirin** – All patients who have had CABG’s will be put on a small dose of aspirin to take every day, unless you are allergic to it or your doctor decides not to give it to you for some reasons. Aspirin has been shown to prevent the formation of blood clots in arteries narrowed by heart disease, therefore reducing the risk of heart attacks and strokes.

The dosage of aspirin is either 100mg or 150mg daily. It should be taken with or after food.
There are many products of aspirin available on the market. Consult your doctor or pharmacist to choose the appropriate Aspirin product for you.

*Enteric Coated Aspirin* is recommended for patients who have suffered from stomach ulcers, hiatus hernia, heartburn or reflux in the past.

Do not take extra aspirin tablets or anti-inflammatory medications unless advised by your doctor or pharmacist. If you require something for pain or fever, use a product that contains Paracetamol (*eg* Panadol®, Dymadon®, Panamax®).

If you notice any signs of bleeding (*eg* nose bleeds, bruises, dark red urine or black stools) please see your doctor as soon as possible.

→ **Warfarin** – Most patients who have heart valve surgery will need to take warfarin to thin the blood. The duration of warfaring therapy varies among patients. Some patients will need to take warfarin for the rest of their life, while others only need to take it for a short period of time.

Prior to discharge from the hospital, you will be given an information booklet ‘*Warfarin – Important instructions for patients*’. Please ask your pharmacist or nurse for a copy if you have not received one. You will also be counseled about warfarin therapy before you go home.

**IMPORTANT:** Do not take Aspirin or any anti-inflammatory medications while taking warfarin, unless advised by your doctor.

→ **Lipid Lowering Medications** – Patients are often required to take medications known as statins to control the blood levels of cholesterol. Large studies have shown that statins
can reduce the risk of blood vessel diseases, heart attacks and stroke. The benefits of statins may not be seen immediately. You must keep taking it to receive the full benefit.

**Different statin products:**

- Atorvastatin (*Lipitor*®)
- Simvastatin (*Zocor*®, *Lipex*, *Simvar*, *Zimstat*®)
- Pravastatin (*Pravachol*, *Lipostat*®)
- Rosuvastatin (*Crestor*®)  

These medications are best taken at **night**.

→ **Blood Pressure Mediation** – After cardiac surgery, patients who have had pre-existing heart conditions (eg Hypertension, Myocardial Infarction or Heart Failure) will be commenced on either or both of the following medication:

**Beta Blockers:**

- Atenolol (*Tenormin*, *Noten*®)
- Bisoprolol (*Bicor*®)
- Carvedilol (*Dilatrend*®)
- Metoprolol (*Betaloc*, *Minax*, *Metohexal*®)

**ACE Inhibitors:**

- Captopril (*Capoten*, *Acenorm*, *Coptohecal*, *Enzace*, *Topace*®)
- Enalapril (*Renitec*, *Amprace*, *Auspril*, *Alphapril*, *Enahexal*®)
- Lisinopril (*Zestril*, *Prinivil*, *Lisodur*, *Fibsol*®)
- Perindopril (*Coversyl*®)
- Quinapril (*Accupril*, *Asig*®)
- Ramipril (*Tritace*, *Ramace*®)
- Trandalopril (*Gopten*, *Odrik*®)  

These medications not only help control high blood pressure, but also prevent the chance of angina and heart attacks.
Anti-anginal Medications – You may no longer require any medication that was being used to prevent angina or chest pain after surgery. Some of these medications may include:

Nitrates:
- Isosorbide mononitrate (Imdur®, Duride®, Monodur®)
- Isosorbide dinitrate (Isordil®)
- Glycerly trinitrate patch (Transiderm Nitro®, Nitro-Dur®)

Calcium Channel Blockers:
- Nifedipine (Adalat Oros®)
- Diltizem (Cardizem®)

Other Anti-anginal Medication:
- Nicorandil (Ikorel®)

RISK FACTORS FOR HEART DISEASE

Heart surgery is not a cure, just a second chance at an active life. To take advantage of this second chance and to avoid the chance of further surgery, you need to decrease or eliminate as many of the risk factors as possible.

The risk factors that you can change

Smoking – It is absolutely essential that you quit smoking and avoid second hand smoke (passive smoking). We realise that it is not easy to give up smoking. Whilst in Hospital please inform the nursing staff if you are finding it difficult and Nicotine Replacement Therapy (NRT) can be organized to help manage cravings. Once you return home we also recommend you contact the Quitline on: 131 848 and speak to your GP.
**High Blood Pressure** – can speed up the process of Coronary Artery Disease. High blood pressure is ‘silent’ that is, it doesn’t have noticeable warning symptoms therefore have your blood pressure checked regularly by your local doctor. High blood pressure can be controlled through lifestyle changes. Medications may also be needed and in some instances a number of medications may be required long term. Other lifestyle changes to help reduce blood pressure include; exercising, lowering your salt intake and limiting your alcohol intake.

**Recommended Blood Pressure**

<table>
<thead>
<tr>
<th>Systolic</th>
<th>130</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diastolic</td>
<td>85</td>
</tr>
</tbody>
</table>

**High Cholesterol** – The higher your blood cholesterol level the higher your risk of Coronary Heart Disease. High blood cholesterol can gradually clog the blood vessels supplying the heart and other parts of the body. This can reduce the blood flow to the heart and lead to a heart attack. It is important to have your blood cholesterol checked regularly by your local doctor.

**Recommended Blood cholesterol / Lipid levels**

<table>
<thead>
<tr>
<th>Total Cholesterol</th>
<th>&lt; 4.0mmol/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDL</td>
<td>&lt; 2.0mmol/L</td>
</tr>
<tr>
<td>HDL</td>
<td>&gt; 1.0mmol/L</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>&lt; 1.5mmol/L</td>
</tr>
</tbody>
</table>

**Lack of regular Exercise / Inactivity** – To fully benefit from your surgery you should follow the exercise program the physiotherapist has given you and continue it for life as it helps to control other risk factors such as high blood pressure, cholesterol and being overweight. The heart foundation recommends 30mins of moderate intensity physical activity (brisk walking) on most, if not all days of the week.
Increased Weight / Obesity – Being overweight and carrying too much weight around the middle are direct risk factors for Coronary Artery Disease and Diabetes. Try to lose weight by eating a well controlled balanced diet. If you are having trouble, consult a dietitian.

**Waist circumference**

<table>
<thead>
<tr>
<th>Men:</th>
<th>Less than 95cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women:</td>
<td>Less than 84cm</td>
</tr>
</tbody>
</table>

Diabetes – Along with taking your medications, lifestyle choices are important in managing diabetes.

Depression – While it is usual to experience sadness following heart problems, coronary heart disease can put you at greater risk of depression. Depression and lack of quality social support from others can lead to a reduction in quality of life and increased risk of further heart problems for people with heart disease. It is important to maintain psychological and social health; self monitor for depression and seek help when needed; and monitor your levels of social support from others and seek help if needed.

**How do I know if I’m depressed (and not just sad)?**

Have you for more than 2 weeks:

<table>
<thead>
<tr>
<th>Felt sad, down or miserable most of the time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lost interest or pleasure in most of your usual activities?</td>
</tr>
</tbody>
</table>

If you answered ‘yes’ to either of the above questions, then you maybe depressed. Please discuss this with your doctor or other health professional.
The link between diet and heart disease is well established. Many of the cardiac risk factors that you may have can be improved through dietary changes. By following some simple guidelines, you can reduce your diet related risk factors for heart disease.

1. **Aim to keep your weight within your healthy weight range.** By following a sensible eating plan and including exercise in your daily routine, a healthy weight can be achieved and maintained.

2. **Limit your fat intake.** All fats and high fat foods are rich in energy and will contribute to weight problems. Saturated fats, mainly found in animal fats, are a particular problem as they also contribute to raised cholesterol levels.

Saturated fats are found in fatty meats, full cream dairy foods (ideally use low fat), butter, lard, copha, many snack foods eg crisps, many commercial cakes and biscuits, palm and coconut oils and many takeaway foods eg sausage rolls, hot chips etc.

Instead of these saturated fats, switch to either polyunsaturated or monounsaturated fats and oils eg polyunsaturated margarine, canola oil, olive oil etc.

**If your cholesterol level is high, it is advisable also to:**

- Limit egg yolks to 2–3 a week.
- Limit offal meats (kidney, liver, brains etc).
- Limit prawns, shrimp, calamari, squid and octopus to no more than once a week.

**IMPORTANT:** Do not avoid dairy products altogether, as they provide valuable calcium to prevent osteoporosis. Reduced fat and low fat dairy foods have less fat, but just as much (in fact often more) calcium as their full cream versions.
3. Eat mostly fruit, vegetables, bread *(preferably wholemeal)*, cereals, legumes *(baked beans, lentils, chickpeas)*, grains *(rice, wheat, barley, oats)* and pastas *(all shapes, colours and sizes)*. These foods are very low in fat, high in fibre, are filling, satisfying and not fattening *(Figure 22)*.

4. **Reduce your salt intake.** Eating less salt and salty foods can help lower your blood pressure and help prevent any fluid retention problems. Shop for products labelled ‘no salt’, ‘no added salt’ or ‘low salt’. Use as little salt as possible in cooking and at the table.

**Food diagram**

Based on the Australian Nutrition Foundation ‘Healthy eating pyramid’

*Figure 22*
5. **Limit your sugar intake.** Too much refined sugar and high sugar foods will replace healthier foods like vegetables & fruit, therefore, the quality of your diet won’t be as good, and furthermore, too much sugar will contribute to a weight problem.

6. If you drink alcohol, limit your intake. Excess alcohol is fattening and it can also contribute to high blood pressure.

**Recommended intake:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men:</strong></td>
<td>0-2 standard drinks per day</td>
</tr>
<tr>
<td><strong>Women:</strong></td>
<td>0-1 standard drinks per day</td>
</tr>
</tbody>
</table>

1 standard drink =

- 1 middy beer
- 120ml wine
- Nip spirits (30ml)
- 60ml port

2–3 alcohol free days are also recommended.

**Enjoy Healthy Eating**

- Use margarine spreads instead of butter or dairy blends.
- Use a variety of oils for cooking – some suitable choices include canola, sunflower, soybean, olive and peanut oils.
- Use salad dressings and mayonnaise made from oils such as canola, sunflower, soybean and olive oils.
- Choose low or reduced fat milk and yoghurt or ‘added calcium’ soy beverages. Try to limit cheese and ice-cream to twice a week.
- Have fish *(any type of fresh or canned)* at least twice a week.
- Select lean meat *(meat trimmed of fat and chicken without skin)*. Try to limit fatty meats including sausages and delicatessen meats such as salami.
- Snack on plain, unsalted nuts and fresh fruit.
- Incorporate dried peas *(eg split peas)*, dried beans *(eg haricot beans, kidney beans)*, canned beans *(eg baked beans, three bean mix)* or lentils into two meals a week.
- Make vegetables and grain-based foods such as breakfast cereals, bread, pasta, noodles and rice the major part of each meal.
- Try to limit take-away foods to once a week. Take-away foods include pastries, pies, pizza, hamburgers and creamy pasta dishes.
- Try to limit snack foods such as potato crisps and corn crisps to once a week.
- Try to limit cakes, pastries and chocolate or creamy biscuits to once a week.

For further information please contact the following organizations:

National Heart Foundation: **(02) 9211 5188**  
Heartline: **1300 362 787**  
Australian Nutrition Foundation: **(02) 9516 8191**
Notes:
CONTACT LIST

St Vincent’s Hospital (Switchboard) ......................................................... 02 8382 1111
wwwsvh.stvincents.com.au

Public Transport
Bus Services: www.sydneybuses.info
- Routes 378 and 311 (from Railway Square) and 380 and 389 (from Circular Quay).
Trains: www.cityrail.info
- The closest train station is Kings Cross on the Eastern Suburbs Line

Wards:
- Xavier 10 North (CCU) ................................................................. 02 8382 2314
- Xavier 10 South ................................................................. 02 8382 2096
- Xavier 5 (Intensive Care Unit) .................................................... 02 8382 2036

Care Coordinator (Wendy Upcott) ..................................................... 02 8382 3592
Social Work Dept ................................................................. 02 8382 2213
Accommodation Officer ............................................................... 02 8382 2114
Cardiac Rehabilitation Coordinator ............................................... 02 8382 2321
Florist (Fragrant Plum) ................................................................. 02 8382 3032