

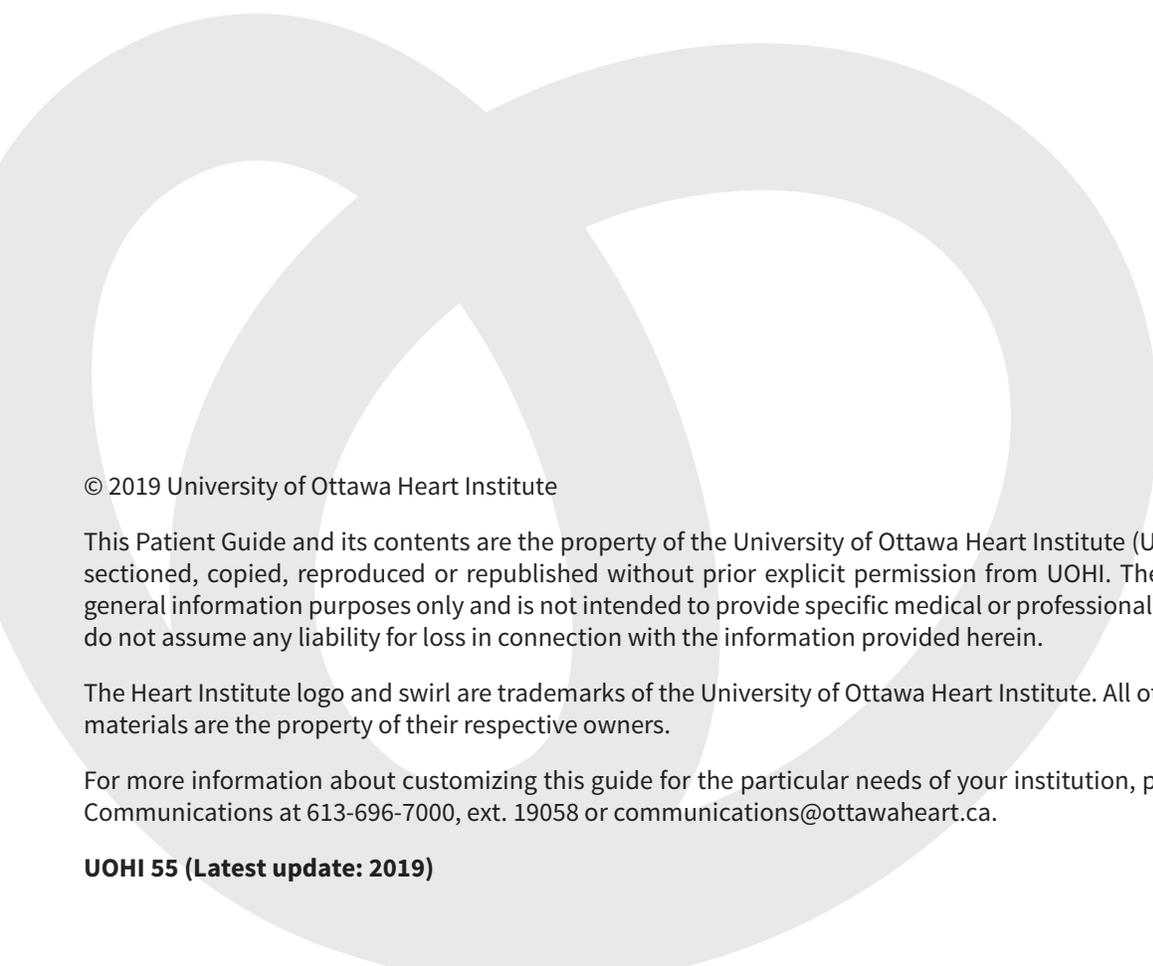


UNIVERSITY OF OTTAWA  
HEART INSTITUTE  
INSTITUT DE CARDIOLOGIE  
DE L'UNIVERSITÉ D'OTTAWA

# Coronary Artery Disease and Recovery After a Heart Attack



A GUIDE FOR PATIENTS AND FAMILIES



© 2019 University of Ottawa Heart Institute

This Patient Guide and its contents are the property of the University of Ottawa Heart Institute (UOHI). They may not be modified, sectioned, copied, reproduced or republished without prior explicit permission from UOHI. The content has been prepared for general information purposes only and is not intended to provide specific medical or professional advice. The authors of this Guide do not assume any liability for loss in connection with the information provided herein.

The Heart Institute logo and swirl are trademarks of the University of Ottawa Heart Institute. All other trademarks and copyrighted materials are the property of their respective owners.

For more information about customizing this guide for the particular needs of your institution, please contact the Department of Communications at 613-696-7000, ext. 19058 or [communications@ottawaheart.ca](mailto:communications@ottawaheart.ca).

**UOHI 55 (Latest update: 2019)**

# PREPARING FOR DISCHARGE

## BEFORE LEAVING, PLEASE MAKE SURE YOU HAVE:

- Attended the Coronary Artery Disease/Recovery from Heart Attack Discharge Class. Please ask your nurse for details.
- Reviewed this Guide with your family/significant other. You can view the video that accompanies this Guide with additional information at the following link: [www.ottawaheart.ca/coronary-artery-disease-patient-guide](http://www.ottawaheart.ca/coronary-artery-disease-patient-guide)
- After Visit Summary: This is completed by your doctor and has information related to your diagnosis and treatment as well as all medications and follow up plans.
- Ensure you pick up your medications on the way home after discharge
- The GAP Tool: This is completed by your nurse. It outlines your medications, risk factors, and follow-up appointments. You will be given the white copy.
- 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.
- You should see your Family Doctor within 2 weeks of your discharge
- If you are new to diabetes or have established diabetes and are not being followed by an Endocrinologist, please call 613- 696-7059 for an appointment at the University of Ottawa Heart Institute(UOHI) Diabetes Clinic for post discharge follow up.
- Please review Appendix 3 “We’ll be keeping in Touch” for information regarding calls at home from the Heart Institute after your discharge.



### **IMPORTANT**

**Nursing Coordinator: 613-696-7000,  
press 0 and ask for the Nursing Coordinator**

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.

# PLEASE BRING THIS BOOKLET WITH YOU TO THE HEART INSTITUTE

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

## PLEASE COMPLETE THE FOLLOWING INFORMATION

**Contact Person**  
*(relative, friend)*

Name \_\_\_\_\_

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

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

**Family Doctor**

Name \_\_\_\_\_

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

**Pharmacy**

Name \_\_\_\_\_

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

**Cardiologist**

Name \_\_\_\_\_

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

**Other**  
*(Specify)*

Name \_\_\_\_\_

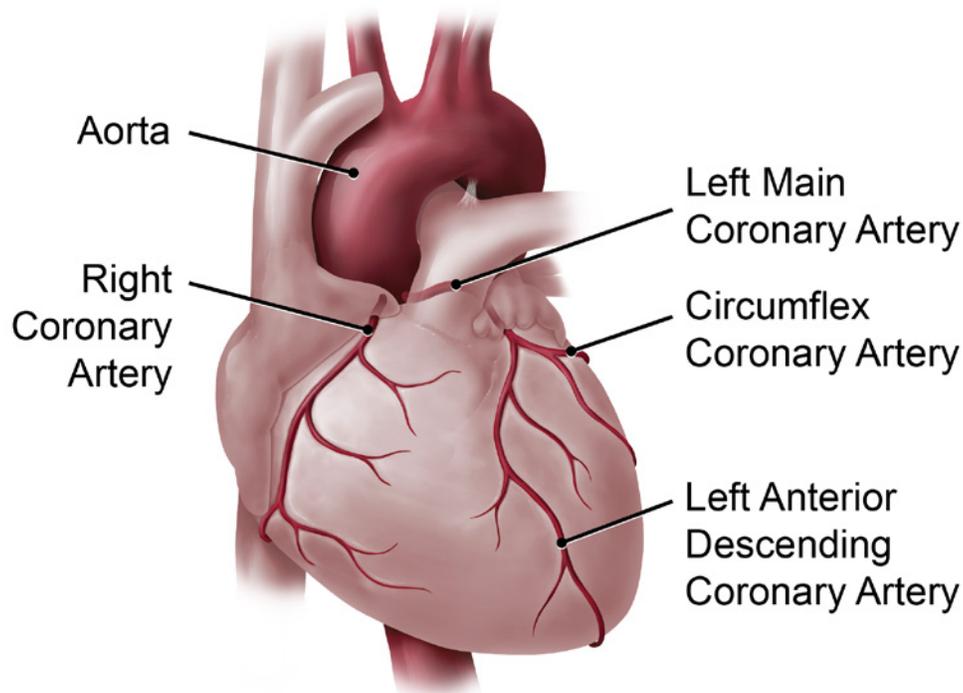
Phone Number \_\_\_\_\_

# TABLE OF CONTENTS

- About Heart Disease ..... 6**
  - Heart Anatomy ..... 6
  - Heart Disease ..... 7
  - Tests..... 9
  - Risk Factors..... 16
  
- Heart Healthy Living.....24**
  - Heart Healthy Eating ..... 24
  - What are the key principles of obesity management? ..... 31
  - Stress, Depression and Anxiety..... 33
  - Emotions Associated with Heart Disease ..... 36
  - Sexual Health and Heart Disease ..... 39
  
- Recovery .....41**
  - Going Home – A New Beginning ..... 41
  - The Healing Process ..... 43
  - For Family and Caregivers ..... 44
  - Physical Activity ..... 45
  - Medications..... 53
  - Participate in a Cardiac Rehabilitation Program ..... 64
  
- Appendices.....70**
  - Appendix 1 – Where to Go for More Information..... 70
  - We’ll be keeping in Touch! ..... 73
  - Women’s Heart Health..... 74
  - Heart Institute Patient Alumni ..... 75

# HEART ANATOMY

## 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

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 two 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.

CHEST PAIN	ANGINA	UNSTABLE ANGINA	HEART ATTACK
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

## Causes of Heart Attacks

**Coronary Artery Disease:** The majority of heart attacks are caused by Coronary Artery Disease. In most cases the plaque inside the artery has ruptured, causing a blood clot to form at the site of the rupture. If the clot is large enough it can get stuck in the narrowed artery, stopping blood flow through the artery.

**Coronary Artery Vasospasm:** this type of heart attack occurs when the artery squeezes or spasms and blocks blood flow to part of the heart muscle. Factors that can contribute to this type of heart attack is using drugs such as cocaine and tobacco use.

**Spontaneous Coronary Artery Dissection(SCAD):** this is a rare emergency condition that occurs when a tear forms in one of the blood vessels in the heart. This tear can slow or block blood flow to the heart that can cause heart damage. For more information related to SCAD please go to [www.ottawaheart.ca/heart-condition/spontaneous-coronary-artery-dissection](http://www.ottawaheart.ca/heart-condition/spontaneous-coronary-artery-dissection).

## Takotsubo

Takotsubo Cardiomyopathy(broken heart syndrome) is a condition often caused by an episode of severe stress. It can look and feel just like a heart attack. There is heart weakness but without blocked arteries. The heart strength usually returns to normal.

## 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.

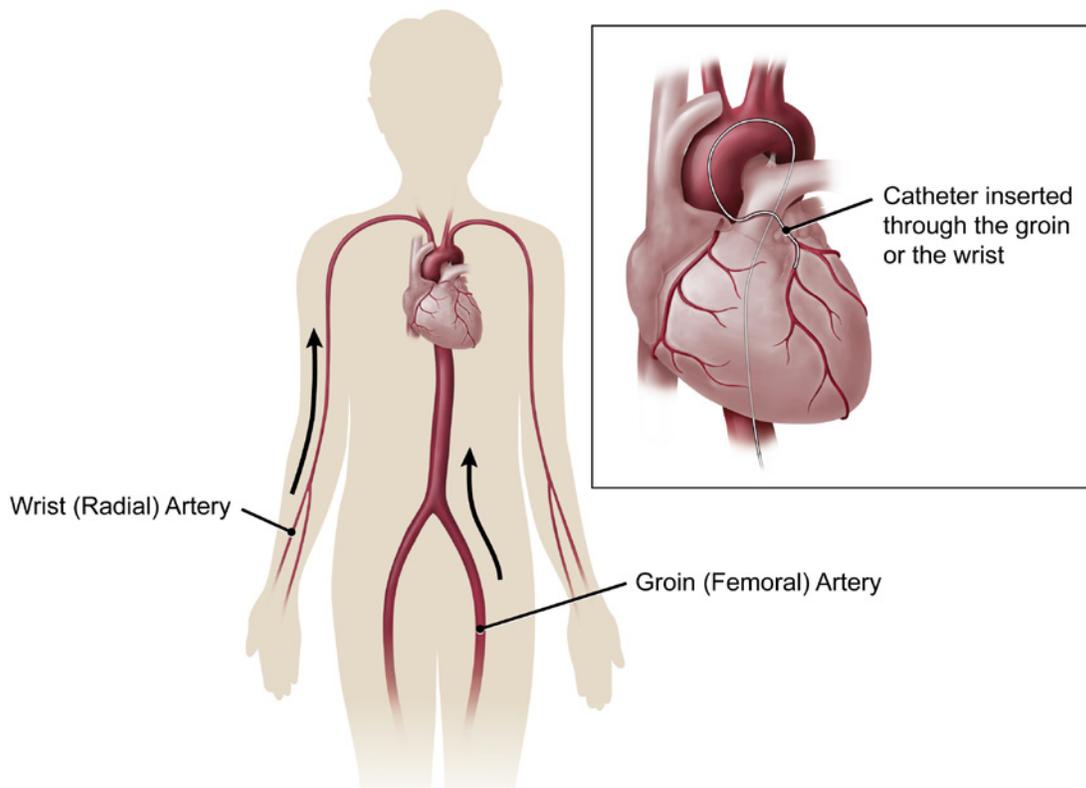
If you have had a heart attack and you are not sure how much damage was done to your heart please speak with your cardiologist.

# TESTS

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 scans 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.

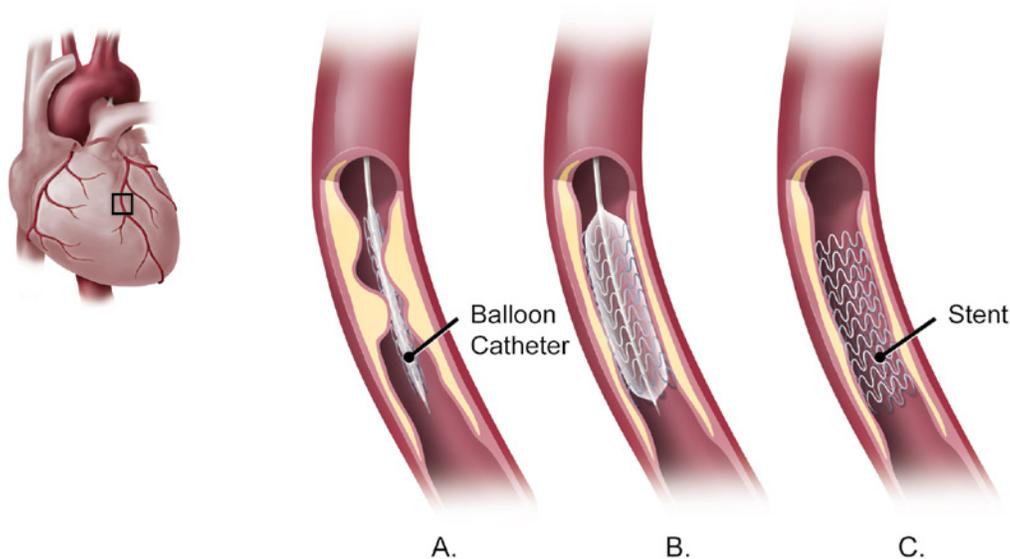


Insertion Sites for Angiogram

## 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 (antiplatelet or anticoagulant)

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 or the urge to empty their bladder as the dye is injected.

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.
- **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. If you are a patient in the Day Unit area, due to space constraints, only one family member or friend should be with you at a time. They may be asked to leave periodically in order for the staff to deliver care and allow the patient to rest.

### 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 go to the bathroom. 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 what action you should take, phone 613-696-7000, press 0 and ask for the Cardiology Nursing 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

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 everyday 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 Modifiable Risk Factors table 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
- Glucose control, prediabetes and diabetes
- Excessive stress levels
- Depression

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

## MODIFIABLE RISK FACTORS FOR HEART DISEASE

RISK FACTOR	TARGET GOALS	INFORMATION SECTIONS
Smoking	No exposure to second hand smoke	<ul style="list-style-type: none"> <li>Smoking</li> </ul>
Obesity Waist Circumference	Obesity management is more than just reducing numbers on a scale—it's about improving overall health and well-being over the long term	<ul style="list-style-type: none"> <li>Heart Healthy Nutrition</li> <li>Weight Management</li> </ul>
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>	<ul style="list-style-type: none"> <li>Heart Healthy Nutrition</li> <li>Blood Pressure</li> <li>Safe Medications</li> </ul>
High Cholesterol	<p>Total Cholesterol: below 4.0 mmol/L</p> <p>HDL Cholesterol: above 1.0 mmol/L</p> <p>LDL Cholesterol: below 2.0mmol/L</p> <p>Non-HDL Cholesterol: below 2.6mmol/L</p> <p>Triglycerides: below 1.7mmol/L</p>	<ul style="list-style-type: none"> <li>Heart Healthy Nutrition</li> <li>Cholesterol</li> </ul>
Physical Inactivity	Aim for 30 to 60 minutes of moderate exercise (example: brisk walking) on most days of the week	<ul style="list-style-type: none"> <li>Healthy Physical Activity</li> </ul>
If you have Diabetes	<p>Fasting blood glucose and before meals: between 4.0 and 7.0 mmol/L</p> <p>A1C: 7% or less</p>	<ul style="list-style-type: none"> <li>Heart Healthy Nutrition</li> <li>Diabetes</li> </ul>
If you have Prediabetes	<p>Fasting blood glucose and before meals: 4.0 and 6.0 mmol/L</p> <p>A1C: less than 6.0%</p>	
Stressed	Manage stress	<ul style="list-style-type: none"> <li>Stress</li> </ul>
Depressed	Manage depression	<ul style="list-style-type: none"> <li>Depression</li> </ul>

# 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 greatly 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 ([www.ottawaheart.ca/clinic/quit-smoking-program](http://www.ottawaheart.ca/clinic/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 613-696-7069. 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

- Canadian Cancer Society Smokers Helpline: [www.smokershelpline.ca](http://www.smokershelpline.ca)
- MyQuit: [myquit.ca](http://myquit.ca), 1-877-376-1701

# 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:

- Aim to make healthier food choices
- Reduce intake of foods higher in sodium
- 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](http://www.hypertension.ca)
- Healthy Ontario: [www.eatrightontario.ca](http://www.eatrightontario.ca)

# 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.
- Making healthier food choices can help 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
- Aim to make healthier food choices
- If you smoke, stop (see Smoking)
- Be active every day and follow your Physical Activity Plan
- Attend a nutrition workshop (see More Information about Heart Health Nutrition)
- Take your cholesterol medications as prescribed by your doctor

### **MORE INFORMATION ABOUT CHOLESTEROL**

#### **Web Sites:**

- Unlock Food: [unlockfood.ca](http://unlockfood.ca)

## If You Have Prediabetes or Diabetes

### HOW GLUCOSE AFFECTS YOUR HEART

Type 2 diabetes is a progressive disease. Up to 10 years before diagnosis, insulin resistance occurs causing blood glucose levels to rise particularly after meals (Prediabetes). This can lead to insulin deficiency. Insulin is a hormone that unlocks our body's cell doors so that glucose can be taken up as fuel. These abnormalities lead to an inflammatory response in the vessel wall which favour growth of the atherosclerotic plaque and may cause instability and plaque rupture.

### KEEPING YOUR BLOOD GLUCOSE LEVELS HEALTHY

- Take your medications as prescribed
- Learn about managing glucose by attending a diabetes education program (see More Information below)
- Monitor and keep track of your blood glucose
  - Target: blood glucose before meals between 4.0 and 7.0 mmol/L
  - Target: blood glucose two hours after meals between 5.0 and 10.0 mmol/L
- Aim to make healthier food choices
- Be active every day and follow your Physical Activity Plan
- Visit to your family doctor or diabetes specialist regularly

### ADDITIONAL MEAL PLANNING TIPS

- Eat regular meals. Aim to eat every four to six hours. Include a healthy snack if meals are more than four to six 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.
- More information in the *Heart Healthy Eating* section, page 24

## **MORE INFORMATION ABOUT GLUCOSE MANAGEMENT**

It's natural to have questions about what food to eat. A registered dietitian can help you make healthier food choices. 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 prediabetes and 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 prediabetes
- 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
- Online self referral can be accessed with this link <https://diabetesottawa.ca/people-living-with-diabetes/self-referral-form> or call 613-238-3722

### **Diabetes Education Programs (Outside Ottawa)**

- To locate a diabetes education program near you, see Diabetes Canada at 1-800-BANTING (226-8464) or at [info@diabetes.ca](mailto:info@diabetes.ca)

### **Books**

- *The Complete Diabetes Guide for Type 2 Diabetes*, Karen Graham RD CDE 2013

### **Web Sites**

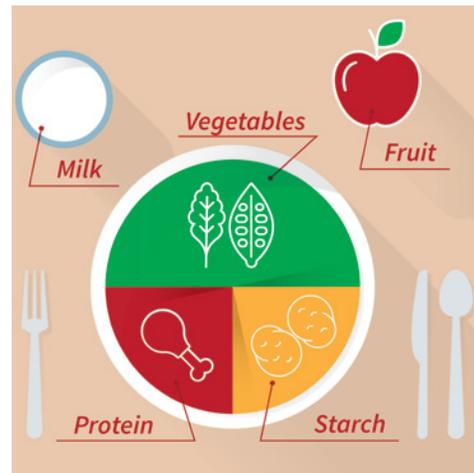
- Champlain Diabetes Services: [www.champlaindrcc.ca](http://www.champlaindrcc.ca)
- Diabetes Canada: [www.diabetes.ca](http://www.diabetes.ca), 1-800-BANTING (226-8464)

# HEART HEALTHY EATING

## 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 glucose levels if you have diabetes
- Your risk for another event



## TOP 10 TIPS FOR HEALTHY EATING

Making healthy food choices doesn't have to be overwhelming. These tips will get you on your way.

- 1. Cook at home more often.** Cooking at home makes it easier to avoid processed foods. It can be as simple as scrambled eggs, whole grain toast, tomato and cucumber slices.
- 2. How you eat is as important as what you eat.** Enjoy mealtimes and the food you eat! Don't multitask. Avoid distractions like your computer or TV while you eat. Sit down and enjoy a meal at the table. If you live with others, make family dinner a priority.
- 3. Listen to your body.** Eat when you're hungry and stop when you feel satisfied.
- 4. Eat at regular times.** Eat breakfast within 1 to 2 hours after waking up. Don't wait too long between your meals. It's harder to make healthy choices when you're hungry.
- 5. Plan healthy snacks.** Try whole grain crackers and peanut butter or hummus, a piece of fruit and a few unsalted nuts, or frozen berries and plain yogurt.
- 6. Eat a variety of vegetables and fruit at every meal.** Enjoy brightly coloured whole vegetables and fruit. Fresh or frozen, try them in different ways—raw, roasted, or sautéed.
- 7. Eat whole grains more often.** Switch to brown rice, whole wheat pasta, dark rye bread or oatmeal. Try something new in your soup, salad or casserole like quinoa, bulgur or barley.
- 8. Eat fish at least twice a week.** Trout, salmon, tuna and sardines are some tasty options. Try fresh frozen or canned.
- 9. Include legumes like beans, chickpeas, lentils, nuts and seeds more often.** Add them to salads, soups and grain dishes such as rice, quinoa or couscous. Legumes can replace meat in your meals. Try a vegetarian chili.
- 10. Don't be afraid of fat.** You need fat for good health and it adds flavour to your cooking. Use plant-based fats such as olive or canola oil.

## COOK AT HOME MORE OFTEN

### What is a home cooked meal?

- Meals cooked at home should include at least 3 food groups (Vegetables and fruit, Grain Products, Milk and alternatives, Meat and alternates.)
- Meals cooked at home don't need to be fancy or time consuming.
- Meals can be as simple as a peanut butter and banana sandwich and a glass of milk.
- Use whole, unprocessed foods.

### Why should I cook at home?

- Cooking at home gives you more control over what goes into your food.
- Cooking at home is cheaper than eating pre-made meals or at restaurants.
- Food cooked at home is lower in sodium (salt) fat and sugar.

### Tips to cook more at home

- Cook with your family and friends.
- Try new recipes.
- Cook large batches of soups, stews and casseroles on the weekend to eat during the week or freeze for another day.
- Keep ingredients like canned fish, eggs, frozen vegetables and brown rice in your cupboard for fast easy meals.
- Plan ahead and make a weekly meal plan.

## HOW YOU EAT IS AS IMPORTANT AS WHAT YOU EAT

### How should I eat?

- Sit at the table to eat.
- Don't do other activities while eating.
- Turn off all screens including television, phones, tablets and computers.
- If you live with others take this opportunity to connect with friends and family.
- If you live alone set the table nicely and listen to music.

### Why should I eat at the table?

- Eating while doing other things means you pay less attention to what you eat and may end up eating faster and more food.
- By sitting at the table you will enjoy what you are eating. You will also be more aware of how much and what you are eating.
- Eating with others is a great opportunity to connect with friends and family.

### Tips to start eating at the table

- Start by eating at the table once or twice each week.
- If it's too difficult to eat supper together at the table, start with breakfast.
- At work eat lunch away from your desk.

## LISTEN TO YOUR BODY

### Why should I listen to my body?

- There is no one right way to eat.
- Don't diet. Think about making small changes.
- Choose foods which are nourishing and taste good.
- Eating is about more than just nutrients.
- Eating is social and should be enjoyable.

### How do I listen to my body?

- Listen to your body's cues.  
Eat when you feel hungry.
- Stop eating when you feel full.
- Enjoy the food that you are eating.
- Use all your senses when eating.

### Tips to listen to your body

- Turn off all distractions, such as the TV, computer or tablet.
- Don't rush. Eat slowly and taste the food you are eating.
- Pause during and after your meal to ask yourself how full you are.

## EAT AT REGULAR TIMES

### What are regular meals?

- Eat breakfast within one to two hours after waking up.
- Aim to eat every 4 to 6 hours after breakfast.
- Try not to skip meals.
- If you know it will be longer than 4 to 6 hours between meals plan a snack.

### Why should I eat regular meals?

- Skipping meals leaves you feeling extra hungry. By the time you get to the next meal you might eat too much.
- When you are very hungry it's hard to reach for healthy foods and to eat slowly.

### Tips to eat regular meals

- Start by including breakfast on a daily basis, if you have never eaten breakfast, start by aiming to eat it one or two days/week.
- Set an alarm to remind yourself to eat.
- At work book an appointment in your calendar to avoid interruption.
- Plan your meals in advance; they can be simple.

## PLAN HEALTHY SNACKS

### What is a healthy snack?

- A healthy snack should include at least two food groups (Vegetables and fruit, Grain Products, Milk and Alternates, Meat and Alternates.)
- Keep your serving sizes small.
- See snack handout for easy snack ideas to have on hand.

### Why should I plan healthy snacks?

- Healthy snacking can help you feel full between meals.
- Healthy snacking can help you to keep your energy level up.
- Snack when you are hungry, not because you are bored or stressed.
- Snacking can make it easier to eat enough vegetables and fruits.

### Tips for healthy snacking

- Plan snacks ahead of time.
- Don't snack out of the container, portion it into a bowl.
- Don't eat while driving.
- Don't eat in front of the TV, while reading, while using your phone, computer or tablet.

## EAT A VARIETY OF VEGETABLES AND FRUIT AT EVERY MEAL

### Why should I eat more?

- Eating 7 servings of vegetables and fruit each day may help to reduce your risk of developing heart disease, diabetes, cancer and stroke.
- Eating enough vegetables and fruit can help reduce cholesterol and blood pressure.

### What is a serving of vegetables and fruit?

- A serving of most raw or cooked vegetables is ½ cup.
- A serving of most fruit is ½ cup or 1 small piece of fruit (size of a tennis ball).
- Choose whole vegetables and fruit more often instead of juice.

### Tips to include more vegetables and fruit

- Eat a vegetable or fruit at all meals.
- Have an apple, orange, banana, kiwi or melon for a snack.
- Keep raw, cut up vegetables in the fridge for snacking.
- Move your vegetables and fruit out of the crisper and onto a higher shelf
- Use fresh or frozen vegetables and fruit more often. If you buy canned make sure to look for No Added Salt canned vegetables.
- Roast vegetables and eat them leftover all week.

## EAT WHOLE GRAINS MORE OFTEN

### What are whole grains?

- Whole grains include the entire seed of the plant.
- Whole grains are higher in fibre, vitamins and minerals.
- They include oatmeal, bulgur, brown or wild rice, barley, quinoa and popcorn.

### Why should I eat more?

- Eating whole grains may help to reduce your risk of heart disease, diabetes, cancer and stroke.
- Oatmeal, barley and psyllium are high in soluble fibre which helps to reduce LDL (lousy) cholesterol.

### Tips to include more whole grains

- Use brown or wild rice instead of white rice.
- Have oatmeal for breakfast or snack a few times each week.
- Add quinoa or barley to salads.
- Use dark rye bread or whole grain bread instead of white bread.
- Use whole grain pasta instead of white (or try half and half).

## EAT FISH AT LEAST TWICE A WEEK

### What fish should I eat?

- Choose fatty fish more often.
- Try salmon, mackerel, pickerel, sardines or trout.
- Aim to eat fish at least twice each week.
- Seafood like oysters, mussels, shrimp, and lobster are also good choices.

### Why should I eat fish?

- Eating fish can help to lower your risk of having more heart problems.
- Fatty fish are high in omega-3 fats which may help to reduce your risk of heart disease.
- Fish is a good source of protein.

### Tips to eat more fish

- Use fresh, frozen or canned fish.
- Use canned salmon to make a sandwich.
- Add canned fish to salads.
- Bake frozen fish for a quick easy weeknight meal.
- Have sardines on toast or whole grain crackers.
- Add fresh or frozen fish to a curry.

## INCLUDE LEGUMES LIKE BEANS. CHICKPEAS. LENTILS. NUTS AND SEEDS MORE OFTEN

### What are legumes?

- Legumes include most beans like chickpeas, kidney beans, black beans and white beans.
- Nuts and seeds will give you many of the same benefits.
- Nuts and seeds make an excellent snack.

### Why should I eat more?

- Eating nuts, seeds, beans and lentils may help to reduce your risk of developing heart disease, diabetes and other chronic diseases.
- Nuts, seeds, beans and lentils may help to reduce your cholesterol and blood pressure.
- Aim to include them at least 4-5 times/week.

### Tips to include more nuts, seeds, bean and lentils

- Add chickpeas to a main course salad.
- Add kidney beans to chili.
- Eat one vegetarian meal once a week.
- Make bean salad and keep it in the fridge for lunches.
- Eat nuts as a snack.
- Add nuts or seeds to your salad.

## DON'T BE AFRAID OF FAT

### Why is fat important?

- Fats play an important role in your body.
- Fats give you energy, and some fatty acids that our bodies can't make.
- Fats are a part of cell walls, hormones and insulate our bodies
- Fats make food taste good and keep you full.

### Which fats should I eat more often?

- Choose unsaturated fats more often.
- Unsaturated fats come from plant sources including nuts, seeds, avocado.
- When cooking use olive oil, or canola oil, more often.
- Make your own salad dressing at home using olive oil or canola oil.
- Eat nuts and seeds as a snack.

### Which fats should I eat less often?

- Trans fats are found mainly in processed foods and cooking more at home will help you to avoid them.
- Choose saturated fats less often. Saturated fats come from animal based products such as red meat and dairy.
- Limit your intake of red meat to once or twice/week.
- Choose lower fat dairy more often.

## A WORD ABOUT ALCOHOL

Limit alcohol to three servings a day (maximum of 15 servings a week) for men and two servings a day (maximum 10 servings a week) for women.

One serving is:

- 140 ml (5 oz) wine or
- 355 ml (12 oz) beer or
- 45 ml (1.5 oz) liquor

## Heart Healthy Eating Resources

### NUTRITION WORKSHOPS:

The dietitian at the University of Ottawa Heart Institute offers a series of interactive workshop series

- The workshops can be attended by patients, families, and members of the public who are interested in learning about heart healthy eating.
- Workshops are 60 minutes in length and daytime and evening options are available.
- The workshops are free of charge.
- Pick up your Workshops Schedule at the Heart Institute or check our Calendar at: [www.ottawaheart.ca](http://www.ottawaheart.ca) for dates and times.

**Nutrition 101:** Learn how to read food labels and get the facts on fat, cholesterol, fibre and salt.

**Nutrition 201:** Learn about trends in nutrition including super foods, supplements and the Mediterranean diet

**Rediscover Eating:** A five week program to help you rethink your relationship with food.

### WEBSITES:

- **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)
- **Diabetes Canada:** [www.diabetes.ca](http://www.diabetes.ca)
- **American Heart Association:** [www.americanheart.org](http://www.americanheart.org)
- **Unlock Food:** [unlockfood.ca](http://unlockfood.ca)
- **Obesity Canada:** [obesitycanada.ca](http://obesitycanada.ca)
- **Ottawa Public Health:** [www.ottawa.ca](http://www.ottawa.ca)

### COOKBOOKS

- **Yum and Yummer:** Greta Podleski, 2017
- **Hold the Hidden Salt:** Tilley, Maureen 2011
- **Nourish:** Whole food recipes featuring seeds, nuts, and beans: Nettie Cronish, Cara Rosenbloom, 2016
- **Dietitians of Canada! 275 Recipes:** Weisman, Mary Sue, 2012
- **15 Minute Meals:** Oliver, Jamie 2016

# WHAT ARE THE KEY PRINCIPLES OF OBESITY MANAGEMENT?

*Reproduced with permission from the Canadian Obesity Network (CON)*

**1. Obesity is a chronic condition that requires long-term management.**

Managing excess body weight (obesity) is similar to managing high blood pressure or diabetes—left unmanaged, these conditions get worse and when treatments stop, the problem comes back. This is why weight management strategies have to be realistic and sustainable. Short-term ‘quick-fix’ solutions are not sustainable, which is why weight usually comes back.

**2. Obesity management is more than just reducing numbers on a scale—it’s about improving overall health and well-being over the long term.**

A common belief about obesity is that there is a simple cure (i.e. lose weight).

The problem with this notion is that it does not account for the fact that obesity is a chronic disease. The overall goal of obesity management is the improvement of your health and well-being. The first step is to prevent further weight gain. In addition, even a modest reduction in body weight can lead to significant improvements in health. It’s important to look past the scale, and focus on the big picture of why a change is being made.

**3. An important part of obesity management is identifying and addressing root causes for weight gain and removing roadblocks.**

In the same way that each and every person is different and unique, the reasons behind each individual’s weight gain can be different. Managing obesity is even more difficult when you do not understand the root cause of your weight gain and your road blocks to weight management. Identifying and removing what is holding you back is key to making positive, successful health improvements.

**4. Every individual defines success differently.**

Understanding the reasons why you decided to address your obesity can help you to assess what is important to you and how you will measure success within your long-term plan.

Success may mean having more energy to be active with your friends and family, improving your self-esteem, preventing further weight gain or improving overall health. Whatever your ideal “success” may be, use it to help guide and motivate you.

Take some time to reflect ~ If you or a loved one are thinking about taking steps towards managing obesity, what are the reasons for making this change, and how will you define “success”?

**5. Work towards your “best” weight.**

When setting expectations for a weight management plan, it is important to set realistic and achievable goals that work within a lifestyle that you still enjoy. You shouldn’t stress about counting calories, setting a timeline for specific weight loss, or exercising excessively. Instead, focus on making healthy and enjoyable lifestyle changes that will improve your overall quality of life! Whatever weight you achieve through these changes is considered your “best” weight.

Using the resources offered by CON is a great first step in helping you achieve your goals!

Building an enjoyable, healthy lifestyle ~ If you do not like the way you are living when you are managing your weight, it will be much more difficult to keep it off and to keep yourself from going back to the way you were living before you lost it. Work towards building a healthy lifestyle that you truly enjoy!

## My Personal Health Goal

What do I want to do:

*(Example: Eat breakfast)*

---

---

---

---

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: \_\_\_\_\_

# STRESS, DEPRESSION AND ANXIETY

## 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”
- Insulin resistance can occur causing blood glucose levels to rise outside of the normal range
- 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)
- 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).

## 10 TIPS FOR MANAGING STRESS

- 1. Exercise regularly.** Exercising at least three to five times a week helps to relax and condition your body and mind.
- 2. Breathe deeply.** Take a few deep breaths. Notice how it changes how you feel.
- 3. Be aware of quick fixes.** Try to avoid the tendency to consume more alcohol and non-prescribed drugs in stressful times.
- 4. Notice your thoughts.** Reflect on how you think about what's causing you stress. A trusted person or a counsellor can help you see things in a new way.
- 5. Relax the muscles in your body.** Stress can make your body tense. Try to relax the areas where you carry the most stress.
- 6. Recognize what you can't control.** Reflect on what you can control, and let go of things beyond your control.
- 7. Take a break.** Give yourself permission to nap, listen to music, read, meditate or just have some quiet time.
- 8. Make time for things you enjoy.** Set time aside for hobbies or learning something new.
- 9. Avoid exposure to stress.** If possible, avoid unnecessary triggers for stress, such as distressing TV shows.
- 10. Evaluate your commitments.** Consider how you spend your time and letting go of some commitments.

## **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 six 90-minute sessions in a group format and each of the sessions covers different topics including:

- Deep breathing and mindfulness stress management techniques
  - Effective communication strategies to reduce stress
  - Improving our interpersonal communication
  - Uncovering and changing negative thoughts
  - Using humour as a coping strategy
  - Ways to improve our sleep
- Location: University of Ottawa Heart Institute, 40 Ruskin St., Ottawa
  - To Register: Call 613-696-7399
  - Material Cost: \$25.00
  - Family members can access the Stress Management Program through the Heart Health Education Centre after a cardiac risk assessment

### **Stress and the Heart**

This is a one hour workshop offered to patients and family members through the Cardiac Rehabilitation program. During this session we discuss coping strategies and the physical, psychological and emotional impact of stress on the heart.

There is no cost to attend. See workshop schedule in the Cardiac Rehabilitation program or on-line at <https://www.ottawaheart.ca/document/calendar-workshops>  
You can also call the Cardiac Rehabilitation program at 613-696-7070.

### **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

# EMOTIONS ASSOCIATED WITH HEART DISEASE

Heart patients may experience a variety of emotions after being diagnosed or treated for heart disease. For example, over two-thirds of patients may experience anxiety, depression, confusion, memory problems, irritability and/or anger in the weeks or months after bypass surgery. Emotional reactions are influenced by a number of factors (e.g., work or family stress, type of heart problem or treatment, medication side effects, poor sleep, one's emotional health before being hospitalized). Understanding one's health condition and treatment, participating in cardiac rehabilitation, engaging in exercise and speaking about one's experience with peers, significant others, and/or health professionals help recovery. Please call the UOHI Cardiac Rehabilitation Centre (613-696-7070) for information on programs that might help (e.g. Stress Management, Managing Emotions, Women at Heart, Yoga, and 'Sleep to Your Heart's Content' programs).

The good news is that, for most patients, these overwhelming emotions resolve over time. For some, however, emotions such as depression and anxiety persist.

## Depression

Depression is an understandable and common reaction among 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, nurse or mental health professional.

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 as prescribed. They find it difficult to find the drive or energy to make healthy lifestyle changes.

## 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 where 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 DEPRESSED OR ANXIOUS

- Talk to your doctor or a mental health professional (social worker, psychologist, or psychiatrist) about proven treatments for depression and/or anxiety
- Participating in Cardiac Rehabilitation Program has proven benefits for both physical and mental health.
- Check out The Beat for the Top 10 sleep tips; getting a good night's sleep helps you manage your emotions.

## 10 TIPS FOR EMOTIONAL HEALTH

- 1. Practice deep breathing.** Deep breathing relaxes your body and lowers your blood pressure and heart rate.
- 2. Name your emotions.** Naming your emotions helps you be more aware and decide how you will react.
- 3. Try not to judge your emotions.** Judging our emotions can make them seem worse.
- 4. Know your emotional triggers.** Knowing what makes you angry, sad or anxious will help you be better prepared.
- 5. Be more mindful.** Be aware of what is around you and try to notice your thoughts and feelings.
- 6. Move your body.** Physical activity decreases anxiety and improves mood and self-esteem.
- 7. Talk to someone you care about.** Humans are social! Make time to talk and connect with others.
- 8. Sleep well.** Sleep is important for your mind and body.
- 9. Stop “shoulds” in their tracks.** Don't put too much pressure on yourself about what you “should” or “shouldn't” be doing.
- 10. Do the things that make you happy.** Identify the things that make you happy and make time for them.

## MORE INFORMATION ABOUT DEPRESSION AND ANXIETY

### 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)
- *The Anxiety and Phobia Workbook (4th Ed.)*, Bourne, E. (2005)
- *The Anti-anxiety Workbook*, Antony & Norton (2009)

### 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

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.

## 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 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 your 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 your 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

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. \_\_\_\_\_

# THE HEALING PROCESS

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 in the Physical Activity section.

## SOCIAL WORK IN THE HOSPITAL SETTING

You can ask to speak to a social worker while you are in the hospital or if you are taking part in the Cardiac Rehabilitation program. Social workers can assist patients and their families with a number of concerns:

- Applying for financial assistance
- Assessing resources to ensure that you get your medication in a timely way
- Assistance in ensuring appropriate discharge and return to the community
- Providing emotional support and counselling to alleviate depression, anxiety and adjustment to your health condition
- Assisting with communication within the family
- Providing emotional support and access to resources to yourself and your family
- Advocacy and Liaison services with other health care professionals and community resources

If you would like to speak to a social worker, let a member of your health care team know and a referral will be made.

# FOR FAMILY AND CAREGIVERS

## 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.
- Don't be afraid of asking for help with meals and snacks
- Try to get at least eight hours of sleep every night, or whatever you require to feel rested
- 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.

# PHYSICAL ACTIVITY

Regular physical activity will:

- Improve the function of your heart and lungs
- Improve your HDL (good) cholesterol and triglycerides
- Lower your blood pressure
- Improve your blood glucose levels
- 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

The instructions provided below on how to start a walking program are important to follow for anyone who has had a heart attack or who did not have a regular exercise program before their cardiac event.

### 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 up straight close to a solid surface on which you can use your hands for balance.
- Step back with one foot, 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 30 to 60 seconds. Repeat with the other leg.

If the above program feels too difficult for you, you can use interval training. This is a type of exercise where you alternate harder exercise with easier exercise for short periods of time. For example, each interval could include:

- 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 walk 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, without being short of breath. If you are too short of breath to speak clearly, you should slow down.

### 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 and fatigue during your activity, including your breathing. There is no right or wrong answer but if you feel you are above level 15 (or “Hard/heavy” exertion, then you should slow your pace. If you feel you are exercising at a level below “light” (level 11), then you may try to increase your effort a little bit.

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.

Rating of Perceived Exertion (RPE) Scale	
6	Nothing at all
7-8	Extremely light
9	Very light
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard (heavy)
16	
17	Very hard
18	
19	Extremely hard
20	Maximal exertion

**Physical Activity Log: Use to track your progress**

UNUSUAL EVENTS e.g., chest pain, dizziness or other														
RATE OF PERCEIVED EXERTION (RPE)														
MINUTES														
ACTIVITY														
DATE														



## Rest and Activity at Home

It may be hard to understand why we recommend such a slow return to your normal activities, especially if you were very physically active before your heart attack and are relatively young.

It is important to understand that your heart is a muscle and at any age or fitness level, your heart and your body needs time to recover. This means taking it slow, and gradually increasing your activities back to normal. After recovery, most of our patients are able to do all the activities they enjoyed before their heart attack. For higher intensity activities, such as playing hockey, starting back to the gym to lift weights or running, you may benefit from some guidance on how to progress gradually. We recommend you to do this with the assistance of a Cardiac Rehabilitation Program where it can be done safely under the supervision of a Physiotherapist or exercise specialist.

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

- Try to get eight hours of sleep every night during your recovery period.
- 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:

### WEEK 1

- Walking slowly
- Writing, drawing, painting
- Reading
- Watching TV, using computer
- Knitting , needlework
- Meditation
- Stretching exercises
- Climbing stairs slowly
- Short outings
- Lifting no more than 5 to 10 pounds (when necessary, not for strength training)

### WEEKS 2 TO 3

- Light laundry
- Easy sweeping, dusting
- Washing dishes, preparing light meals
- Walking the dog

### WEEKS 3 TO 6

- Walking at a moderate pace
- 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, not for strength training)
- Bowling
- Golfing with power cart
- Shuffleboard, croquet, billiards
- Playing a musical instrument
- Gentle beginner's level yoga (no inversions)

A Cardiac Rehabilitation program will help you determine which activities are best for you at this stage. See page 64 for more information about Cardiac Rehabilitation.

# 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 and diabetes. If your medication is not listed or you want more detailed information about your specific medications, ask your pharmacist.

## Medications for treating heart disease

TYPE OF MEDICINE	NAMES OF MEDICATION	HOW MEDICATION WORKS	POTENTIAL SIDE EFFECTS
Antiplatelets	ASA (Aspirin®, ECASA) Clopidogrel (Plavix®) Prasugrel (Effient®) Ticagrelor (Brilinta®)	<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> <li>• Shortness of breath(Ticagrelor)</li> </ul>
<p><b>NEVER STOP OR CHANGE YOUR ANTIPLATELET MEDICATIONS UNLESS YOU HAVE BEEN INSTRUCTED TO DO SO BY YOUR CARDIOLOGIST</b></p>			

TYPE OF MEDICINE	NAMES OF MEDICATION	HOW MEDICATION WORKS	POTENTIAL SIDE EFFECTS
ACE Inhibitors (Angiotensin Converting Enzyme Inhibitors)	Benazepril (Lotensin®) Captopril (Capoten®) Cilazapril (Inhibace®) Enalapril (Vasotec®) Fosinopril (Monopril®) Lisinopril (Zestril®, Prinivil®) Perindopril (Coversyl®) Quinapril (Accupril®) Ramipril (Altace®) Trandolapril (Mavik®)	<ul style="list-style-type: none"> <li>• Widens 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) – Call 911</li> </ul>
Beta Blockers	Acebutolol (Rhotral®, Sectral®) Atenolol (Tenormin®) Bisoprolol (Monocor®) Carvedilol (Coreg®) Labetalol (Trandate®) Metoprolol (Betaloc®, Lopressor®) Nadolol (Corgard®) Pindolol (Visken®) Propranolol (Inderal®) Timolol (Blocadren®)	<ul style="list-style-type: none"> <li>• Lowers blood pressure and heart rate</li> <li>• Helps prevent angina</li> <li>• Improves heart function</li> <li>• Slows down irregular heart rhythms</li> <li>• Decreases the risk of future heart attacks</li> </ul>	<ul style="list-style-type: none"> <li>• Fatigue/tiredness</li> <li>• Dizziness, lightheadedness</li> <li>• Depression</li> <li>• Wheezing</li> </ul>

TYPE OF MEDICINE	NAMES OF MEDICATION	HOW MEDICATION WORKS	POTENTIAL SIDE EFFECTS
Cholesterol Lowering Medications	<b>Statins</b> Atorvastatin (Lipitor®) Lovastatin (Mevacor®) Pravastatin (Pravachol®) Rosuvastatin (Crestor®) Simvastatin (Zocor®)	<ul style="list-style-type: none"> <li>Lowers LDL (“bad”) cholesterol</li> <li>Decreases the risk of future heart attacks</li> </ul>	<ul style="list-style-type: none"> <li>Constipation, gas</li> <li>Indigestion</li> <li>Mild decrease in liver function</li> <li>Muscle pain – Notify doctor</li> </ul>
	<b>Cholesterol Absorption Inhibitors</b> Ezetimibe (Ezetrol®)	<ul style="list-style-type: none"> <li>Usually used with a statin to lower LDL (“bad”) cholesterol</li> </ul>	<ul style="list-style-type: none"> <li>Diarrhea</li> <li>Mild decrease in liver function</li> <li>Muscle pain – Notify doctor</li> </ul>
	<b>PCSK9 Inhibitors</b> Alirocumab (Praluent®) Evolocumab (Repatha®)	<ul style="list-style-type: none"> <li>Usually used with a statin to lower LDL (“bad”) cholesterol</li> </ul>	<ul style="list-style-type: none"> <li>Redness or swelling at the injection site</li> </ul>
	<b>Fibrates</b> Bezafibrate (Bezalip SR®) Fenofibrate (Lipidil EZ®, Lipidil Micro®, Lipidil Supra®) Gemfibrozil (Lopid®)	<ul style="list-style-type: none"> <li>Lowers triglycerides</li> </ul>	<ul style="list-style-type: none"> <li>Rash</li> <li>Stomach upset (nausea, vomiting, diarrhea, gas)</li> <li>Mild decrease in liver function</li> <li>Muscle pain – Notify doctor</li> </ul>
	Niacin (Niaspan®)	<ul style="list-style-type: none"> <li>Increases HDL (“good”) cholesterol</li> <li>Lowers triglycerides</li> </ul>	<ul style="list-style-type: none"> <li>Flushing</li> <li>Mild decrease in liver function</li> </ul>
	<b>Bile Acid Binders</b> Cholestyramine (Questran®) Colestipol (Colestid®)	<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>

TYPE OF MEDICINE	NAMES OF MEDICATION	HOW MEDICATION WORKS	POTENTIAL SIDE EFFECTS
Nitrates	Isosorbide Dinitrate (ISDN, Isordil®) Isosorbide Mononitrate (Imdur®) Nitroglycerin spray (Nitrolingual®) Nitroglycerin patch (NitroDur®, Minitran®, Trinipatch®)	<ul style="list-style-type: none"> <li>• Improves blood flow to the heart by widening 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>
Angiotensin II Receptor Blockers (ARBs)	Candesartan (Atacand®) Irbesartan (Avapro®) Losartan (Cozaar®) Olmesartan (Olmotec®) Telmisartan (Micardis®) Valsartan (Diovan®)	<ul style="list-style-type: none"> <li>• Widens 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>
Neutral Endopeptidase Inhibitor / Angiotensin II Receptor Blocker (ARB)	Sacubitril / Valsartan (Entresto®)	<ul style="list-style-type: none"> <li>• Widens blood vessels &amp; lowers blood pressure</li> <li>• Removes excess water by increasing urine production</li> <li>• Decreases the risk of hospitalization due to heart failure</li> <li>• Alternative to ACE inhibitors</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) – Call 911</li> </ul>

TYPE OF MEDICINE	NAMES OF MEDICATION	HOW MEDICATION WORKS	POTENTIAL SIDE EFFECTS
Calcium Channel Blockers	Amlodipine (Norvasc®) Felodipine (Plendil®, Renedil®) Nifedipine (Adalat XL®) Diltiazem (Cardizem CD®, Tiazac®) Verapamil (Isoptin®)	<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>
Diuretics (Water Pills)	Ethacrynic Acid (Edecrin®) Furosemide (Lasix®) Hydrochlorothiazide (HCTZ, HydroDiuril®) Metolazone (Zaroxolyn®)	<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>
Potassium Supplement	Potassium Chloride (Slow K®, K-Dur®)	<ul style="list-style-type: none"> <li>• Replaces potassium in blood</li> </ul>	<ul style="list-style-type: none"> <li>• Nausea/vomiting</li> </ul>
Anticoagulants	Apixaban (Eliquis®) Dabigatran (Pradaxa®) Edoxaban (Lixiana®) Rivaroxaban (Xarelto®) Warfarin (Coumadin®)	<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>

TYPE OF MEDICINE	NAMES OF MEDICATION	HOW MEDICATION WORKS	POTENTIAL SIDE EFFECTS
Anti-arrhythmics	Amiodarone (Cordarone®)	<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®)		<ul style="list-style-type: none"> <li>Nausea/vomiting</li> <li>Diarrhea</li> </ul>
	Sotalol (Sotacor®)		<ul style="list-style-type: none"> <li>Fatigue/tiredness</li> <li>Dizziness, lightheadedness</li> <li>Depression</li> <li>Wheezing</li> </ul>
Digitalis	Digoxin (Lanoxin®, Toloxin®)	<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>

## Medications for treating diabetes

TYPE OF MEDICINE	NAMES OF MEDICATION	HOW MEDICATION WORKS	POTENTIAL SIDE EFFECTS
Biguanides	Metformin (Glucophage®) Metformin extended release (Glumetza®)	<ul style="list-style-type: none"> <li>Helps reduce release of sugar from the liver</li> <li>Makes cells more responsive to insulin so that they can use sugar more efficiently</li> </ul>	<ul style="list-style-type: none"> <li>Nausea, gas, abdominal pain, diarrhea that may subside</li> </ul>
Sodium-Glucose Cotransporter 2 (SGLT2) Inhibitors	Canagliflozin (Invokana®) Dapagliflozin (Forxiga®) Empagliflozin (Jardiance®)	<ul style="list-style-type: none"> <li>Decreases reabsorption of sugar in the kidneys</li> <li>Promotes sugar loss through the urine</li> <li>Improves cardiovascular health and survival</li> </ul>	<ul style="list-style-type: none"> <li>Bladder infections</li> <li>Vaginal yeast infections</li> <li>Rash / redness to the penis / foreskin</li> <li>Do not take if unable to eat regular meals or drink fluids</li> </ul>
Glucagon-Like Peptide-1 (GLP-1) Receptor Agonist	Albiglutide (Eperzan®) Dulaglutide (Trulicity®) Exenatide (Bydureon®, Byetta®) Liraglutide (Saxenda®, Victoza®) Lixisenatide (Adlyxine®) Semaglutide (Ozempic®)	<ul style="list-style-type: none"> <li>Increases insulin secretion</li> <li>Decreases sugars made by liver</li> <li>Slows stomach emptying</li> <li>Decreases hunger</li> <li>Improves cardiovascular health and survival</li> </ul>	<ul style="list-style-type: none"> <li>Nausea, vomiting, diarrhea</li> <li>Increased heart rate</li> <li>Weight loss</li> <li>Low blood sugar (rare)</li> <li>Pancreatitis (rare)</li> </ul> <p>*Injectible</p>
Dipeptidyl Peptidase 4 (DPP-4) Inhibitors	Alogliptin (Nesina®) Linagliptin (Trajenta®) Saxagliptin (Onglyza®) Sitagliptin (Januvia®)	<ul style="list-style-type: none"> <li>Enhances action of gut hormones that release insulin</li> <li>Decreases sugars made by liver</li> </ul>	<ul style="list-style-type: none"> <li>Runny nose</li> <li>Low blood sugar (rare)</li> <li>Pancreatitis (rare)</li> </ul>

<p>Insulin Secretagogues</p>	<p>Gliclazide (Diamicon<sup>®</sup>, Diamicon MR<sup>®</sup>)</p> <p>Glimepiride (Amaryl<sup>®</sup>)</p> <p>Glipizide (Glucotrol XL<sup>®</sup>)</p> <p>Glyburide (Diabeta<sup>®</sup>)</p> <p>Nateglinide (Starlix<sup>®</sup>)</p> <p>Repaglinide (Gluconorm<sup>®</sup>)</p>	<ul style="list-style-type: none"> <li>Stimulates the pancreas to make more insulin</li> </ul>	<ul style="list-style-type: none"> <li>Can cause low blood sugar if a meal is missed or delayed, or if more activity than usual</li> </ul>
<p>Thiazolidinediones</p>	<p>Pioglitazone (Actos<sup>®</sup>)</p> <p>Rosiglitazone (Avandia<sup>®</sup>)</p>	<ul style="list-style-type: none"> <li>Improves insulin sensitivity</li> </ul>	<ul style="list-style-type: none"> <li>Swelling due to water retention</li> <li>Heart failure</li> </ul>

## Types of Insulin

Please note this list is not all inclusive

TYPE	NAME	ACTION	NOTES
Ultra Fast Acting	Insulin Aspart (Fiasp®)	<ul style="list-style-type: none"> <li>Onset: 5 - 7 min</li> <li>Peak: 0.5 - 0.75 hrs</li> <li>Duration: 3 - 5hrs</li> </ul>	
Very Rapid Acting Analogues (Clear)	Insulin Aspart (Novo Rapid®)	<ul style="list-style-type: none"> <li>Onset: 10 – 15 min</li> <li>Peak: 1 – 1.5 hrs</li> </ul>	<ul style="list-style-type: none"> <li>Meal time insulin to be taken within 15 min of eating</li> <li>May be used in an insulin pump</li> </ul>
	Insulin Glulisine (Apidra®)	<ul style="list-style-type: none"> <li>Duration: 3 – 5 hrs</li> </ul>	
	Insulin Lispro 100 units/mL & 200 units/mL (Humalog®)		
Short Acting (Clear)	Insulin Regular 100 units/mL (Humulin R®, Novolin ge Toronto®)	<ul style="list-style-type: none"> <li>Onset: 30 min</li> <li>Peak: 2 – 3 hrs</li> <li>Duration: 6.5 hrs</li> </ul>	<ul style="list-style-type: none"> <li>Meal time insulin to be taken 30 min before eating</li> </ul>
	Insulin Regular 500 units/mL (Entuzity®)		
Intermediate Acting (Cloudy)	Insulin NPH (Humulin N®, Novolin ge NPH®)	<ul style="list-style-type: none"> <li>Onset: 1 – 3 hrs</li> <li>Peak: 5 – 8 hrs</li> <li>Duration: up to 18 hrs</li> </ul>	<ul style="list-style-type: none"> <li>Used to cover the rise in blood sugar from steroids (e.g. prednisone)</li> </ul>
Extended Long Acting Analogues (Clear)	Insulin Detemir (Levemir®)	<ul style="list-style-type: none"> <li>Onset: 90 min</li> </ul>	<ul style="list-style-type: none"> <li>Should not be mixed with other insulin</li> </ul>
	Insulin Glargine 100 units/mL (Lantus®, Basaglar®)	<ul style="list-style-type: none"> <li>Peak: flat curve</li> </ul>	
	Insulin Glargine 300 units/mL (Toujeo®)	<ul style="list-style-type: none"> <li>Duration: varies from 16 -48 hrs depending on the product</li> </ul>	
Pre Mixed (Cloudy)	Insulin Aspart / Insulin Protamine (Novo Mix 30®)	<ul style="list-style-type: none"> <li>This depends on the mixture.</li> </ul>	<ul style="list-style-type: none"> <li>Should not be mixed with other insulin</li> <li>Taken 15 – 30 min before eating</li> </ul>
	Insulin Lispro / Insulin Protamine (Humalog Mix 25®)	<ul style="list-style-type: none"> <li>A single vial, cartridge or pen contains a fixed ratio of rapid or short acting to intermediate acting insulin</li> </ul>	
	Insulin Regular / Insulin NPH (Humulin 30/70®, Novolin ge 30/70®)		

## 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 Trillium Drug Program for possible assistance:
  - Phone: 1-800-575-5386
  - Web Site: <https://www.ontario.ca/page/get-help-high-prescription-drug-costs>

## 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 1st nitroglycerin tablet/spray
If no relief within five minutes	→	Take 2nd nitroglycerin tablet/spray
If no relief within five minutes	→	Take 3rd nitroglycerin tablet/spray

**IF NO RELIEF AFTER THE 2ND 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

## 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 everyday 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 everyday 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: 613-696-7068

- Two- to three-month program
- Supervised on-site, twice-weekly exercise sessions (one hour/session)
- Medical assessment by cardiac rehabilitation physician
- Nutrition workshops
- Referral to services if needed, 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: 613-696-7068

- 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
- Nutrition workshops
- 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
- Referral to services if needed such as:
  - Nutritional counselling
  - Stress management
  - Smoking cessation
  - Vocational counselling
  - Psychological counselling
  - Social work counselling

## **BRIEF PROGRAM**

Phone: 613-696-7068

- Coronary risk factor assessment
- Nutrition workshops
- Exercise evaluation and tailored home exercise program, no supervised exercise sessions
- Total of 2 or 3 appointments at the Heart Institute
- Follow-up evaluation scheduled after three and twelve months
- Referral to services as needed such as:
  - Nutritional counselling
  - Stress management
  - Smoking cessation
  - Vocational counselling
  - Psychological counselling
  - Social work counseling

## **WOMEN@HEART PROGRAM**

Peer support program led by women with heart disease for women with heart disease

The Women@Heart program aims to provide women with heart disease, in every community, with access to emotional and educational support and a caring environment for better recovery after a cardiac event. Call 613-696-7000 ext. 10412 or visit [www.yourheart.ca](http://www.yourheart.ca)

## FRANCOFORME\* (FRENCH CASE-MANAGED HOME PROGRAM)

\*open to Franco-Ontarians only

Phone: 613-696-7068

- 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
- Nutrition workshops
- 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
- Referral to services if needed such as:
  - Nutritional counseling
  - Stress management
  - Smoking cessation
  - Vocational counselling
  - Psychological counselling
  - Social work counseling

## VIRTUAL CARE PROGRAM

Activating patients to proactively manage their heart health

The Virtual Care Program is an online cardiovascular health management system that provides best practice strategies for the control and management of risk factors for primary and secondary prevention of heart disease. The features of the platform include: assessments and preferences, personal wellness plan, trackers and progress reports, integration with wellness devices and cellular application push messaging, health library and content tagging, reminders, circle of care invitations, online social forums/support groups, and wellness challenges. The platform is designed to raise awareness about an individual's heart health status and motivate them to manage and improve their health and well being. Email [virtualcare@ottawaheart.ca](mailto:virtualcare@ottawaheart.ca) or visit [pwc.ottawaheart.ca/virtualcare](http://pwc.ottawaheart.ca/virtualcare)

## CARDIAC PREHABILITATION

Phone 613-696-7000 extension 19999

\*This program is for patients waiting at home for some types of cardiac surgery.

- Phone assessment by Cardiac Rehabilitation nurse
- Two hour educational workshop to help patients prepare for cardiac surgery
- Led by program nurses, physiotherapists, registered dietitian, diabetes educators, and stress management experts
- Home exercise program provided; no supervised exercise sessions
- Referral to other services as needed

## Tele-Rehab Programs in the Region

- Using the telemedicine system, remote sites connect to a live cardiac rehab class onsite at UOHI
- Patients are referred from their stay at UOHI and receive cardiac rehab programs at their local hospital or health center
- Patients attend 1 hour/2 X week for 8-12 weeks with follow-up evaluation scheduled after three and twelve months completion

### Locations:

- Cornwall: Seaway Valley Community Health Centre  
Phone: 613-936-0306 ext 106
- Winchester: Winchester District Memorial Hospital  
Phone: 613-774-2420 ext 6870
- Almonte: Ottawa Valley Family Health Team  
Phone: 613-256-9370 ext 2065
- Kemptville: Kemptville District Hospital  
Phone: 613-258-6133 ext. 136
- Bourget: Centre de santé communautaire de l'Estrie  
Phone: 613-487-1802
- Alexandria: Glengarry Memorial Hospital  
Phone: 613-525-2222 ext. 4330
- Barry's Bay: St. Francis Memorial Hospital  
Phone: 613-756-3045 ext 256
- Arnprior Family Health Team and Arnprior Regional Health  
Phone: 613-622-5763 ext 109

## Community and Regional Programs

### MONTFORT HOSPITAL CARDIOVASCULAR AND PULMONARY HEALTH SERVICES

Phone: 613-746-4621 ext. 4125 Fax: 613-748-4913

\*open to Ontario residents only

- 8-12 week program
- 2 exercise sessions/week
- Group sessions (8-12 patients)
- Exercise supervised by a physiotherapist or a kinesiologist and a nurse
- Medical assessment
- Bilingual staff



### 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: 819-966-6550 ext. 2330

This one year long program has 5 clinical appointments and covers risk factor assessment, education sessions, medical assessment and referral to dietitian and social worker as needed.

## Exercise after Cardiac Rehabilitation

### HEART WISE EXERCISE

Phone: 613-696-7387, 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.



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 Exercise 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: [heartwise.ottawaheart.ca](http://heartwise.ottawaheart.ca).

# APPENDIX 1 – WHERE TO GO FOR MORE INFORMATION

## Prevention and Wellness Centre

The role of the Prevention & Wellness Centre (PWC) is to provide patients, families, providers, and the public with education, programs and services for the prevention and management of cardiovascular disease risk factors.

The PWC is also home to the Canadian Women’s Heart Health Centre initiative. The Canadian Women’s Heart Health Centre initiatives target prevention and management strategies to improve women’s cardiovascular health in an effort to reduce sex disparities in the identification, treatment and outcomes of cardiovascular disease in women.

**Location:** 2nd Floor of the Heart Institute, H-2342

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

**Phone:** 613-696-7000 x14753 or 1-866-399-4432

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

**Web Site:** [pwc.ottawaheart.ca](http://pwc.ottawaheart.ca)

Our heart health education series can be found online by visiting:  
<http://pwc.ottawaheart.ca/awareness/heart-health-education>

## CardioPrevent® Program

Cardiovascular risk reduction program to empower patients take control of their health

CardioPrevent is a global cardiovascular risk reduction program for individuals who have not suffered a cardiac event but are at an increased risk of developing heart disease due to elevated lifestyle and medical risk factors. Over a 12-month period, patients undergo a full risk factor screening; receive tailored education and programming supported by behavioral-based counseling, follow-ups, and referral to community resources when required. The program includes results and follow-up feedback; goal setting; problem solving; skills building; relapse prevention; feedback and reinforcement; and the communication of reports and recommendations to the primary care provider and referring physician. Call 613-696-7071 or visit [pwc.ottawaheart.ca/care/cardioprevent-program](http://pwc.ottawaheart.ca/care/cardioprevent-program)

## Virtual Care Program

Activating patients to proactively manage their heart health

The Virtual Care Program is an online cardiovascular health management system that provides best practice strategies for the control and management of risk factors for those at risk of heart disease. The features of the platform include: assessments and preferences, personal wellness plan, trackers and progress reports, integration with wellness devices and cellular application push messaging, health library and content tagging, reminders, circle of care invitations, online social forums/support groups, and wellness challenges. The platform is designed to raise awareness about an individual’s heart health status and motivate them to manage and improve their health and well being. Email [virtualcare@ottawaheart.ca](mailto:virtualcare@ottawaheart.ca) or visit [pwc.ottawaheart.ca/virtualcare](http://pwc.ottawaheart.ca/virtualcare)

## Workshops

Pick up your Workshops Schedule or check our calendar online at: [www.ottawaheart.ca](http://www.ottawaheart.ca)

Workshops on a variety of nutrition topics are available.

### **Weekday options**

Free workshops are 60 minutes in length, days and evenings.

- **Nutrition 101:** Learn how to read food labels and get the facts on fat, cholesterol, fibre and salt.
- **Nutrition 201:** Learn about trends in nutrition including super foods, supplements and the Mediterranean diet
- **Rediscover Eating:** A five week program to help you rethink your relationship with food.

### **University of Ottawa Heart Institute Canadian Women's Heart Health Centre**

[yourheart.ca](http://yourheart.ca)

Heart Healthy Eating Resources

## Nutrition Workshops:

The dietitian at the University of Ottawa Heart Institute offers a series of interactive workshop series

- The workshops can be attended by patients, families, and members of the public who are interested in learning about heart healthy eating.
- Workshops are 60 minutes in length and daytime and evening options are available.
- The workshops are free of charge.
- Pick up your Workshops Schedule at the Heart Institute or check our Calendar at: [www.ottawaheart.ca](http://www.ottawaheart.ca) for dates and times.
  - **Nutrition 101:** Learn how to read food labels and get the facts on fat, cholesterol, fibre and salt.
  - **Nutrition 201:** Learn about trends in nutrition including super foods, supplements and the Mediterranean diet
  - **Nutrition Tips for Weight Management:** Learn to set realistic goals and plan meals for weight management

## Heart Disease Support Groups

### OTTAWA HEART INSTITUTE ALUMNI

- **Phone:** 613-696-7241
- **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)

# 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 & 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. You can answer by saying yes or no or by pressing 1 for Yes or 3 for No on your phone pound keys. Information & 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. The system will call you at day 2 and 1, 3, 6, 9 & 12 months after your discharge. You do not have to stay by your phone. The system will try to reach you 3 times at each scheduled time.

### WHO TO CONTACT IF YOU HAVE QUESTIONS?

For any cardiac concerns at any time please call 613-696-7000 press "0" and ask to page the Cardiology Nursing Coordinator.

For any information related to IVR please contact the Cardiac Telehealth department Monday to Friday, 8 am to 4 pm at 613-696-7050 or toll free at 1-877-303-9877.

## WHAT MAKES WOMEN DIFFERENT?

Men and women can be very different when it comes to matters of the heart, and that's just as true for matters of heart health. Heart disease is RISING among women. The good news is that the majority of risk factors that cause heart disease such as smoking, diabetes, physical inactivity, high blood pressure, high stress levels and high cholesterol can be controlled or treated.

If you are receiving this booklet from the University of Ottawa Heart Institute and have been diagnosed with heart disease, we highly recommend that you participate in one of our cardiac rehabilitation program options, including our Women at Heart Program, after your discharge from hospital. This simple step can significantly decrease the chances of a future cardiac event and improve your chances of leading a healthy life in your future. This includes women who have had a heart attack, had a stent inserted, had heart surgery or a heart disease diagnosis, such as SCAD (Spontaneous Coronary Artery Dissection). Even if you have had a treatment for your heart disease, you still have heart disease and would greatly benefit from attending our rehabilitation program after your treatment.

**DID YOU KNOW?** After a heart attack, heart surgery or a heart disease diagnosis, attendance in a cardiac rehab program can reduce the chances of you being re-admitted to hospital by 31%! It also lowers your mortality by 25% (Cdn. Guidelines for Cardiac Rehabilitation and CVD Prevention, March 2009). Despite this clear benefit, women are only half as likely as men to attend and adhere to the program. Many women don't know they are at risk after an event or even after a treatment they received. That can change beginning right now, with you.

## KEY MESSAGES:

- Know your risk factors. It's never too late to start making healthy changes.
- When in doubt, check it out! Call 911 or seek immediate medical care if you think you are having any possible heart related symptoms.
- Attend a free cardiac rehabilitation program (on-site and home program options available)
- Join the Women at Heart Program: led by women with heart disease for women with heart disease

The Heart Institute's Canadian Women's Heart Health Centre aims to provide leadership in the development, implementation and evaluation of cardiovascular prevention and management strategies to improve women's cardiovascular health.

For more information or to enroll in a program right now please call: 613-696-7068

You can also visit our website for more information:

Visit [www.ottawaheart.ca/clinical-department/cardiac-prevention-rehabilitation](http://www.ottawaheart.ca/clinical-department/cardiac-prevention-rehabilitation) or [www.yourheart.ca](http://www.yourheart.ca) to learn more about the programs we offer for heart disease prevention and support!

# HEART INSTITUTE PATIENT ALUMNI

## WE CAN HELP. WE'VE BEEN THERE.

The Patient Alumni are a diverse community of current and former University of Ottawa Heart Institute patients and their families, friends and caregivers. We gratefully support the Institute by sharing information on advancements in the prevention and treatment of heart disease and by designating funds towards projects and services that improve patient comfort and care.

By joining the Alumni, you will become part of a very unique community!

The Heart Institute is the only hospital in Canada that has formed an alumni group to stay in contact with discharged patients and their families. For over 40 years, the Heart Institute has delivered world-class care to thousands of patients. As Alumni members, we wish to stay in touch, stay informed, and contribute to the Institute's quality of care and future success.

## WHY JOIN THE ALUMNI?

Alumni membership is free of charge, thanks to the partnership and financial support of the Heart Institute and its fundraising Foundation.

As an Alumni member, you'll get up-to-date information through our:

- e-letters
- Websites
- Lectures, courses and special events

By joining, you will also be able to share information and experiences with other Alumni members through our unique private social networking site, at <http://community.ottawaheart.ca>

For more information and access to free membership, visit our website, [ottawaheartalumni.ca](http://ottawaheartalumni.ca)

Or contact us at:

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

**Telephone:** 613-696-7241



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



**PATIENT ALUMNI**  
ASSOCIATION DES  
ANCIENS PATIENTS