



UNIVERSITY OF OTTAWA  
HEART INSTITUTE  
INSTITUT DE CARDIOLOGIE  
DE L'UNIVERSITÉ D'OTTAWA

# CORONARY ARTERY DISEASE

A Guide for Patients and Families



# PREPARING FOR DISCHARGE

## Before you leave, please make sure you have:

- Attended the cardiology discharge preparation class. Please ask your nurse for details.
- Reviewed this Guide with your family/significant other.
- “Discharge Prescription/Notes” Letter: This is completed by your doctor and has information related to your diagnosis and treatment as well as all medications and follow up plans. The white copy is yours to keep; the yellow copy is to be given to your family physician. (We will mail this copy to your family physician.) The end of the white copy is to be removed and given to your pharmacist.
- The GAP Tool: This is completed by your nurse. It outlines your medications, risk factors, and follow-up appointments.
- Information or an appointment with the Cardiac Rehabilitation Program.
- If you have concerns regarding your discharge or financial problems please let your doctor or nurse know as soon as possible. We can ensure that you meet with a Social Worker who may be able to assist you with these difficulties.
- “Vial of Life” Package. This is a plastic resealable bag containing a large medication vial, magnet for your refrigerator and directions on how to participate in this program.

### IMPORTANT

**Nursing Coordinator: 613-761-4708**

Please call the Nursing Coordinator if you have symptoms or concerns throughout your recovery period. The Nursing Coordinator can be reached anytime of the day or night

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# PLEASE BRING THIS BOOK WITH YOU TO THE HEART INSTITUTE

Patient Name \_\_\_\_\_

**Please complete the following information:**

**Contact Person** Name \_\_\_\_\_  
(relative, friend)

Phone Number \_\_\_\_\_  
(Home)

Phone Number \_\_\_\_\_  
(Cell)

**Family Doctor** Name \_\_\_\_\_

Phone Number \_\_\_\_\_

**Pharmacy** Name \_\_\_\_\_

Phone Number \_\_\_\_\_

**Cardiologist** Name \_\_\_\_\_

Phone Number \_\_\_\_\_

**Other (Specify)** Name \_\_\_\_\_

Phone Number \_\_\_\_\_

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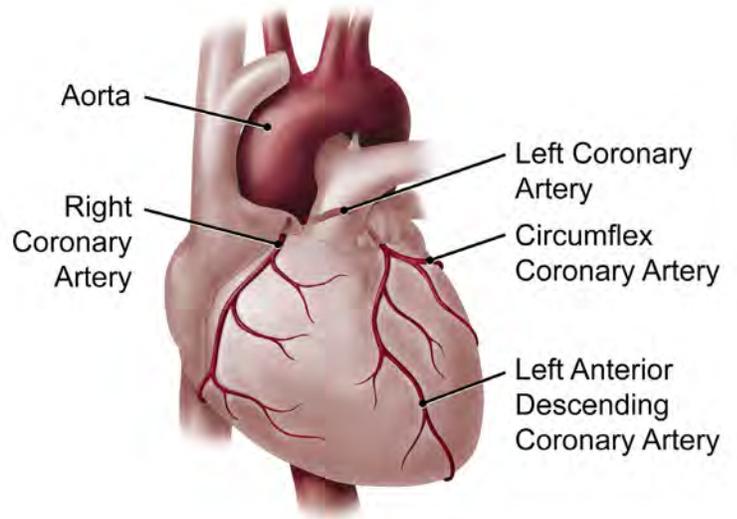
# Heart Anatomy

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## The Heart Is a Pump

The heart is a muscle that pumps blood around the body through a series of pipes. These pipes are called arteries. The left side of the heart receives fresh, oxygen-rich blood from the lungs and then pumps it out a large artery called the aorta that branches into smaller arteries that go to all parts of the body.

The various parts of the body then take the oxygen out of the blood and the now stale, oxygen-poor blood is returned to the right side of the heart through pipes called veins. The right side of the heart pumps this stale blood to the lungs where it picks up more oxygen and the cycle begins again.



## The Coronary Arteries

The heart muscle, like every other part of the body, needs its own oxygen-rich blood supply. Arteries branch off the aorta and spread over the outside surface of the heart. The Right Coronary Artery (RCA) supplies the bottom part of the heart. The short Left Main (LM) artery branches into the Left Anterior Descending (LAD) artery that supplies the front of the heart and the Circumflex (Cx) artery that supplies the back of the heart.

# Heart Disease

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Heart disease, also known as cardiovascular disease, is a general term for a variety of conditions that affect the heart and blood vessels. It is a chronic disease that can lead to serious events including heart attack and death. Heart disease is one of the leading causes of death in Canada and worldwide. The most common form of heart disease is coronary artery disease (CAD) caused by atherosclerosis.

## Atherosclerosis

Over time, plaque builds up on the inside wall of arteries. Plaque is made of several substances including cholesterol. This build up is called atherosclerosis or hardening of the arteries. It can start at an early age and is caused by a combination of genetic and lifestyle factors that are called risk factors. Atherosclerosis can cause a narrowing in the arteries to various parts of the body such that blood flow is slowed or blocked. Poor blood flow to the brain can cause a stroke. Poor blood flow to the arms or legs is called peripheral artery disease (PAD). Poor blood flow to the heart is called coronary artery disease (CAD) and can cause angina or a heart attack.

## Angina

Plaque build up in the coronary arteries to the heart causes poor blood flow and the heart may not receive all the oxygen that it needs. This usually occurs when the heart has to work harder such as while walking, climbing stairs, or feeling worried or upset. When the heart isn't getting enough oxygen, it can cause pain or pressure in the middle of the chest that may spread to the arms, neck, or jaw. Sometimes there may be shortness of breath, sweating, or nausea. This pain is called angina and usually goes away within 2 to 20 minutes by resting or taking a medication called nitroglycerin. It does not cause any heart damage.

## Unstable Angina

Sometimes, the plaque in the artery can crack open suddenly. The blood forms a clot over the cracked plaque but this clot causes a sudden narrowing of the artery. The chest pain or angina may now occur more frequently, with less exercise, or last longer than usual. This change in the pattern of angina is called unstable angina.

## Heart Attack

If the heart is starving for blood and not getting enough oxygen for more than 20 minutes, then a part of the heart muscle dies causing some permanent damage. This is called a heart attack or myocardial infarction (MI). Heart attacks are confirmed with

blood tests and a test that shows the electrical activity of the heart called an electrocardiogram (ECG).

Some heart attacks involve only a small area of the heart and can be managed with standard medical treatment in hospital. Some heart attacks involve a larger area of the heart and have a specific pattern on ECG. These heart attacks are called ST-elevation myocardial infarctions (STEMI) and require immediate treatment with clot dissolving drugs or opening up the artery with balloon angioplasty and stents.

<b>Chest Pain</b>	<b>Angina</b>	<b>Unstable Angina</b>	<b>Heart Attack</b>
While Resting	Rare	Sometimes	Common
Goes Away with Rest or Nitroglycerin	Yes	Yes	Sometimes
Lasts More than 20 Minutes	No	No	Yes
Causes Permanent Heart Damage	No	No	Yes

## **Heart Damage**

Some heart attacks cause very little damage to the heart muscle and the heart can still pump strongly. Some heart attacks are larger and the muscle damage causes a weak heart. There are several heart tests that measure the strength of the heart such as an echocardiogram (an ultrasound of the heart that looks at the pumping strength of the heart and how the heart valves work), nuclear scans such as a MUGA scan, or a ventriculogram which is commonly done during an angiogram.

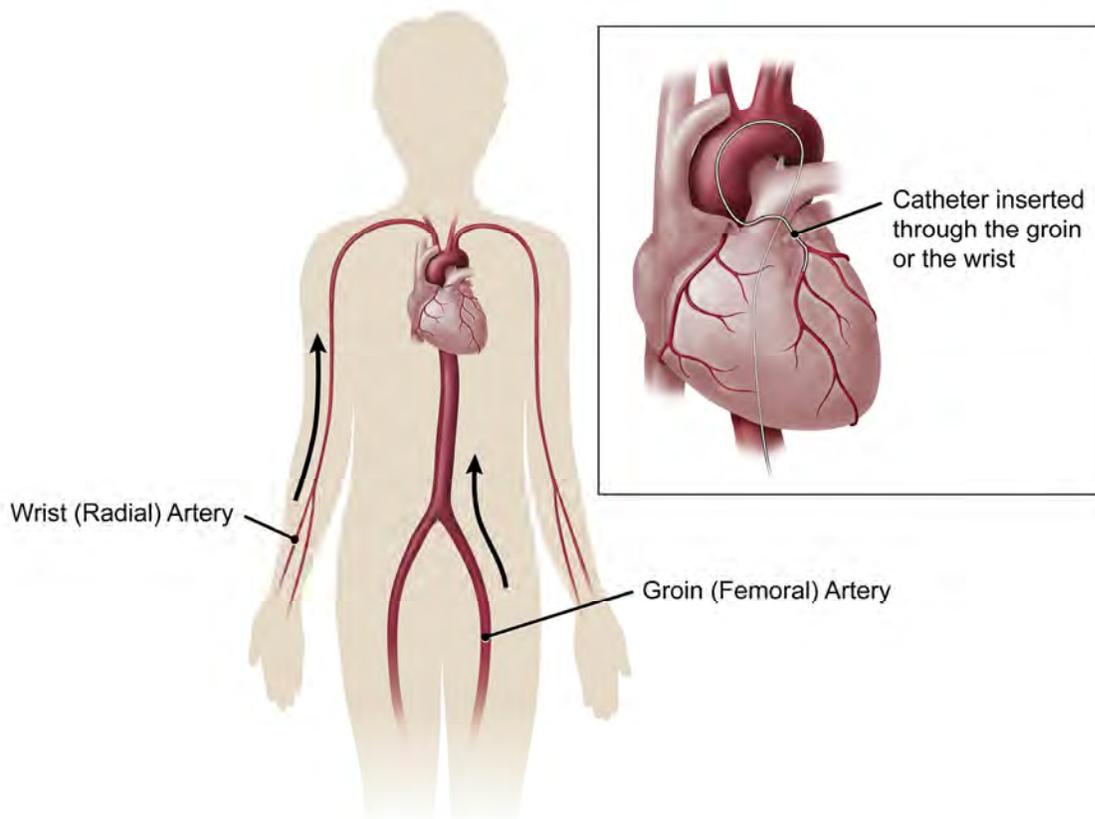
# Tests

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There are several tests that can check if plaques are blocking the coronary arteries to the heart. These include: treadmill test (fast walking on a treadmill while attached to an ECG machine), nuclear scan such as SPECT or PET scan, stress echocardiogram, CT angiography scan, or angiogram.

## Angiogram

With this test, a small tube or catheter is inserted into an artery in the groin or wrist and guided to the heart. A dye is injected through this tube and into the coronary arteries so that they can be seen by an X-ray. This shows if there is plaque blocking the arteries and whether the blockages should be treated just with medications or if there is also need for an angioplasty or coronary artery bypass grafting (CABG) surgery. Sometimes dye is injected into the pumping chamber of the heart to check how strong the heart is and if there was any damage to the heart muscle. This is called a ventriculogram. The catheter is then removed.

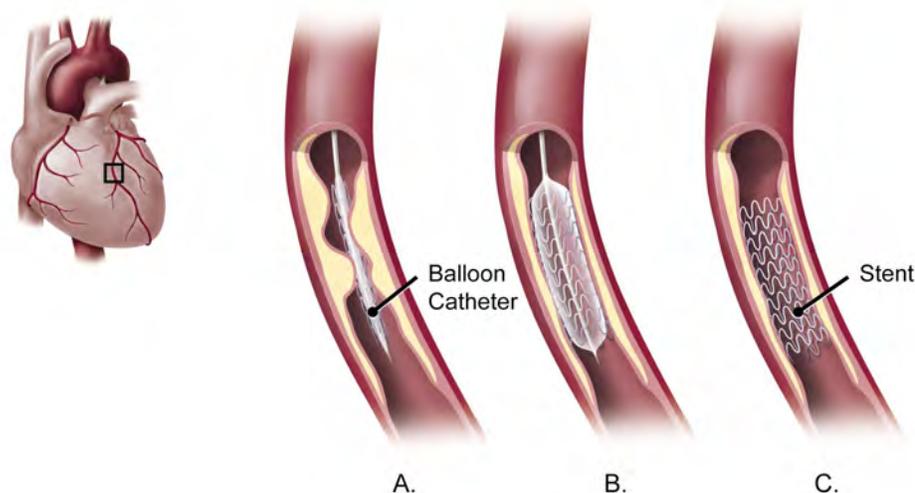


Insertion Sites for Angiogram

## Angioplasty and Stents

Sometimes blockages in the coronary arteries can be fixed with angioplasty. A small tube or catheter is inserted into an artery in the groin or wrist and guided to the heart as with the angiogram. In this procedure, a small balloon at the end of the catheter can be inflated for a short period of time to push the plaque back against the wall of the artery so that blood can flow better.

In many patients, a small metal mesh tube or stent, is placed over the balloon. When the balloon is deflated and removed, this stent stays permanently where the blockage was and lowers the risk of this area narrowing again. Some stents are metal alone (bare metal stents). Others have a medication coating on them (drug eluting stents).



- A.** The balloon catheter and collapsed stent are inserted into the narrowed artery. **B.** The balloon is inflated to expand the stent. **C.** The balloon catheter is removed leaving the stent in place.

### Advantages of Angioplasty

Over 90% of angioplasties are successful immediately. Blood flow through the artery returns to normal or near normal. Some people may not have complete relief, but their symptoms are improved, allowing them to be more active and comfortable.

There is no incision as this is not surgery and you are not put to sleep (general anesthesia). Most people are up and walking on the same day. Some people go home the same day, but some patients are required to stay overnight and go home the following morning.

## **Disadvantages of Angioplasty**

An artery may become narrow again after angioplasty. This is called restenosis. If the artery narrows enough, you may feel angina again. The use of stents has reduced the restenosis rate. Restenosis is usually treated with a second angioplasty, but occasionally bypass surgery is needed or medical therapy is used.

## **Risks of Angiogram and Angioplasty**

Angiogram and angioplasty (with or without stent implantation) are common procedures. Your physician has carefully considered your clinical condition and believes that the benefits of the procedure outweigh the risks. However, since these procedures are invasive there are risks associated with them.

Common risks include:

- Bleeding at the catheter insertion site or other organs due to blood thinning medication (anticoagulants)

Less common but potentially more serious risks include:

- Heart attack
- Stroke
- Unknown dye allergy
- Kidney problems, including kidney failure requiring dialysis
- Emergency heart surgery
- Death
- Other rare and unpredictable complications

In 1% to 2% of angioplasty cases, the artery collapses or is damaged by the wire or balloon. A stent can often fix this, but sometimes patients need emergency coronary artery bypass surgery. At the Heart Institute, our operating rooms are close by if a patient needs surgery.

**Discuss the risks and benefits of your procedure with your doctor.**

# Coronary Artery Bypass Grafting

Sometimes the blocked arteries cannot be fixed with angioplasty/stents and may require coronary artery bypass grafting (CABG) which is surgery that requires opening the chest. Arteries inside the chest, an artery from the wrist, or pieces of vein from the leg are used to go around the blockages in the coronary arteries. This surgery requires a recovery time of five to seven days in hospital and one to two months at home.

## What to Expect During an Angiogram

### Before Your Procedure

After a brief discussion with the nurse you will be taken into the Catheterization Lab and asked to lie on a special X-ray table. The temperature in the room will be very cold. You will be attached to a heart monitor.

As this is a teaching hospital there may be other physicians, nurses and lab technologists involved in your procedure. All staff will be wearing gowns, masks and special aprons.

Your groin/wrist will be washed with a cold solution and sterile sheets will be placed over you. It is important that you neither move nor touch the top of the sheets once they are in place. You may be asked to lie with your arms above your head for a period of time. A nurse will be available to assist you.

### During Your Procedure

You will be given medication to help you relax, but you will be awake during the procedure so that you can follow instructions from the doctor and nurses. The doctor will administer freezing to your groin/wrist. A small catheter will be threaded through a blood vessel up to the heart. A contrast dye will be injected through this catheter to highlight the coronary arteries. Most patients experience a sensation of body warmth as the dye is injected or the urge to empty their bladder.

X-ray pictures will be taken throughout the procedure. The X-ray machine will move over you very close to your body.

During the procedure, you may be asked to take a deep breath and hold it for a few seconds, or to cough. It is not unusual to experience some chest pain. Inform the nurse if you experience any discomfort or have concerns.

The time for the procedure in the lab is usually between 30 to 90 minutes. If your condition is complex, your procedure will be longer.

Due to unforeseen circumstances there may be a lengthy wait in the lab waiting area or you may be returned to your room until the lab is available.

## After Your Procedure

You will leave the Catheterization Lab on a stretcher, and one of the following will happen:

- **After an angiogram:** The catheter will be removed and a special clamp or manual pressure will be applied. A sand bag will then be placed over your groin to continue pressure on the puncture site.
- **After an angioplasty:** You will be transferred to a unit which specializes in catheter (sheath) removal if a groin insertion was used, or back to the sending unit if the wrist was used.

The nurse will frequently check your pulse, blood pressure, pulses in your feet or wrist, and the puncture site.

### Following a groin insertion:

- If the doctor used your groin (femoral artery), you must remain on bed rest for up to 6 hours after the procedure.
- It is important to keep your head on the pillow and your affected leg straight. You will be reminded frequently to do these two things to avoid bleeding from the puncture site.
- If you experience back discomfort, you can be repositioned with the help of a nurse, keeping your affected leg straight. The head of your bed may be elevated slightly.
- During this time you may sleep, read or rest. You will be given a snack.

### Following a wrist insertion:

- If the doctor used your arm (radial artery) you will have a clamp applied to your arm in the lab to prevent bleeding.
- You will be on bed rest for approximately one hour after the procedure.
- It is important to keep your arm on the pillow and refrain from twisting your wrist. You may move your fingers. Your nurse will be available to assist you while the clamp is in place.
- During this time you may sleep, read or rest. You will be given a snack.

Ask your nurse for assistance as soon as you need to empty your bladder. It is important not to sit up. The nurse will assist you in getting up once your bed rest is complete. You will be encouraged to walk around during the hour before discharge.

## Activity

### Following a groin (femoral) insertion:

- Limit the amount of stair climbing as much as possible. Try to climb the stairs only once on the day of your procedure.
- Do not lift anything heavy—greater than 10 lbs (4.5 kg) —for 48 hours.
- Apply pressure to your groin if you have to sneeze or cough hard for 48 hours. The easiest way to apply pressure is to make a fist and place it firmly on the groin area over the band-aid.

### Following a wrist (radial) insertion:

- Do not lift anything greater than 10 lbs (4.5 kg) with the affected arm for 48 hours after the procedure. Avoid vigorous wrist movements of the affected arm.
- You may elevate your arm on a pillow to help prevent swelling.

## Dressing

- You may remove the clear dressing or band-aid the day after the procedure, and replace it with a new band-aid.
- A small amount of dried blood on the old dressing and puncture site is normal.
- You may take a shower the day after your test, but do not allow the dressing to stay wet.
- Do not take a tub bath or cleanse the arterial puncture site for 48 hours after your test.
- You may re-apply a dry band-aid for a few more days in order to keep the skin clean and reduce the risk of trauma or infection. The band-aid may be removed 72 hours after the procedure.
- Try to avoid wearing tight or restrictive clothing over the puncture site.

## Puncture Site

Examine the site every day and notify your nurse or physician if any of these problems develop:

- An expanding lump or persistent area of redness and warmth
- Yellow drainage from the wound site
- Worsening numbness in the leg, hand, wrist, or arm
- Severe discomfort at the puncture site

Mild discomfort at the procedure site or forearm is normal and may be treated with Tylenol or application of a warm, dry towel.

## Bleeding

If any bleeding occurs while in hospital, please ring for your nurse immediately. If a small amount of bleeding occurs at the puncture site at home:

- For a wrist site, sit down immediately and apply firm pressure to your wrist with your fingers for ten minutes.
- For a groin site, lie down and apply pressure to your groin using a fist placed firmly on the groin area over the band-aid.

If the bleeding stops, remain quiet and keep your procedure leg/wrist immobile for two hours.

If recurrent bleeding occurs, notify your physician as soon as possible.

- If you are unsure as to what action you should take phone 613-761-4708 and ask to speak with the Cardiology Nursing Co-coordinator

If the **bleeding does not stop** or if there is a **large amount** of bleeding:

- CALL 911 IMMEDIATELY. DO NOT DRIVE YOURSELF TO THE HOSPITAL.
- Lie down and hold firm pressure on the site until help arrives.

# Risk Factors

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At the University of Ottawa Heart Institute, you have received the best available cardiac care to treat and manage your heart condition, but your heart disease is not cured. Heart disease is a chronic health condition and, like any health problem, it can bring uncertainty and changes into your every day life.

You can respond to these changes in different ways. Research tells us that learning about your risk factors, taking charge of your heart health, and staying involved in your health and health care will help you to continue to do the things that you wish to do.

The following three-step plan will help you learn to take care of your heart and preserve your health:

## Step 1

Get to know your own risk factors and plan how to manage them. Use the risk factor profile on page 13 to help you to identify your risk factors and think about how you might set some health goals.

## Step 2

Participate in a Cardiac Rehabilitation Program. Work with specialists in nutrition, physical activity, stress management, return-to-work counselling, and other social and emotional services to develop a plan that is tailored to your specific needs.

## Step 3

Learn how to live and work with heart disease. Use the information here to help you get through the normal bouts of anxiety and emotional ups and downs so that you can renew your sense of well being.

# Causes of Heart Disease

Coronary artery disease is caused by a combination of genetic and lifestyle factors. These are called risk factors.

The following risk factors are important to be aware of but are not considered to be controllable:

- Your age
  - As you get older, your risk of heart disease increases
- Your gender
  - Men over the age of 55 are at higher risk of heart disease
  - After menopause, a woman's risk of heart disease gradually becomes the same as a man's
- Your heredity
  - Your risk of heart disease is increased if close family members—a parent brother or sister—developed heart disease before age 55 or, in the case of female relatives, before menopause.
- Your ethnicity
  - First nations people and people of African or Asian descent are at higher risk of developing heart disease

The risk factors that you can control are:

- Smoking
- Excess body weight, especially around your waist
- High blood pressure (hypertension)
- Abnormal blood cholesterol levels
- Lack of regular exercise
- Diabetes
- Excessive stress levels
- Depression

These are referred to as **modifiable** risk factors.

## Modifiable Risk Factors for Heart Disease

Risk Factor	Target Goals	Information Page
Smoking	Smoke Free	p. 14
Overweight Waist Circumference	<p><b>Ideal range: BMI of 18.5 – 25</b> If your BMI is above 25, aim for a 5 – 10% reduction of your total body weight.</p> <p><b>Waist:</b> Women: Below 35 in (88cm) Men: Below 40 in (102 cm)</p>	Heart Healthy Nutrition: p. 20 Weight Management: p. 25
High Blood Pressure	<p>Less than 140/90 in your doctor's office and less than 135/85 at home</p> <p><i>If you have diabetes or kidney disease: less than 130/80 in your doctor's office and less than 125/75 at home</i></p>	Heart Healthy Nutrition: p. 20 Blood Pressure: p. 15 Safe Medications: p. 54
High Cholesterol	<p>LDL-C: below 2.0 mmol/L</p> <p>TC /HDL-C Ratio: less than 4.0</p> <p>Triglycerides: below 1.7mmol/L</p>	Heart Healthy Nutrition: p. 20 Cholesterol: p. 15
Physical Inactivity	Aim for 30 to 60 minutes of moderate exercise (example: brisk walking) on most days of the week	Healthy Physical Activity: p. 29
If you have Diabetes	<p>Fasting blood sugar: between 4.0 and 7.0 mmol/L</p> <p>HgA1C: below 7%</p>	Heart Healthy Nutrition: p. 20 Diabetes: p. 17
Stressed	Manage stress	p. 36
Depressed	Manage depression	p. 38

# Smoking

## How Smoking Affects Your Heart

The nicotine in smoke causes the arteries of the heart to narrow. The carbon monoxide released from cigarettes causes damage to the walls of the arteries encouraging the build up of fat on those walls.

Smoking also:

- Raises your LDL (lousy) cholesterol
- Lowers your HDL (healthy) cholesterol
- Speeds up your heart rate
- Increases your blood pressure

Smoking after a heart attack or angioplasty increases the chances of a second heart attack and/or restenosis (re-blocking) of the coronary arteries.

## If You Smoke, Quit!

- Quitting smoking is the single most important thing you can do to positively affect your heart health.
- The benefits of quitting occur within 20 minutes of your last cigarette and at one year your risk of a heart attack is reduced by 50%.

The Heart Institute's Quit Smoking Program is available to all smokers who are interested in quitting. We use proven techniques and individualized counselling to help people quit. To register for the Quit Smoking Program, please call 613-761-5464. There are other options for quitting smoking in our region. It is up to you to decide which option is best.

Keep in mind this one important tip: most people find that the more support they get while trying to quit, the better.

## More Information about Quitting Smoking

### Web Sites

- Canadian Cancer Society Smokers Helpline: [www.smokershelpline.ca](http://www.smokershelpline.ca)

# High Blood Pressure

## How High Blood Pressure Affects Your Heart

High blood pressure makes your heart work harder, damages your blood vessels, and can also cause greater plaque build up. All these factors eventually lead to heart damage. Controlling your blood pressure can reduce the progression of your heart disease and may reduce your risk of having a stroke.

To control your blood pressure:

- Follow your Heart Health Nutrition Plan
- Achieve and maintain a healthy body weight
- Be active every day and follow your physical activity plan
- Practice stress management techniques that work for you
- Take your medications as prescribed
- Become smoke free

### More Information about High Blood Pressure

#### Web Sites

- Blood Pressure Canada: [www.hypertension.ca/bpc/](http://www.hypertension.ca/bpc/)
- Healthy Ontario: [www.healthyontario.com](http://www.healthyontario.com)

# High Blood Cholesterol

## How Cholesterol Affects Your Heart

Cholesterol is a fat-like substance that is produced mostly in your liver, although some of the cholesterol in your blood comes from the foods you eat.

The most important types of cholesterol in your blood are:

- Low density lipoprotein cholesterol or LDL
- High density lipoprotein cholesterol or HDL

L is for “Lousy”:

- LDL cholesterol carries fats to your body organs to be stored away for future use.
- It causes a build-up of cholesterol (plaque) on the walls of the arteries in your heart.
- High levels of LDL can damage artery walls.
- Eating heart healthy and maintaining a healthy weight can lower your LDL.

H is for “Healthy”:

- HDL cholesterol is good because it carries excess fats away from your body organs for elimination.
- The more HDL you have in your blood, the better protected you are against the build-up of plaque in your arteries.
- Regular exercise and quitting smoking can help increase HDL.

## How You Can Improve Your Cholesterol

- Be aware of your cholesterol levels
- Follow your Heart Health Nutrition Plan
- Achieve a healthy body weight (see page 66)
- If you smoke, stop (see page 14)
- Be active every day and follow your Physical Activity Plan (see page 29)
- Attend a nutrition workshop (see page 27)
- Take your cholesterol medications as prescribed by your doctor

### More Information about Cholesterol

#### Books

- *Coping with Cholesterol*, Elizabeth Mansfield (2006)

#### Web Sites

- Healthy Ontario: [www.healthyontario.com](http://www.healthyontario.com)

# If You Have Diabetes

## How Diabetes Affects Your Heart

Diabetes or an elevated blood sugar level can lead to changes in the circulatory system. These changes may cause damage to your heart.

## Keeping Your Blood Sugar Levels Healthy

- Take your medications as prescribed
- Learn about managing diabetes by attending a diabetes education program (see More Information below)
- Monitor and keep track of your blood sugars
- Target: blood sugar before meals between 4.0 and 7.0 mmol/L
- Target: blood sugar two hours after meals between 5.0 and 10.0 mmol/L
- Follow the Heart Healthy Nutrition Plan
- Be active every day and follow your Physical Activity Plan (see page 29)
- Achieve and maintain a healthy body weight (see page 66)
- Visit to your family doctor or diabetes specialist regularly

## Additional Meal Planning Tips

- Eat regular meals. Aim to eat every 4 to 6 hours. Include a healthy snack if meals are more than 4 to 6 hours apart.
- Eat breakfast.
- Limit sugars and sweets such as sugar, regular soft drinks, fruit drinks, desserts, candies, jam, syrup and honey.
- If you are thirsty, drink water or sugar free drinks. Drinking regular soft drinks, sweetened drinks or fruit juices will raise your blood sugar level. If you have a condition requiring fluid restriction, follow your personalized recommendations.
- Have portion sizes that will help you reach or maintain a healthy body weight.

## More Information about Diabetes

It's natural to have questions about what food to eat. A registered dietitian can help personalize your meal plan. If you have diabetes and are taking insulin, speak with your family doctor. You may need to see an endocrinologist (a doctor specializing in diabetes).

### Community Diabetes Education Program of Ottawa

- For adults with type 2 diabetes who are controlled with diet, pills or just starting insulin; no major health problems related to their diabetes
- Teaching is also available for people with pre-diabetes
- Group and individual sessions on healthy eating, getting active, testing blood glucose, stress and emotions, delaying or preventing complications and foot care
- In English, French and other languages
- Web site: [www.diabeteseducation.ca](http://www.diabeteseducation.ca)
- To register, call 613-233-6655 or fax a doctor's referral to 613-233-6713

### Diabetes Education Programs (Outside Ottawa)

- To locate a diabetes education program near you, see Diabetes Ontario at [www.diabetesontario.org](http://www.diabetesontario.org) or contact Canadian Diabetes Association at 1-800-BANTING (226-8464) or at [info@diabetes.ca](mailto:info@diabetes.ca)

### Books

- *The Essential Diabetes Book*, Mayo Clinic (2009)

### Web Sites

- Canadian Diabetes Association: [www.diabetes.ca](http://www.diabetes.ca), 1-800-BANTING (226-8464)

# The Healing Process

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Every year, thousands of Canadians survive a heart attack, go back to work and enjoy a normal life. Your heart is healing and with each passing day you'll get stronger and more active. With a heart attack, a portion of your heart muscle has been damaged. This is sometimes a difficult concept to understand because you cannot see the damage that has been done to your heart.



## How Long It Will Take Your Heart to Heal

The post heart attack healing period varies, often depending on the size of your heart attack and can last anywhere from one to three months. If you are not sure how big your heart attack was, please ask your doctor before you are discharged.

The first week is important because your heart is starting to heal. It is important to have a calm and relaxing environment for the heart to rest and recover.

From the second week on, your heart will continue to heal through the following weeks. During this time, we will ask you to gradually increase some physical activities and limit others. You may be told not to drive for four weeks following your heart attack. Check with your doctor before your discharge regarding when you can drive.

It is normal to sometimes feel tired or drained for the first few weeks. Some patients find it helpful to plan short rest periods to allow them to have more energy to complete daily activities. You will find more information on activity after a heart attack on page 29.

# Heart Healthy Nutrition

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## How What You Eat Affects Your Heart

The food that you eat affects many of the important risk factors associated with heart disease for example:

- Your blood cholesterol
- Your blood pressure
- Your weight and waist circumference

## Your Waist Circumference and Your Heart

- It is not just how much you weigh that matters, but also where you carry your excess weight.
- People who store fat around their stomachs have a higher risk of having heart disease and diabetes than those who carry it around their hips.

## Follow a Heart Healthy Nutrition Plan

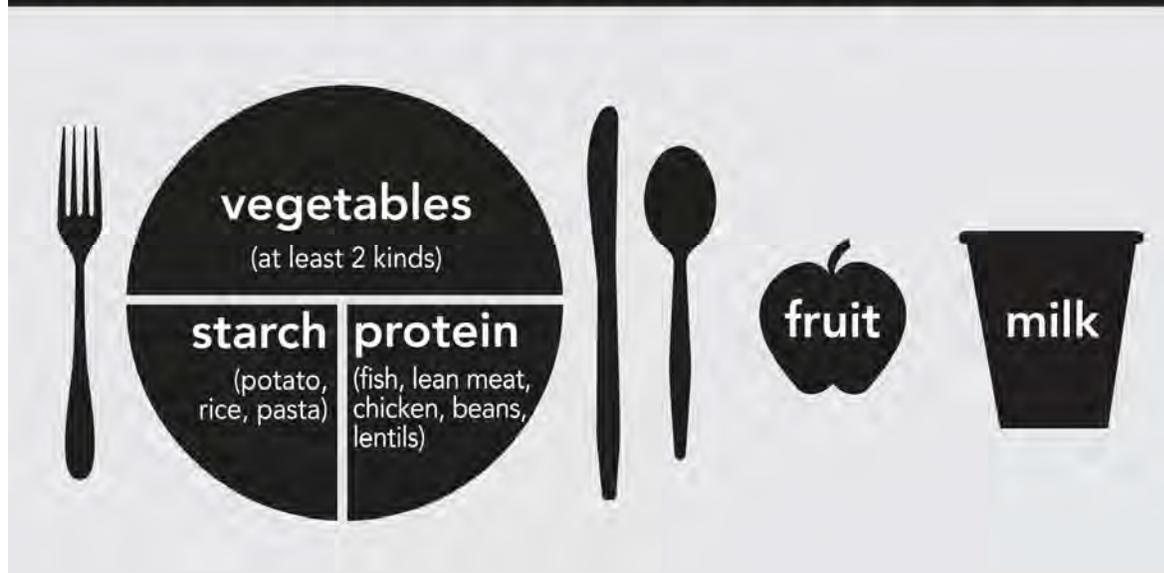
Eating heart healthy means:

- Limiting saturated and trans fats
- Choosing healthy fats and oils
- Increasing vegetables, fruit, fiber and whole grains
- Reducing salt and sugar

## Top 5 Nutrition Tips

1. Eat regular meals. Aim to eat every 4 to 6 hours. Include a healthy snack if you need to.
2. Include vegetables or fruit at each meal
3. Include at least three food groups at each meal
4. Fresh is best...cook with fresh foods and limit salt
5. Choose healthy oils more often

## A CLOSER LOOK AT THE FOODS TO CHOOSE AND ENJOY!



### Tips for Eating More Vegetables and Fruit

(Vegetables: Aim to fill  $\frac{1}{2}$  your plate)

If all of your vegetables and fruit are the same color,	Try to include vegetables and fruit that are a variety of colors: red, orange, yellow
If you're having a hard time including vegetables and fruit,	Try to include vegetables or fruit at every meal, for example berries for breakfast, veggie sticks for lunch, salad for supper
If you're finding it too time consuming to prepare vegetables and fruit,	Try frozen vegetables or fruit
If you're eating the same vegetables and fruit every day,	Try a new vegetable once a week

### Remember:

- Choose brightly coloured vegetables and fruits at all meals

### Tips for Eating Healthy Grains

(Starch: Aim to fill ¼ of your plate)

If you're eating low fiber cereals such as Special K® or Corn Flakes,	Try a high fiber cereal such as oatmeal, shredded wheat or All-Bran Buds®
If you're eating white bread or light rye bread,	Try a whole grain, multigrain, pumpernickel or dark rye bread instead
If you're eating white rice or white pasta,	Try whole wheat pasta, brown rice, quinoa or bulgur
If you're eating commercial muffins,	Try baking your own

#### Remember:

- Choose high fiber grain products and aim to eat 25–35 g of fiber per day

### Tips for Eating Healthy Meat and Alternatives

(Protein: Aim to fill ¼ of your plate)

If you're eating poultry with the skin on,	Remove the skin before eating
If you're eating red meat more than once or twice a week,	Choose lean cuts of pork, poultry and fish more often or try a vegetarian meal once a week
If you're avoiding fish,	Choose fresh, frozen or canned fish 2 to 4 times per week or consider an Omega-3 supplement
If you're using deli meats for sandwiches,	Try cooking extra meat the night before for sandwiches or use alternatives such as tuna, salmon or egg

#### Remember:

- Choose lean cuts of meat, poultry and fish more often
- Try a vegetarian meal once or twice a week
- Limit whole eggs to two to three per week

## Tips for Eating Healthy Milk and Alternatives

If you're choosing homogenized or 2% milk,	Choose skim or 1% milk instead
If you're eating regular yogurt,	Choose yogurt with 1% of M.F. (milk fat) or less
If you're eating ice cream,	Choose frozen yogurt or ice milk
If you're eating regular cheese,	Try low fat cheese with 15% M.F or less

### Remember:

- Choose low fat dairy products more often

## Tips for Using Healthy Fats and Oils

If you're deep frying or pan frying foods,	Try baking, broiling, steaming, stir-frying or grilling instead
If you're using hard fats such as butter or lard for cooking,	Try using liquid fats such as olive, canola, safflower, sesame or corn oil instead
If you're using mayonnaise, salad dressings or sour cream,	Try the low fat version or make your own salad dressings with oil and vinegar at home
If you eat nuts as a snack,	Limit your portion size to 2 tbsp (a handful)
If you use butter,	Try a non-hydrogenated margarine instead

### Remember:

- Choose unsaturated fats more often
- Limit your intake of saturated and trans fats

## Tips for Eating Less Salt

If you buy packaged frozen meals,	Read the Nutrition Facts Table and choose the product with the lowest % Daily Value for sodium (try for less than 10%)
If you're thinking of going out for dinner for the third time this week,	Make a simple dinner at home. Try scrambled eggs with vegetables and toast instead.
If you add condiments to your burgers (ketchup, mustard, barbeque sauce , relishes and pickles),	Only use a small amount of ketchup, mustard and relish and top up your burger with lettuce, tomatoes, cucumbers onions, avocados, or homemade salsa
Instead of using your favourite sauce or rub to flavour meats and veggies	Marinate meats and veggies with olive oil, lemon juice and herbs
If you add salt when you cook,	Try using herbs and spices or garlic when cooking instead

\*Adapted from Champlain Cardiovascular Prevention Network "Give Your Head a Shake"

### Remember:

- Read the food label and choose foods that have less than 200 mg or 10% DV of sodium per serving

## A Word about Alcohol

Limit alcohol to a maximum 2 servings a day for men and 1 serving a day for women.

One serving is:

- 125 ml (4 oz) wine or
- 355 ml (12 oz) beer or
- 45 ml (1.5 oz) liquor

# Top 5 Tips for Healthy Weight Management

## 1. Set SMART weight loss goals (see page 66)

**SMART** goals will help you make progress and keep you motivated:

- Specific:** Decide what you are going to do and how to do it.
- Measurable:** Keep track of how you are doing.
- Achievable:** Pick something you think you can do. Start with small changes.
- Rewarding:** Think of how good you will feel when you make small changes.
- Time Frame:** Give yourself a time limit to reach your goal.

- Post your goals where you can look at them often
- Aim to lose weight slowly— $\frac{1}{2}$  to 2 lbs ( $\frac{1}{4}$  to 1 kg) per week—and you will be more likely to keep it off
- Remember: even if losing 5 to 10% of your present weight does not get you to your ideal weight, it is still enough to help your heart

## 2. Eat regular meals

- Three meals a day
- Space your meals no more than 4 to 6 hours apart
- Include healthy snacks

## 3. Reduce portions

- Remember that how much you eat counts
- Choose smaller servings at your meals and snacks
- But, don't cut back too much—that can make you hungry and more likely to over-eat

4. Keep a food journal

- Keeping track of what you eat will help you to spot eating patterns you may want to change.
- Use this information to set SMART goals for making small changes in your eating patterns

5. Get active

- Aim for 30 to 60 minutes most days of the week
- For example, brisk walking will help you burn calories, sleep better, increase your energy, and improve your overall heart health

## My Personal Health Goal

What do I want to do:  
(Example: Eat breakfast)

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How often:  
(Example: Eat breakfast daily)

---

How long:  
(Example: I will continue for 1 month and then re-check my progress)

---

Signature:

I, \_\_\_\_\_, commit to doing the work necessary to reach my goal.

Date:

Signed:

## More Information about Heart Health Nutrition

### Heart Delicious Nutrition Workshops

- The dietitian at the University of Ottawa Heart Institute offers an interactive workshop series that covers a range of topics to help you:
  - Develop the skills for heart healthy eating
  - Get the facts on fat, cholesterol, fibre, and salt
  - Learn how to read and understand food labels
  - Plan healthy meals
  - Manage your diabetes
  - Set realistic goals for healthy weight management
- The workshops are appropriate for patients, families, and members of the public who are interested in learning about heart healthy eating.
- Workshops are 60 minutes in length and weekday and weekend options are available.
- The workshops are free of charge. Register by calling: 613-761-4753.
- Pick up your Workshops Schedule at the Heart Institute or check our website: [http://www.ottawaheart.ca/patients\\_family/calendar.htm](http://www.ottawaheart.ca/patients_family/calendar.htm) for updated dates and times.

### Books and Cookbooks

- *Light Hearted at Home: The Very Best of Ann Lindsay*, Lindsay, Ann (2010)
- *HeartSmart: The Best of HeartSmart Cooking*, Stern, Bonnie (2006)
- *500 Best Healthy Recipes*, Roblin, Lynn (2006)
- *American Heart Association Low-Salt Cook Book*, American Heart Association (2006)
- *Hold the Salt*, Tilley, Maureen (2009)
- *Choice Menus Presents: Meal Planning with Recipes for One or Two People*, Hollands, Margorie (2004)

- *Coping with Cholesterol\**, Mansfield, Beth and Ruth McPherson, (2005)
- \*Available for \$5.00 in the Heart Institute's Heart Health Education Centre
- *Healthy Habits, Healthy Weights*, Heart and Stroke Foundation (2005)
- *Anne Lindsay's Light Kitchen*, Lindsay, Anne (2002)

### **Web Sites**

- Dietitians of Canada: [www.dietitians.ca](http://www.dietitians.ca)
- Heart and Stroke Foundation: [www.heartandstroke.ca](http://www.heartandstroke.ca)
- Health Canada: [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)
- Canadian Diabetes Association: [www.diabetes.ca](http://www.diabetes.ca)
- American Heart Association: [www.americanheart.org](http://www.americanheart.org)
- Eat Right Ontario: [www.eatrightontario.ca](http://www.eatrightontario.ca)

# Physical Activity

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Regular physical activity will:

- Improve the function of your heart and lungs
- Improve your HDL (good) cholesterol and triglycerides
- Lower your blood pressure
- Help you achieve a healthier body weight
- Improve your blood sugar
- Improve your muscle tone and bone density
- Increase your endurance and improve your confidence
- Improve your ability to cope with stress and decrease anxiety and depression

## How to Increase Your Physical Activity

Once you are home, you should continue all the activities you followed while you were in the hospital. The longer you are home, the more you should be able to do.

A balance of rest and activity should still be maintained to allow for continued healing and to conserve your energy. Activity should be increased gradually. Everyone's recovery is different. The rate at which you progress will depend on the severity of your cardiac event and your previous activity level. After four to six weeks, you should be back to performing your regular activities.

Walking is one of the earliest activities you are allowed to resume and it is one of the best exercises for improving your health. We have given you a walking guide below to help get you started.

You will be referred to a Cardiac Rehabilitation Program to provide you with exercise and lifestyle guidelines. This is an important part of your recovery. You are strongly encouraged to participate. You may also want to discuss details with your doctor about returning to more intense activities.

# Walking Program

## Weeks 1 to 2

- Five to 10 minutes of leisurely walking once or twice daily

## Weeks 3 to 6

At this point you are ready to begin your walking program:

- Begin with 10 minutes of slow walking once or twice daily.
- Increase by one minute per day until you are walking 20 to 30 minutes per walk.
- Increase your speed and distance as tolerated, remembering that it is important to avoid shortness of breath and fatigue. Always begin your walks at a slow stroll for the first few minutes, then increase your pace. Your walking time can be maintained at 30 minutes once or twice daily.

After your walks, stretch your calf muscles. They are likely to get tight as you begin to increase your daily activity.

- Stand straight close to a solid surface on which you can use your hands for balance.
- Place one leg in front of the other, shoulder width apart, with both your feet pointing forward.
- Bend the knee that is forward while keeping the back leg straight until you feel a stretch in the back leg.
- Hold for 15 to 30 seconds. Repeat with the other leg.



If you are having difficulty following the above program, use interval training. For example, each interval includes:

- Walking two to five minutes
- Then resting two to five minutes

Repeat this pattern as many times as you are able to, gradually increasing the number of intervals.

## Exercise Guidelines

- Walk on flat ground initially. If hills are unavoidable, walk more slowly when going uphill.
- It is best to wait about an hour after a meal before you exercise as extra energy is required for digestion.
- It is important to start exercising for short periods of time and at a slow walking pace. Gradually increase the length of your walks before you increase the speed.
- If you are feeling well enough, you may exercise twice per day.
- You should be back to your pre-walk or resting state within 10 minutes of completing your exercise. If not, the next time you exercise, reduce your time or speed.
- If you feel tired, shorten your walking time. Go back to the previous level of activity for a few days. Listen to what your body is telling you. You may be trying to do too much too soon.
- Avoid exercising in extreme temperatures, such as hot humid days or cold windy ones. During this time, exercise indoors using stationary equipment or walk in the hallways of your house or apartment, or in a mall.
- If you are using a treadmill, keep it flat. It is best not to use the incline.
- A stationary bicycle can also be very valuable, especially if you have joint problems which make walking more difficult. Make sure you pedal at a slow speed with little or no tension.
- Avoid exercises where you hold your breath or bear down.

### **STOP and Rest If You:**

- Become very short of breath
- Feel weak, tired, lightheaded or dizzy
- Have any discomfort, especially chest discomfort
- Have a fast heart rate or palpitations
- Have nausea or excessive sweating

**If these symptoms persist, call 911**

# Self-Monitoring Tools

The following tools will help to guide you with the progression of your exercise program.

## Walk and Talk Test

This is the simplest test of all. At all times, you should be able to carry on a light conversation while exercising.

## Rate of Perceived Exertion (RPE) Scale

This is a number-based scale used to describe how you feel during your exercise session. The number you choose should reflect your overall level of effort, including your breathing. There is no right or wrong answer. For exercise, you should be between 3 and 5 on the scale of 0 to 10. As your recovery and fitness improve, so too will your perceived level of effort. The change in effort that you feel over time, for the same exercise, is a measure of your improvement.

RPE Scale	
0 =	Nothing at all
1 =	Very easy
2 =	Easy
3 =	<b>Moderate</b>
4 =	<b>Somewhat difficult</b>
5 =	<b>Difficult</b>
6 =	More difficult
7 =	Very difficult
8 =	+
9 =	++
10 =	Very, very difficult (almost maximal)

## Physical Activity Log

Date	Activity	Minutes	Rate of Perceived Exertion (RPE)	Unusual Events e.g., chest pain, dizziness or other



## Rest and Activity at Home

The following guidelines offer some helpful advice about activity in general:

- Try to get eight hours of sleep every night during your recovery period.
- Minimize activity after meals. Sit and watch TV or read the newspaper.
- Stop and rest when you feel tired.
- Give yourself enough time for activities so that you won't feel tense or rushed.
- Plan your day to achieve a balance between active periods and quiet times. Spread out more difficult tasks and alternate an easy task with a difficult one.
- Housework is not advised for the first week you are home. After that, you may resume light housework, such as helping with meals, and increase as your tolerance improves.
- Standing still for any length of time is very tiring. During your recovery, sit for as many activities as possible, e.g., washing dishes, food preparation.

Some additional guidelines for resuming activities of daily living:

### **Weeks 1 to 3**

- Walking slowly
- Writing, drawing
- Reading
- Watching TV
- Knitting , needlework
- Climbing stairs slowly
- Short outings
- Lifting 5 to 10 pounds (when necessary)
- At Week 2: Light laundry, sweeping, dusting, washing dishes, preparing light meals

**Weeks 3 to 6**

- Cleaning sinks and toilets
- Mopping floor
- Vacuuming
- Ironing
- Bed-making
- Light gardening
- Raking leaves
- Pushing light power mower
- Lifting up to 20 pounds (when necessary)
- Bowling
- Golfing with power cart

# Stress, Depression and Anxiety

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## Stress

### How Stress Affects Your Heart

In situations that are perceived as stressful, your body reacts by releasing stress hormones. In response, your heart rate and blood pressure increase, your breathing becomes faster and more shallow, your skin starts to sweat, and your entire body revs up into high gear.

In the short term, these reactions make you more alert and able to deal with the stressful situation. But if you are under stress for a long time, other changes occur:

- Fat cells that were released into the bloodstream for extra energy become converted into cholesterol
- Platelets circulating in the blood become more “sticky”
- Patterns of daily life may change, making it more difficult to eat well, exercise regularly, and get enough rest

### How to Manage Your Stress

How we think about an event determines its impact on our health.

- Attend a stress management program (see below) and learn how to:
  - Identify what causes you stress and how it affects you
  - Learn stress management skills like breathing and relaxation exercises
- Be physically active every day to help reduce the effects of stress
- Identify and use your support networks (e.g., friends and family)
- Get a “Coping with Stress” booklet from the Heart Health Education Centre and read a book about stress management
- If you feel overwhelmed or if you are having difficulty functioning in your daily activities, speak to your doctor or nurse about options available to help you (e.g., books, websites or a referral to counselling services).

## More Information about Stress

### Stress Management Program

The University of Ottawa Heart Institute Minto Prevention and Rehabilitation Centre provides a skills-oriented Stress Management Program that offers a variety of techniques to better manage stress. There are five 90-minute sessions in a group format and each of the sessions covers different topics including:

- Breathing and muscle relaxation techniques
  - Improving assertive communication
  - Uncovering and changing negative thoughts
  - Using humour as a coping strategy
- Location: University of Ottawa Heart Institute, 40 Ruskin St., Ottawa
  - To Register: Call 613-761-4558
  - Material Cost: \$30
  - Family members can access the Stress Management Program through the Heart Health Education Centre after a cardiac risk assessment

### Books

- *Don't Sweat the Small Stuff...and It's All Small Stuff*, R. Carlson
- *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness*, J. Kabat-Zinn
- *Stress, Sanity and Survival*, R. Woolfolk, FC Richardson
- *The Relaxation & Stress Reduction Workbook*, M. Davis, M. McKay and E. Robbins-Eshelman

## Depression

Depression is common in people with heart problems. About one in five patients (20%) experience clinical (or major) depression. If you are feeling at least five of the symptoms listed below for a two-week period or more, you may be developing depression and you may need to speak to your doctor or nurse.

These symptoms may include:

- Sad feelings
- Loss of interest in activities that you usually enjoy
- Changes in appetite
- Significant unplanned weight loss or weight gain
- Sleep problems
- Loss of energy
- Difficulties with concentration or memory
- Decrease in your normal social activities or withdrawing from friends and family
- Feelings of worthlessness, helplessness, or hopelessness
- Changes in sexual desire
- Thoughts about death or suicide

### How Depression Affects Your Heart

Depression may affect your heart in two ways: directly and indirectly. Depression affects your heart directly by increasing the risk of blood clotting, plaque build up and atherosclerosis. Depression also negatively affects your immune system, so you are less able to fight off germs and viruses.

Depression may affect your heart indirectly by influencing some of the decisions you make. People with depression often find it difficult to make healthy choices about quitting smoking, exercising, eating, or taking medications safely. They find it difficult to find the drive or energy to make healthy lifestyle changes.

## What You Can Do If You Are Feeling Depressed

- Negative thinking is often involved in depression. Getting help to learn new ways of thinking and stopping the negative thinking can be beneficial.
- Do more pleasant activities—even if you don't feel like it.
- Exercise regularly. Getting out for a walk everyday may improve your mood.
- Set realistic goals and do one thing at a time.
- Celebrate your achievements. You may need to record your daily activities to prove to yourself that you are making gains.
- Take time for yourself.
- Talk about your problems or concerns; don't bottle up your feelings.
- Seek support from your family and friends and/or from support groups.
- Participate in the Cardiac Rehabilitation Program.
- Talk to your doctor or a mental health professional (social worker, psychologist, or psychiatrist) about proven treatments for depression.

### More Information about Depression

#### Books

- *Feeling Good: The New Mood Therapy*, Burns, D. (1990)
- *Mind Over Mood: Change How You Feel by Changing the Way You Think*, Greenberger & Padesky (1995)

#### Web Sites

- Canadian Mental Health Association: [www.cmha.ca](http://www.cmha.ca)
- Canadian Psychological Association: [www.cpa.ca](http://www.cpa.ca)

## **Anxiety**

Anxiety is one of the most distressing emotions that people feel. At some point in time, most cardiac patients will experience varying degrees of fear or nervousness related to their health condition.

Anxiety describes a number of problems including generalized anxiety (a mixture of worries experienced most of the time), panic attacks (intense feelings of anxiety which people often feel like they are going to die), and posttraumatic stress disorder (repeated memories of terrible experiences with high levels of fear).

Like depression, about one in five cardiac patients experience significant anxiety symptoms. These symptoms may include:

- Uncontrollable worry
- Feeling “on edge” or restless
- Feeling irritable
- Muscle tension
- Light-headedness
- Sleep problems
- Being easily fatigued
- Difficulty breathing
- Increased heart rate
- Headaches
- Sweating
- Gastrointestinal (stomach) problems

### **How Anxiety Affects Your Heart**

Anxiety may play a role in cardiac problems by increasing the risk of an irregular heart beat and triggering spasms; both of these responses may lead to cardiac complications. Anxiety may also lead to unhealthy behaviours such as: smoking, overeating, poor sleep and decreased physical activity.

## What You Can Do If You Are Feeling Anxious

Learn to recognize when you are starting to feel anxious and plan ways to manage your feelings, for example:

- Learn new coping strategies to cope with anxious situations instead of avoiding them.
  - Practise slow and deep breathing
  - Imagine scenes that are relaxing and pleasant for you
  - Learn relaxation skills (e.g., tense and release the muscles throughout your body)
  - Distract yourself from the thoughts or physical symptoms that contribute to your anxiety (e.g., count backwards from 100 in three's)
  - Do something pleasurable like reading a funny book or getting a back rub
  - Share your fears and worries with someone you trust
- Challenge yourself to change the way you are thinking about a problem. For example, tell yourself “I can handle this, I’ve done it before” or “I’m not going to die, it is normal for my heart to pump harder when I am exercising”.
- Prepare solutions to problems that cause you anxiety, so you are ready in advance.
- Determine how much control you have in a given situation and let go of things that are beyond your control.
- Talk to your doctor or a mental health professional (social worker, psychologist, or psychiatrist) about proven treatments for anxiety.
- Participate in the Cardiac Rehabilitation Program.

### More Information about Anxiety

#### Books

- *The Anxiety and Phobia Workbook (4<sup>th</sup> Ed.)*, Bourne, E. (2005)

#### Web Sites

- Canadian Mental Health Association: [www.cmha.ca](http://www.cmha.ca)
- Canadian Psychological Association: [www.cpa.ca](http://www.cpa.ca)
- Anxiety Disorders Association of Canada : [www.anxietycanada.ca](http://www.anxietycanada.ca)

# Sexual Health and Heart Disease

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Sexual activity is an important part of quality of life and is often a great concern for both patients and their partners after a cardiac event. Fears and concerns may temporarily interfere with sexual spontaneity and response. Feel free to talk about your questions and concerns with your health provider. He or she is used to discussing these matters and will answer your questions in a professional and understanding way.

A few factors may interfere with your sexual health after your discharge from the hospital. You might temporarily suffer from mild depression which will affect your sexual desire. Some medications may also impact sexual function. You might fear that sexual activity will cause another heart attack or your spouse might silently think the same. For the majority of patients, this will last a short period of time and life will pick up where it left you before you had a cardiac event.

Here are a few answers to common concerns about sexual activity:

## Sexual Activity after a Heart Attack

If you have recently had a heart attack, your doctor might ask you to wait up to 6 weeks before resuming sexual activity. After this healing period, the risk of having a heart attack during sex is actually quite low. The risk is comparable to that of getting angry and is reduced if you exercise regularly and take your medication.

From a cardiac standpoint, sexual intercourse is like any other physical activity; your heart rate and your blood pressure increase. The activity is often compared to walking at three to six kilometers per hour on a level surface, or climbing 20 stairs in 10 seconds.

## Recommendations for Engaging in Sexual Activity

- These past few weeks have been very stressful on your partner and yourself. Both of you might still be tired. Plan sexual activity for the time of day when you have the most energy and are least bothered by other health issues.
- Avoid having sex after a large meal. Give yourself a few hours to digest.
- The effort on your heart is about the same regardless of your position.
- Limit the amount of alcohol you drink and avoid using tobacco as both of these may affect sexual function.
- If you have chest pain or shortness of breath, speak to your doctor.

## **If You Had Erectile Dysfunction before Your Heart Attack**

Erectile dysfunction (ED) is often associated with heart disease. The same factors that contributed to blocking the arteries of your heart can block arteries elsewhere in you body. Some medications may also contribute to ED. A healthy lifestyle that incorporates a heart healthy diet, exercise and reaching a healthy weight will correct ED in 30% of obese patients.

Speak to you doctor if you suspect your medications are a contributing factor.

## **Use of ED Medication after a Heart Attack**

Check with your doctor before starting or resuming ED medications (Viagra®, Cialis® or Levitra®). These medications are usually safe but can be devastating on your blood pressure if taken with any form of nitroglycerin (spray under the tongue, pills or the patches).

You should not take any form of nitroglycerin within 24 hours after taking Viagra® or Levitra®, or within 48 hours if you take Cialis®.

If you do experience chest pain within 24 hours of taking any of the above medications please call 911 and let the paramedics and emergency physician know you have taken these drugs.

## **ED Treatment Options for Nitroglycerin Users Not Eligible for ED Medication**

If you have been told you are not a candidate for ED medication, there are other options. These involve treating the penis by inserting or injecting medications or using vacuums devices. Finally, penile prosthesis may be surgically implanted. These more specialized approaches require a referral to a urologist.

## **Hormone Replacement Therapy for Postmenopausal Women**

For years, women were prescribed HRT (estrogen and progesterone) to relieve postmenopausal symptoms. Several studies have shown no protective effect on the heart, and one study reported an increase in the risk of heart disease. In women taking HRT for menopausal symptoms, treatment should be discontinued if they experience angina or a heart attack. There is also evidence that HRT may increase the risk of stroke, blood clots and breast cancer.

## **Treatments for Sexual Dysfunction in Women with Heart Disease**

There are a few options for women but the problem is often more complicated than with men. Women respond more to touch and verbal stimuli and will present with sexual dysfunction involving several of the sexual response cycles (desire, arousal and orgasm).

Certain medications may improve low sexual desire in women taking antidepressants and there is a small category of woman that will benefit from Viagra. A clitoral suction vacuum device, EROS CTD, is FDA approved for female sexual dysfunction. Its mechanism is similar to vacuum devices used for male erectile dysfunction. It may improve local arousal and response and is safe to use. Speak to your doctor about your concerns.

## **Suggestions for Maintaining Your Sex Life**

- Sex is not always about intercourse. Explore your senses: hold hands, hug and touch your partner.
- Create a bit of romance with music, candles and special scents.
- Agree to have honest discussions. Tell each other what you like and don't like.

# Going Home – A New Beginning

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As difficult and stressful as this experience has been for you and your family, be aware that most people do recover from a heart attack and live a full life.

## Can This Happen Again?

Even though you have received the best available care to treat and manage your heart condition, your heart disease is not curable. Heart disease is a chronic health condition that, like any health problem, will bring uncertainty and changes into your everyday life. Learning about your risk factors and how to manage them is the best way to prevent future blockages in your coronary arteries.



## Returning to Work

To help you understand whether you can return to work, you and your doctor will consider:

- How stable your condition is
- How safe you are to do your job
- What the licensing requirements are (e.g., for truck drivers or pilots)
- What the demands of your job are—both physically and mentally

## What Your Doctor Needs to Know about Your Job

- The physical work that you do such as lifting or carrying
- Whether you use heavy tools like jackhammers

- The conditions that you work under, such as temperature, fumes, shift work, or frequent deadlines
- The amount of job stress you have

**Tip:** Take a copy of your job description to your doctor

## **What Papers You Need to Return to Work**

Your doctor may need to write a letter stating:

- When you can return to work
- What you can or can't do

**Tip:** If your doctor writes "light duty," this needs to be explained: what duties you can perform, what hours you can work, and how long light duty is to continue

## **Where to Get Help with Questions about Work**

- A vocational counsellor who specializes in work-related issues will be available through your Cardiac Rehabilitation Program.
- There may be help through your workplace, such as a human resources staff member, an occupational health nurse, company doctor, or union representative.
- Your family physician may be able to help.

## **How to Prepare for Follow-Up Appointments with Your Doctor**

To get the most from your follow-up clinic appointments:

- Bring your updated medication list and plan to review it with your doctor
- Make a list of your questions and concerns
- Bring a family member or friend with you and ask them to take notes
- Ask questions if you are not sure you understand the information

The following list includes some of the topics you may want to talk your doctor about:

- Returning to work or returning to driving
- Unusual symptoms
- Changes in medication or medication side effects
- Limitations in your activity
- Follow-up appointment plans

**Questions for the doctor about your recovery/progress:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

# For Family and Caregivers

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## How Family Members and Caregivers Feel

Having a heart attack or being diagnosed with heart disease can have a big emotional impact on family members and caregivers as well. You can feel frightened, angry and even feel guilty. It is important not to let these feelings build and to get help and support.

At any time during the hospital stay, please feel free to discuss these feelings with a doctor or nurse. We can help you obtain support from an advanced practice nurse, clergy, social worker or other health care professional who specializes in providing families with this type of emotional support.

At anytime of the day or night you can speak with a nursing coordinator who can help answer your questions and provide support to you and your family.

## Caring for Yourself

As a caregiver, it is important that you take time to look after yourself. You need to get proper nutrition and rest both during the hospital period and after. The additional stress of supporting your loved one through a cardiac event can make you even more tired and possibly more at risk for catching a cold, etc.

Sometimes family members feel that they have to be with their loved one at all times when they are in hospital. This is the best time for you to get rested and prepare for your family member to return home. Please be assured that the attending doctor or nurse will contact you should there be any change in your loved one's condition.

## Will Your Partner or Family Member Ever Be the Same?

It is important to remind yourself that the majority of people who are treated at the University of Ottawa Heart Institute for a heart attack or who are diagnosed with angina or coronary artery blockages, return to their normal lives within a couple of months.

Having heart disease does mean making some lifestyle changes to prevent reoccurrence, but these changes are positive for the whole family. In many cases, our patients and families lead more active and healthy lives!

## Helpful Tips for Family and Caregivers

- Conserve your energy. Housework and other projects can wait.
- Rest when your partner rests.
- Try to get at least 8 hours of sleep every night.
- Get outside whenever possible, especially when your partner starts walking. Fresh air and exercise are good for you, too!
- Plan occasional breaks away with family and friends.

# Medications

You will likely be taking medications following your heart attack. Your physician has carefully chosen the type of medications and dosage you need based upon your present condition. It is important to recognize that not everyone will be taking the same medications. Your blood pressure, any abnormal heart rhythm, and the extent of damage to the heart muscle, will influence your doctor's decision.

The following is a brief outline of the medications most commonly used and their role in treating heart disease. If your medication is not listed or you want more detailed information about your specific medications, ask your pharmacist.

Type of Medicine	Names of Medication	How Medication Works	Potential Side Effects
<b>Antiplatelets</b>	ASA (Aspirin <sup>®</sup> , ECASA) Clopidogrel (Plavix <sup>®</sup> ) Prasugrel (Effient <sup>®</sup> ) Ticagrelor (Brilinta <sup>®</sup> )	<ul style="list-style-type: none"> <li>Helps prevent blood clots in injured coronary arteries</li> <li>Helps prevent blood clots on stents (clopidogrel, prasugrel)</li> <li>Decreases the risk of future heart attacks</li> </ul>	<ul style="list-style-type: none"> <li>Increased risk of bleeding &amp; bruising</li> <li>Stomach upset (nausea, diarrhea, heartburn)</li> </ul>
<b>ACE Inhibitors (Angiotensin Converting Enzyme Inhibitors)</b>	Benazepril (Lotensin <sup>®</sup> ) Captopril (Capoten <sup>®</sup> ) Cilazapril (Inhibace <sup>®</sup> ) Enalapril (Vasotec <sup>®</sup> ) Fosinopril (Monopril <sup>®</sup> ) Lisinopril (Zestril <sup>®</sup> , Prinivil <sup>®</sup> ) Perindopril (Coversyl <sup>®</sup> ) Quinapril (Accupril <sup>®</sup> ) Ramipril (Altace <sup>®</sup> ) Trandolapril (Mavik <sup>®</sup> )	<ul style="list-style-type: none"> <li>Relaxes blood vessels and lowers blood pressure</li> <li>Decreases the risk of future heart attacks</li> <li>Maintains the heart's shape promoting normal function</li> </ul>	<ul style="list-style-type: none"> <li>Cough</li> <li>Dizziness, lightheadedness</li> <li>Increased potassium level in blood</li> <li>Swelling of lips/face/throat (rare) – <b>Call 911</b></li> </ul>

Type of Medicine	Names of Medication	How Medication Works	Potential Side Effects
<b>Beta Blockers</b>	Acebutolol (Rhotral <sup>®</sup> , Sectral <sup>®</sup> )	• Lowers blood pressure and heart rate	• Fatigue/tiredness
	Atenolol (Tenormin <sup>®</sup> )		• Dizziness, lightheadedness
	Bisoprolol (Monacor <sup>®</sup> )	• Helps prevent angina	• Depression
	Carvedilol (Coreg <sup>®</sup> )	• Improves heart function	• Wheezing
	Labetalol (Trandate <sup>®</sup> )		
	Metoprolol (Betaloc <sup>®</sup> , Lopressor <sup>®</sup> )	• Slows down irregular heart rhythms	
	Nadolol (Corgard <sup>®</sup> )		
	Pindolol (Visken <sup>®</sup> )	• Decreases the risk of future heart attacks	
Propranolol (Inderal <sup>®</sup> )			
Timolol (Blocadren <sup>®</sup> )			
<b>Cholesterol Lowering Medications</b>	<b>Statins</b>	• Lowers LDL (“bad”) cholesterol	• Constipation, gas
	Atorvastatin (Lipitor <sup>®</sup> )		• Indigestion
	Lovastatin (Mevacor <sup>®</sup> )	• Decreases the risk of future heart attacks	• Mild decrease in liver function
	Pravastatin (Pravachol <sup>®</sup> )		• Muscle pain – Notify doctor
	Rosuvastatin (Crestor <sup>®</sup> )		
	Simvastatin (Zocor <sup>®</sup> )		
	<b>Fibrates</b>	• Lowers triglycerides	• Rash
	Bezafibrate (Bezalip SR <sup>®</sup> )		• Stomach upset (nausea, vomiting, diarrhea, gas)
	Fenofibrate (Lipidil EZ <sup>®</sup> , Lipidil Micro <sup>®</sup> , Lipidil Supra <sup>®</sup> )		• Mild decrease in liver function
	Gemfibrozil (Lopid <sup>®</sup> )		• Muscle pain – Notify doctor
<b>Niacin</b>	• Increases HDL (“good”) cholesterol	• Flushing	
Niacin (Niaspan <sup>®</sup> )	• Lowers triglycerides	• Mild decrease in liver function	
<b>Ezetimibe</b>	• Usually used with a statin to lower LDL (“bad”) cholesterol	• Diarrhea	
Ezetimibe (Ezetrol <sup>®</sup> )		• Mild decrease in liver function	
		• Muscle pain – Notify doctor	

Type of Medicine	Names of Medication	How Medication Works	Potential Side Effects
	Cholestyramine (Questran <sup>®</sup> ) Colestipol (Colestid <sup>®</sup> )	<ul style="list-style-type: none"> <li>Mildly lowers LDL ("bad") cholesterol</li> </ul>	<ul style="list-style-type: none"> <li>Constipation</li> <li>Nausea</li> <li>Bloating</li> </ul>
<b>Nitrates</b>	Isosorbide Dinitrate (ISDN, Isordil <sup>®</sup> ) Isosorbide Mononitrate (Imdur <sup>®</sup> ) Nitroglycerin spray (Nitrolingual <sup>®</sup> ) Nitroglycerin patch (NitroDur <sup>®</sup> , Minitran <sup>®</sup> , Trinipatch <sup>®</sup> )	<ul style="list-style-type: none"> <li>Improves blood flow to the heart by relaxing the blood vessels</li> <li>Helps prevent angina (patch and tablets)</li> <li>Stops angina (spray)</li> </ul>	<ul style="list-style-type: none"> <li>Headache</li> <li>Skin irritation at application site (patch)</li> <li>Lightheadedness (spray)</li> </ul>
<b>Angiotensin II Receptor Blockers (ARBs)</b>	Candesartan (Atacand <sup>®</sup> ) Irbesartan (Avapro <sup>®</sup> ) Losartan (Cozaar <sup>®</sup> ) Olmesartan (Olmotec <sup>®</sup> ) Telmisartan (Micardis <sup>®</sup> ) Valsartan (Diovan <sup>®</sup> )	<ul style="list-style-type: none"> <li>Relaxes blood vessels &amp; lowers blood pressure</li> <li>Decreases the risk of future heart attacks</li> <li>Alternative to ACE inhibitors</li> </ul>	<ul style="list-style-type: none"> <li>Dizziness, lightheadedness</li> <li>Headache</li> <li>Increased potassium level in blood</li> </ul>
<b>Calcium Channel Blockers</b>	Amlodipine (Norvasc <sup>®</sup> ) Felodipine (Plendil <sup>®</sup> , Renedil <sup>®</sup> ) Nifedipine (Adalat XL <sup>®</sup> ) Diltiazem (Cardizem CD <sup>®</sup> , Tiazac <sup>®</sup> ) Verapamil (Isoptin <sup>®</sup> )	<ul style="list-style-type: none"> <li>Lowers blood pressure</li> <li>Lowers heart rate (diltiazem, verapamil)</li> <li>Helps prevent angina</li> <li>Slows irregular heart rhythms (diltiazem, verapamil)</li> </ul>	<ul style="list-style-type: none"> <li>Dizziness, lightheadedness</li> <li>Fatigue/tiredness</li> <li>Headache</li> <li>Swelling of ankles/feet</li> </ul>
<b>Diuretics (Water Pills)</b>	Ethacrynic Acid (Edecrin <sup>®</sup> ) Furosemide (Lasix <sup>®</sup> ) Hydrochlorothiazide (HCTZ, HydroDiuril <sup>®</sup> ) Metolazone (Zaroxolyn <sup>®</sup> )	<ul style="list-style-type: none"> <li>Removes excess water by increasing urine production</li> <li>Reduces swelling in legs and ankles</li> </ul>	<ul style="list-style-type: none"> <li>Dizziness/lightheadedness</li> <li>Decreased potassium level in blood</li> <li>Gout</li> </ul>

Type of Medicine	Names of Medication	How Medication Works	Potential Side Effects
<b>Potassium Supplement</b>	Potassium Chloride (Slow K <sup>®</sup> , K-Dur <sup>®</sup> )	<ul style="list-style-type: none"> <li>• Replaces potassium in blood</li> </ul>	<ul style="list-style-type: none"> <li>• Nausea/vomiting</li> </ul>
<b>Anticoagulants</b>	Apixaban Dabigatran (Pradax <sup>®</sup> ) Rivaroxaban (Xarelto <sup>®</sup> ) Warfarin (Coumadin <sup>®</sup> )	<ul style="list-style-type: none"> <li>• Helps prevent blood clots from forming or getting bigger</li> </ul>	<ul style="list-style-type: none"> <li>• Increased risk of bleeding and bruising</li> </ul>
<b>Anti-arrhythmics</b>	Amiodarone (Cordarone <sup>®</sup> )	<ul style="list-style-type: none"> <li>• Makes the heart beat more regularly</li> </ul>	<ul style="list-style-type: none"> <li>• Nausea/vomiting</li> <li>• Skin may burn more easily under the sun</li> <li>• Sun exposed skin may turn bluish grey</li> <li>• Thyroid abnormality</li> <li>• Decrease in liver function</li> <li>• Lung damage (rare)</li> </ul>
	Dronedarone (Multaq <sup>®</sup> )		<ul style="list-style-type: none"> <li>• Nausea/vomiting</li> <li>• Diarrhea</li> </ul>
	Sotalol (Sotacor <sup>®</sup> )		<ul style="list-style-type: none"> <li>• Fatigue/tiredness</li> <li>• Dizziness, lightheadedness</li> <li>• Depression</li> <li>• Wheezing</li> </ul>
<b>Digitalis</b>	Digoxin (Lanoxin <sup>®</sup> , Toloxin <sup>®</sup> )	<ul style="list-style-type: none"> <li>• Slows down irregular heart rhythms</li> <li>• Strengthens the heart's pumping ability</li> </ul>	<ul style="list-style-type: none"> <li>• Nausea/vomiting – Notify doctor if persistent</li> </ul>

## Manage Your Medications Safely

When you are discharged, you will receive a prescription for your new medications.

1. Make sure your doctor knows all the medications and supplements that you were taking previously so you can both feel confident that you are getting the right prescription.
2. When you receive the prescription, make sure you ask:
  - The name of the medication
  - Why it is being prescribed
  - When and how should it be taken
  - How long you will need to take it
  - What side effects you should expect to have
  - What you should do about the side effects
3. When you pick up your prescription, ask your pharmacist:
  - To explain the best way to take the medication
  - To explain what is written on the labels
  - To provide written information about the medication
4. Try to use the same pharmacy for all your prescriptions. It is important for your pharmacist to have a complete list of all your medications. Your pharmacist can then evaluate if all your medications can be safely taken together.
5. Carry your medication list with you. Make sure the list includes:
  - All your medications, as well as any vitamins, supplements and herbals
  - Your allergies, immunizations and pharmacy phone number
6. Review the list regularly with your doctor or pharmacist.
7. If you have trouble remembering to take your medications, the following tips are “tried and true”:
  - Take your medications at the same time each day.

- Associate your medications with daily activities like:
    - Brushing your teeth or
    - Mealtimes or
    - Bedtime
  - Use a pill organizer (dosette) with different compartments for different times of the day.
  - Ask your pharmacy if they can organize your pills in blister packs.
  - Keep a one-day supply of your medications in your handbag or at the office.
  - If your medications are complicated, ask your doctor if something simpler can be prescribed.
  - Put a note on your calendar to remind you to pick up your prescription refills.
8. Do not store your medication in hot or humid areas, such as the bathroom or glove compartment of your car. These conditions will shorten the expiry of your drugs.
9. Take the medication as it is prescribed by your doctor. If you have concerns about taking medications, discuss them openly and honestly with your doctor. If you experience troublesome side effects, your doctor may be able to prescribe a different kind of medication.
10. If you are worried about the cost of your medication, ask your doctor if a less expensive medication can be substituted, or check with the Ontario Trillium Program for possible assistance:
- Phone: 1-800-575-5386
  - Web Site: [www.health.gov.on.ca/english/public/pub/drugs/trillium.html](http://www.health.gov.on.ca/english/public/pub/drugs/trillium.html)

## In Case of an Emergency

Before you are discharged from the hospital, your nurse will supply you with your Vial of Life kit. If you are ever in need of emergency medical help, the Vial of Life is a quick way for paramedics and hospital staff to know what medications you are taking, your emergency contacts, and any pertinent health information.

When preparing your Vial of Life:

1. Print clearly.
2. Complete your Vial of Life Medication Sheet.
3. Complete your Vial of Life Information Sheet.
4. Place both forms in your vial and store it in the **freezer door** of your refrigerator.
5. Place the Vial of Life magnet on the top right corner of your refrigerator.
6. Remember to update your medication list every time your prescription changes.

### **What to do if your angina or heart pain occurs:**

If you experience angina discomfort/pain please do the following:

- |                                  |   |   |
|----------------------------------|---|---|
| At the first sign of discomfort  | → | Stop immediately and rest                       |
| If no relief with rest           | → | Take 1 <sup>st</sup> nitroglycerin spray/tablet |
| If no relief within five minutes | → | Take 2 <sup>nd</sup> nitroglycerin spray/tablet |
| If no relief within five minutes | → | Take 3 <sup>rd</sup> nitroglycerin spray/tablet |

**If no relief after the 2<sup>nd</sup> nitroglycerin spray/tablet, call 911 or have someone else drive you to the nearest emergency department.**

It is important to let your cardiologist and family doctor know if you experience any changes in your symptoms.

# Participate in a Cardiac Rehabilitation Program

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## What Is Cardiac Rehabilitation?

Cardiac rehabilitation is a program of exercise, education, and counselling that is designed to help you learn how to make heart healthy living a part of your every day life. Research demonstrates that people who participate in a cardiac rehabilitation program are more successful at managing their risk factors compared to those who do not.

Participating in a cardiac rehabilitation program will dramatically reduce your risk of future heart problems. There are a variety of programs available for you to choose from. Your program will be personalized to meet your needs. Your risk factors will be measured at different time points to monitor your progress and improvement.

In most cases, your cardiologist or cardiac surgeon will automatically refer you to a cardiac rehabilitation program. If you have not received your cardiac rehabilitation appointment within a few weeks of being discharged from the hospital, you should contact your doctor and discuss whether cardiac rehabilitation is right for you.

## Overview of Cardiac Rehabilitation Options

Cardiac rehabilitation programs are designed to assist you in achieving and maintaining a heart healthy lifestyle and to help you return to every day life. There are a number of program options available to residents living in the Ottawa-Carleton and surrounding regions. There is no cost for participation in these programs.

## University of Ottawa Heart Institute Programs

### On-Site Supervised Program

Phone: 613-761-4572

- Two- to three-month program
- Supervised on-site, twice-weekly exercise sessions (1 hour/session)
- Medical assessment by cardiac rehabilitation physician
- Nutrition workshops
- Referral to services such as:
  - Nutritional counselling

- Stress management
  - Smoking cessation
  - Vocational counselling
  - Psychological counselling
  - Social work counselling
- Follow-up evaluation scheduled after three and twelve months

### **Case-Managed Home Program**

Phone: 613-761-4572

- Flexibility for those unable to participate in hospital-based program
- Three-month program
- Tailored program focused on your personal heart health goals
- Coronary risk factor assessment
- Total of 15 appointments, approximately 30 minutes each
- Three appointments at Heart Institute, remainder by phone
- Individual home exercise program, no supervised exercise sessions
- Follow-up evaluation scheduled after three and twelve months

### **Brief Program**

Phone: 613-761-4572

- Coronary risk factor assessment
- Nutrition education sessions
- Exercise evaluation and tailored home exercise program, no supervised exercise sessions
- Total of four appointments at Heart Institute
- Follow-up evaluation scheduled after three and twelve months

## **FrancoForme\* (French Case-Managed Home Program)**

\*open to Franco-Ontarians only

Phone: 613-761-4572

- Three-month program offered in French
- Flexibility for those unable to participate in a hospital-based program
- Tailored program focused on your personal heart health goals
- Coronary risk factor assessment
- Total of 15 appointments, approximately 30 minutes each
- Three appointments at Heart Institute, remainder by phone
- Individual home exercise program, no supervised exercise sessions
- Follow-up evaluation scheduled after three and twelve months

## **Cardio-Fit Program**

Phone: 613-761-4572

- Six-month, web-based program for individuals who are eligible
- Tailored exercise and physical activity program
- No supervised exercise sessions
- Five online physical activity planning tutorials (10 to 15 minutes each)
- Online physical activity log
- Follow-up evaluation after six and twelve months

## Community and Regional Programs

### Pembroke Regional Hospital Cardiac Rehabilitation Program

Phone: 613-732-2811 x8091

- Three- to six-month program, modeled after Heart Institute on-site program
- Supervised on-site, twice-weekly exercise sessions
- Education sessions
- Medical assessment
- Referral to a dietitian or social worker, as needed
- Case-managed home program also available



### Hawkesbury and District General Hospital Supervised Program

Phone: 613-632-1111 x177 – Contact Nathalie Aupin

- 12-week program
- Supervised on-site, twice-weekly exercise sessions
- Education sessions
- Bilingual staff



### Brockville Cardiovascular Program

Phone: 613-345-5645 x1414, Fax: 613-345-8348

- 12-week program focused on your personal heart health goals
- Supervised on-site, twice-weekly exercise sessions
- Risk factor assessment with education sessions
- Medical assessment
- Referrals available for individualized risk factors
- Case-managed home program also available



## Programme de réadaptation cardiaque de l'Outaouais

Phone: 819-966-6214

- Based on the Heart and Stroke Foundation of Quebec program
- Personalized physical exercise program
- Stress management program
- Nutrition management workshops
- Five meetings with a case manager plus four optional information sessions
- One-year case managed home program

## Exercise after Cardiac Rehabilitation

### Heart Wise Exercise

Phone: 613-798-5555 x18691, Email: [heartwise@ottawaheart.ca](mailto:heartwise@ottawaheart.ca)

The Heart Wise Exercise program was developed to help individuals with heart problems exercise safely. It is a model for cardiac safe exercise developed by the University of Ottawa Heart Institute in partnership with many community agencies to address the barriers to exercise experienced by cardiac clients. Ideally, this program supplements a formal cardiac rehabilitation program. It could also be an alternative if no cardiac rehabilitation programs are accessible.



There are a variety of Heart Wise Exercise program options allowing patients and their families to choose one that is best suited to their needs and location. Free walking programs are offered in Ottawa shopping malls and in local high schools in Leeds, Lanark and Grenville County, Renfrew County and Prescott- Russell County. All programs must work with the Heart Institute, including attending a training workshop, to meet program criteria and become designated as a Heart Wise site.

For information regarding additional Heart Wise Exercise criteria, assistance in locating a program or how to start a program in your community, please contact the Regional Manager, Prevention and Rehabilitation Centre, University of Ottawa Heart Institute as indicated above. See also: [www.ottawaheart.ca/patients\\_family/heart-wise-exercise.htm](http://www.ottawaheart.ca/patients_family/heart-wise-exercise.htm)

# Appendix 1 – Where to Go for More Information

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## Heart Health Education Centre

The University of Ottawa Heart Institute's Heart Health Education Centre is open to patients, family members, and the public.

The Centre provides:

- Resources and workshops to help prevent, detect, and manage heart disease
- A borrowing library of heart health information including all the books mentioned in this guide
- Someone who is always available to help you find information

**Location:** 2<sup>nd</sup> Floor of the Heart Institute, H-2342

**Hours:** 8:30 a.m. to 5:00 p.m.

**Phone:** 613-761-4753 or 1-866-399-4432

**Email:** [hearthealth@ottawaheart.ca](mailto:hearthealth@ottawaheart.ca)

**Web Site:** [www.ottawaheart.ca/heart\\_disease/heart-health-education-centre.htm](http://www.ottawaheart.ca/heart_disease/heart-health-education-centre.htm)

## Workshops

Pick up your Workshops Schedule or check our calendar online at:  
[www.ottawaheart.ca/heart\\_disease/heart-health-education-centre.htm](http://www.ottawaheart.ca/heart_disease/heart-health-education-centre.htm)

### Medication Management

Get some basic facts about your heart medications: how they work, common side effects, and important questions to ask your doctor and your pharmacist.

### Heart Health Nutrition

Workshops on a variety of nutrition topics are available.

#### Weekday options:

Free workshops are 60 minutes in length, days and evenings. Options are available in both English and French. Call 613-761-4753 to register.

- **ABCs to Heart Healthy Eating:** Develop the skills for heart healthy eating and get the facts on fat, fibre, and salt.
- **Heart Healthy Shopping:** Learn the tools to better understand food labels and develop heart healthy shopping lists.
- **Nutrition Tips for Weight Management:** Learn to set realistic goals, understand healthy portions and plan meals for weight management.
- **Hot Topics in Heart Health Nutrition:** Expand the knowledge you got in ABCs! Learn about the Mediterranean diet, antioxidants, omega-3s, the glycemic index, and supplements.
- **Eating Well with Diabetes:** For people wishing to control or prevent diabetes. Learn about meal planning, sweeteners, carbohydrates and the glycemic index.
- **Bien s'alimenter de A à Z:** Une session de deux heures, offerte en français seulement, qui résume les deux ateliers « La base d'une alimentation saine pour le coeur » et « L'achat de denrées alimentaires saines pour le coeur ». Session offerte une fois par mois.

#### **Saturday options:**

Workshops are offered from 9:30 a.m. to 12:30 p.m. or 1:00 p.m. to 4:00 p.m. Each workshop costs between \$25.00 and \$45.00 per person. Call 613-738-2384 to register.

#### **Coping with Cholesterol**

- **Eat Smart! (\$25):** Get intelligent advice about sensible eating to lower LDL cholesterol and triglycerides. Learn the principles of heart healthy eating to achieve your peak health.
- **Get Moving (\$25):** Start where you are and go wherever your goals take you. Develop a physical activity plan of action to lower LDL cholesterol and triglycerides and increase HDL cholesterol levels. Learn how to safely begin your own physical activity program based on your health goals.
- **Shape Up (\$45):** Develop a weight loss plan of action for increasing HDL cholesterol and lowering LDL cholesterol and triglyceride levels. Get an individual body composition/resting metabolic rate test and learn how to adjust your energy balance to achieve a healthy weight goal.
- **Power Fuel Nutrition (\$30):** Learn how to select the best foods and fluids to have more energy to train better, recover more quickly, avoid injuries, and achieve your peak health and sport performance goals.

## Cookbooks

- *The New Lighthearted Cookbook*. Recipes for heart healthy cooking. Lindsay, Ann (2005).
- *HeartSmart*. The best of heart-smart cooking. Stern, Bonnie (2006).
- *500 Best Healthy Recipes*. Roblin, Lynn (2006).
- *American Heart Association Low-Salt Cook Book*. American Heart Association. (2006).
- *Choice Menus Presents: Meal Planning with Recipes for One or Two People*. Hollands, Marjorie (2004).
- *Coping with Cholesterol*. Elizabeth (Beth) Mansfield & Dr. Ruth McPherson (2005). Available at \$5.00/copy in the library.

## Weight Management Books

- *Healthy Habits, Healthy Weights*. Heart and Stroke Foundation.
- *Anne Lindsay's Light Kitchen*. Anne Lindsay (2002).

## Web Sites

- University of Ottawa Heart Institute  
Heart Health Education Centre  
[www.ottawaheart.ca/heart\\_disease/heart-health-education-centre.htm](http://www.ottawaheart.ca/heart_disease/heart-health-education-centre.htm)
- Dietitians of Canada  
[www.dietitians.ca](http://www.dietitians.ca)
- Heart and Stroke Foundation  
[www.heartandstroke.ca](http://www.heartandstroke.ca)
- Health Canada  
[www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)
- Canadian Diabetes Association  
[www.diabetes.ca](http://www.diabetes.ca)
- American Heart Association  
[www.americanheart.org](http://www.americanheart.org)

# Heart Disease Support Groups

## Ottawa Heart Institute Alumni

**Phone:** 613-761-4370

**Email:** [info@ottawaheartalumni.ca](mailto:info@ottawaheartalumni.ca)

**Web Site:** [www.ottawaheartalumni.ca](http://www.ottawaheartalumni.ca)

## Ottawa Heart Support Group

**Phone:** Hugh McDowell: 613-825-2209, Bill Holland: 613-824-9563,  
Bernie Reynolds-Ridley: 613-729-3481

**Email:** [OttawaHeartSupport@bigfoot.com](mailto:OttawaHeartSupport@bigfoot.com)

**Web Site:** [www.ottheartsupport.bravehost.com](http://www.ottheartsupport.bravehost.com)

# Appendix 2 – Rate Your Weight

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## Rate Your Weight

### Tools to help you rate your weight:

Body mass index (BMI) and waist circumference (WC) are two ways to help determine if your current weight is putting you at risk for developing health problems. They:

- should be used together
- are for healthy men and women over 18 years old
- should not be used for pregnant or breastfeeding women

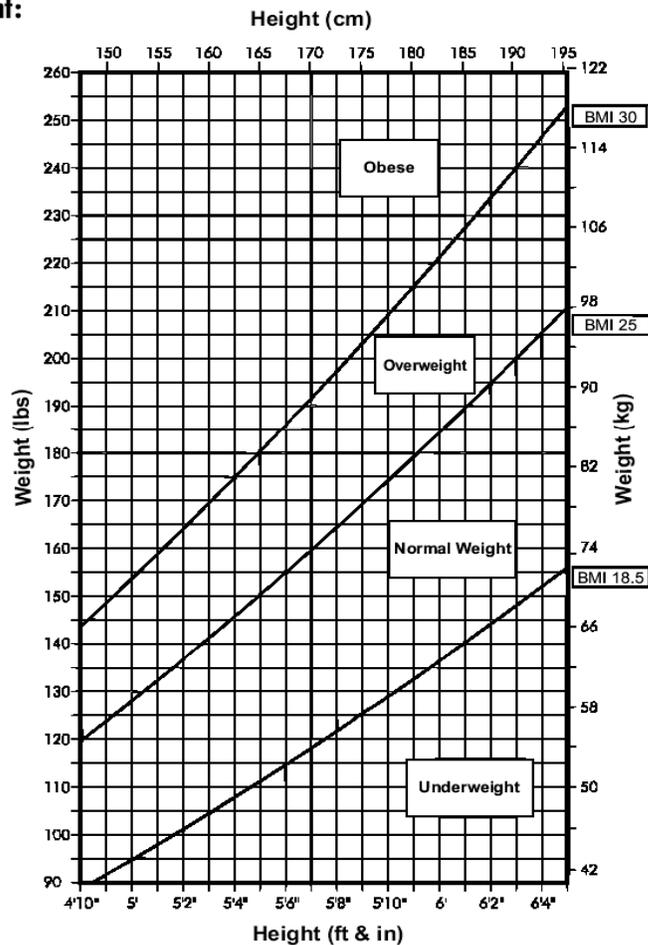
BMI is a measure of your weight related to your height (kg/m<sup>2</sup>).

Find your BMI by using the chart:

1. Find your current weight and draw a horizontal line across the chart.
2. Find your height and draw a vertical line from the top to the bottom of the chart.
3. Your current BMI is where the two lines cross. Compare this to the chart below:

BMI	Risk of developing health problems
less than 18.5	Increased
18.5 - 24.9	Least
25.0 - 29.9	Increased
30.0 - 34.9	High
35.0 - 39.9	Very High
40.0 or more	Extremely High

*Note: For persons 65 years and older the "normal" range may begin slightly above BMI 18.5 and extend into the "overweight" range.*



© Nutrition, City of Ottawa, Public Health and Long Term Care, 2003

Source: Canadian Guidelines for Body Weight Classification in Adults, Health Canada, 2003

**Some health problems associated with body weight:**

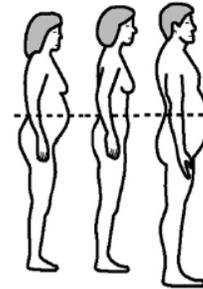
<p><b>Overweight (BMI 25-29.9) and Obesity (BMI 30 or more):</b></p> <ul style="list-style-type: none"> <li>• type 2 diabetes</li> <li>• high blood pressure</li> <li>• high blood cholesterol</li> <li>• coronary heart disease</li> <li>• gallbladder disease</li> <li>• sleep problems</li> <li>• certain cancers (breast, colon, prostate, kidney, endometrial)</li> </ul>	<p><b>Underweight (BMI less than 18.5)*:</b></p> <ul style="list-style-type: none"> <li>• undernutrition</li> <li>• osteoporosis</li> <li>• infertility</li> <li>• weakened immune system</li> </ul> <p><i>*May indicate an eating disorder or other underlying illness</i></p>
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**Waist Circumference (WC):**

Waist circumference is used to measure the amount of fat around your waist. It indicates health risk associated with the amount of body fat and its location. **Use WC only when BMI is between 18.5 to 34.9.**

**How to Measure WC:**

Using a tape measure, measure waist circumference at the smallest area below the rib cage and above the belly button.



Waist Circumference	Risk of developing health problems	Health problems associated with increased WC
Men 102 cm (40 in) or more Women 88 cm (35 in) or more	Increased	<ul style="list-style-type: none"> <li>• type 2 diabetes</li> <li>• coronary heart disease</li> <li>• high blood pressure</li> </ul>

**What Now?**

Make permanent lifestyle changes to help you achieve a healthy body weight in the long term. Start with healthy and balanced eating, and increasing physical activity.

- ▶ Aim to achieve a healthy weight gradually.
- ▶ Use Canada's Food Guide to Healthy Eating to plan all your meals and snacks.
- ▶ Use Canada's Physical Activity Guide to make wise choices about physical activity.
- ▶ Consult your doctor or dietitian for advice about your overall health risks and the weight management options best for you.

# We'll be keeping in Touch!

## Interactive Voice Response (IVR) Information for Patients Discharged Following a Heart Attack or Unstable Angina

### What is Interactive Voice Response (IVR)?

Automated telephone calls from the University of Ottawa Heart Institute are made to patients in their home as a way to remain connected to patients after their discharge from hospital.

### What is the purpose and what are the benefits?

The purpose is to obtain and provide information on your progress during the year following your discharge. The system will ask questions but will also provide you with the opportunity to hear information so that you remain on the established standards of care for an acute coronary syndrome (ACS) patient.

### How does it work?

The system will call you by name and ask you a series of questions that require a yes or no answer. Information and health care tips will also be delivered by the system. A nurse will review the answers on a database from Monday to Friday and will call you if further assessment is required. You will be called at 1, 3, 6, 9 and 12 months after discharge. You do not have to stay by your phone. The system will try to reach you three times.

### Who to contact if you have questions?

For any cardiac concerns, please call 613-761-4708 at any time and ask for the Cardiology Nursing Coordinator.

For any information related to IVR, please contact the Cardiac Telehealth department Monday to Friday, 8:00 a.m. to 4:00 p.m. at 613-761-4520 or toll free at 1-877-303-9877.

# The Ottawa Heart Institute Alumni Inc.

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## You Can Make a Difference

The University of Ottawa Alumni ([www.ottawaheartalumni.ca](http://www.ottawaheartalumni.ca)) provide an on-going link between the Heart Institute and its community of patients. Its goals are:

- To inform Alumni members of advancements in the treatment of heart disease, and
- To promote communication between Alumni and the Institute Staff, and
- To assist the Institute in providing service to its patients and former patients.

All patients, former patients, and their relatives and friends are welcome to become members of The Ottawa Heart Institute Alumni.

## Membership Application

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Province/State: \_\_\_\_\_

Postal/Zip Code: \_\_\_\_\_

Country: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone (H): \_\_\_\_\_

Telephone (W): \_\_\_\_\_

Language of Correspondence: English or French (please circle choice)

Remittance:	Membership Fee	\$	15.00
	I would also like to make a donation now	\$	_____
	<b>Total</b>	\$	_____

Please remit to: THE OTTAWA HEART INSTITUTE ALUMNI INC.  
40 Ruskin Street  
Ottawa, Ontario K1Y 4W7  
Canada

Signature: \_\_\_\_\_

Tax receipts will be issued for all donations. Please note that while donations are tax deductible, the \$15.00 membership fee is not tax deductible. Membership fees are the only funds that the Alumni use to cover the costs of operations and administration. All donated funds are used exclusively to purchase equipment and fund other activities that contribute directly to patient care and comfort in the Heart Institute.

