

2015

Understanding Angina

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- What is coronary artery disease? 1
- What is angina? 2
- What are the differences between a heart attack and angina? 3
- What if I have chest pain/discomfort while I am in the hospital? 4
- What if I get chest pain/discomfort at home? 4
- When do I need to go to an emergency department? 5
- Symptoms of angina 5
- How do I use nitroglycerin spray (nitro) for chest pain and/or discomfort? .. 6
- What are my risk factors for heart disease? 7
- How can I reduce my risk factors for heart disease? 8
- Heart healthy eating 10
- Stress 15
- How active can I be once I get home? 16
- Exercise and physical activity 17
- Warning signs of working too hard 17
- Counting your pulse 18
- Stretching exercises 19
- An exercise program at home 22
- When can I have sex? 24
- Medications 25
- When should I see my family doctor? 27
- What is cardiac rehabilitation? 27
- Resources: who can help me in the community? 29
- Important tips 31

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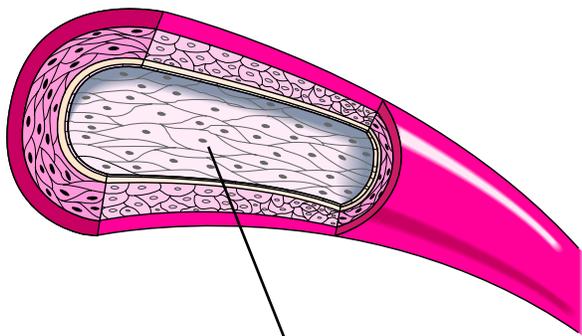
This guide is for you and those close to you. You and your family probably have lots of questions. This guide explains angina and how you can help yourself. It will not answer all your questions. There is space for notes and questions at the end of this guide. The health care team will answer any questions that you or your family have.

Ask your nurse about other pamphlets available to you, while you are in the hospital. Please let someone from your health care team know if you have comments to make this guide better for future patients.

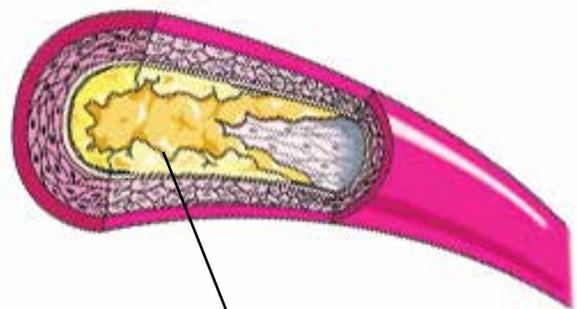
After you leave the hospital, bring this guide with you when you go to see your family doctor.

What is coronary artery disease?

The coronary arteries are the blood vessels that bring blood and oxygen to your heart muscle. Little by little these arteries have gotten narrowed with deposits of fat (cholesterol). This process of narrowing is called **atherosclerosis**. A narrower artery has less space for the blood to flow to your heart muscle. This is shown in the picture below. You may also hear it called **coronary artery disease**.



Normal artery
- blood flows
through easily



Narrowed artery -
blood has trouble
getting through

What is angina?

Angina is a discomfort caused by a **temporary** lack of oxygen to the heart muscle because of a **partial blockage** of a coronary artery.

People describe the discomfort in many different ways. It may feel like:

- A squeezing, burning, aching, pressure, heaviness, tightness, and/or crushing feeling in your chest
- Indigestion
- Heartburn
- Shortness of breath

The discomfort can be in the center, or on either side of the chest, in the neck, jaw, back, and arms.

Usually, angina is brought on by something like physical activity, stress, cold air or extreme heat, or by eating a large, rich, heavy meal. It usually lasts for a few minutes and goes away with rest and/or nitroglycerin under the tongue. It rarely lasts just a few seconds.

Unstable angina is a pain or discomfort that may come at rest or with exertion (physical activity) and may not go away within 15 minutes with rest and nitroglycerin. It can also be a change in the pattern of the pain, coming with less exertion and lasting longer. When angina first starts, if it is frequent or severe, it may be considered unstable. Unstable angina may lead to a heart attack if it is not treated quickly.

A **heart attack** happens if there is a **complete blockage** of the coronary artery. When someone has a heart attack, a narrowed part of a coronary artery got blocked, often with a blood clot made of a combination of cholesterol and blood. Once the artery is blocked, the blood stops flowing through that artery and the heart does not get enough oxygen. That area of the heart will have **permanent** damage.

Heart attack pain can come at any time of the day or night without any warning. It will not go away with under-the-tongue nitroglycerin (nitro). It sometimes feels stronger than angina and may happen with an upset stomach, throwing up, sweating, or shortness of breath. The amount of damage to the heart depends on where and for how long the blood flow was blocked. The damaged area of the heart will form scar tissue over the following 6-8 weeks.

Any pain that lasts longer than 15-20 minutes, even after taking nitroglycerin, may be a heart attack.

You may have less heart damage if you get to the hospital quickly.

What are the differences between a heart attack and angina?

Angina and heart attack are not the same thing. Angina is a discomfort caused by a temporary lack of oxygen to the heart muscle. The most common treatment for angina is nitro and rest. Nitro makes the coronary arteries open wider, letting more blood pass through.

The differences between a heart attack and angina are:

Heart attack	Angina
Permanent damage to heart muscle	No damage to heart muscle
Usually lasts more than 30 minutes	Usually lasts less than 30 minutes
Is not relieved by rest and 3 nitro sprays taken 5 minutes apart	Usually is relieved by rest and up to 3 nitro sprays taken 5 minutes apart
Requires treatment at the nearest hospital right away	This is a warning sign

What if I have chest pain/discomfort while I am in the hospital?

If you have chest pain/discomfort:

- Lay down in your bed and call your nurse right away.
- If you are walking in the hall, sit down and have another person call your nurse.
- Do not take nitro on your own unless your nurse told you to.
- Your nurse will put on your oxygen, check your blood pressure, and give you nitro.
- Your doctor may want an electrocardiogram (ECG) done while you are having chest pain/discomfort. An ECG is a test to record the electrical activity of your heart.

What if I get chest pain/discomfort at home?

At the first sign of chest pain or your usual discomfort, stop what you are doing, sit or lie down, and rest.

- › Spray one nitro spray on or under your tongue.
- › Relax and wait 5 minutes.
- › If the chest pain/discomfort is still there, take a 2nd nitro spray.
- › Wait another 5 minutes.
- › Take a 3rd spray if you still have chest pain/discomfort.
- › If the chest pain/discomfort is not **completely gone after 3 sprays** taken in 15 minutes, **call 911 for paramedics to take you to the nearest emergency department right away.**
- › Do not drive yourself.

The paramedics can start treating your chest pain as soon as they arrive. When you have chest pain/discomfort, your heart is telling you that it isn't getting enough oxygen. The longer it is without enough oxygen, the more damage that can happen to the heart muscle. In cardiology we say, 'Time is Muscle'.

Do not eat, drink, or smoke while using the nitro spray for chest pain/discomfort.

When do I need to go to an emergency department?

Go to the nearest hospital emergency department:

- If you have chest pain/discomfort that doesn't go away after 3 sprays of nitro over the next 15 minutes
- If your symptoms are different from your usual angina pain and/or discomfort
- If the discomfort returns within a few hours

Call 911. DO NOT drive yourself to the hospital. The paramedics can start treating your chest pain/discomfort as soon as they arrive. 'Time is muscle.'

Symptoms of angina

The symptoms of angina may include:

- Chest pain and/or discomfort
- Shortness of breath
- Throat tightness or fullness
- Jaw discomfort
- Arm discomfort

Feeling light-headed, weak, and having palpitations (strong, irregular heartbeat) are not symptoms of angina. **Only use your nitro when you have your symptoms of angina.**

Headaches, dizziness, and light-headedness are common after taking nitro.

You may find that certain activities cause chest discomfort. Using nitro before starting these activities may help. It may also be helpful to take nitro before any exciting or stressful event. **Talk with your doctor about when to take nitro.**

If you have taken medications such as sildenafil (Viagra®), vardenafil (Levitra®) within the last 24 hours, or tadalafil (Cialis®) within the last 48 hours (2 days), you should not use nitroglycerin as this may cause a serious drop in your blood pressure, and cause harm.

How do I use nitroglycerin spray (nitro) for chest pain and/or discomfort?

Before using nitro spray for the first time, the pump must be sprayed (primed) 5 times into the air. Check the package instruction sheet for further priming directions. Check the expiry date on the outside of the container. Replace the nitro spray by the expiry date.

Always carry your nitro with you.

1. Hold the container in an upright position. Remove the plastic cover. Do not shake.
2. Place your finger on the top of the grooved button.
3. Spray into the air until you get a mist (about 5 times).
4. Open your mouth. Bring the container as close to your mouth as possible.
5. Press the button firmly with your finger to release one spray onto or under the tongue. Do not inhale the spray.
6. Let the button go.

What are my risk factors for heart disease?

Anything that increases the chance of a heart attack is called a risk factor. Some risk factors are more serious than others. You can prevent or control some risk factors. Lowering your risk factors can make your health better and reduce the risk of a heart attack.

Risk factors that you cannot control are:

- Family history
 - › You are more likely to have heart disease if you have a close male relative who had heart disease before age 55 or a close female relative who had heart disease before age 65. Some families are more likely to have heart disease than others. Anyone who has a family history of heart disease should try to reduce his/her other risk factors. It is important for all family members to reduce their risk factors. They should talk about this with their family doctors.
- Age
 - › Men over age 45 and women over age 55 are more likely to have a heart attack than younger men and women.
- Gender
 - › Men are more likely than women to have a heart attack.

Risk factors you can do something about

- Smoking
- High blood pressure
- Diabetes
- High blood cholesterol
- Being overweight
- Stress
- Drinking too much alcohol
- Not getting enough exercise and physical activity

Talk with your doctor and nurses about the risk factors that affect you and your family.

How can I reduce my risk factors for heart disease?

Stop smoking

If you are a smoker, stop using tobacco. This is the most important thing you can do to reduce the risk of another heart attack. **You have a 50% greater chance of another heart attack if you continue to use tobacco.** Tobacco use narrows your blood vessels and makes your heart work harder. Breathing in second-hand smoke also greatly increases a non-smoker's risk of developing heart disease.

If you or a family member need help to stop smoking, call the Smokers' Helpline or talk with your doctor.

Quit Smoking Programs

Smokers' Helpline – Nova Scotia

Toll free: 1-877-513-5333

Nicotine replacement therapy (NRT) such as patches and/or gum can double the success rate of quitting.

Control high blood pressure (hypertension)

Your blood pressure is the force blood puts on the artery walls as it moves through them. Hypertension means there is extra pressure and the heart is working harder. You can help control your blood pressure in several ways:

- Do not smoke
- Use less salt
- Try to lower your daily stress
- Lose weight if needed (talk about this with your doctor)
- Have your blood pressure checked often
- Take your pills as told to by your doctor
- Exercise
- Limit the amount of alcohol you drink

Talk with your doctor about what your ideal blood pressure should be.

Control diabetes

If you have diabetes, try to keep your blood sugar as close to normal as possible. Follow your diet, exercise program, and take your medication (if needed).

We recommend that your hemoglobin A1C be less than 7. Talk to your family doctor to help you reach this goal. There are diabetes education centres throughout the province that your family doctor can put you in touch with. The diabetes education centre can offer you education and work with you and your family doctor to manage your diabetes.

Control high blood cholesterol

You may have been told that your cholesterol level was normal. Now that you have heart disease, your doctor may want your cholesterol level to be lower. Talk with your doctor about the best level for you.

Keep a healthy weight

You can reach or keep a healthy weight by eating less and by being more active. If you are overweight, losing some weight may lower your blood cholesterol and blood pressure levels. Check with your doctor before starting an exercise program.

Manage stress

Stress happens when you feel that the demands of life are more than you can handle. Read more in the “How can I manage my emotions and stress?” section of this guide.

Limit your alcohol use

Drinking too much alcohol can increase blood pressure and lead to heart disease and stroke. Drinking too much alcohol affects the kidneys and stiffens the arteries, which can increase blood pressure. If you drink alcohol, it is recommended that you limit it. Talk with your doctor about how much is OK to drink. One drink is equal to 1 bottle of beer (12 ounces), 4 ounces of wine, or 1 ounce of hard liquor.

Exercise regularly

With regular exercise your heart becomes stronger and works better. You will have fewer symptoms such as angina (chest pain) and shortness of breath. Also, with exercise you will improve your fitness level so you can do

more activities with less effort. Regular exercise will also help to control or lower risk factors for heart disease such as high blood pressure, diabetes, high cholesterol, being overweight, stress, and inactivity.

Heart healthy eating

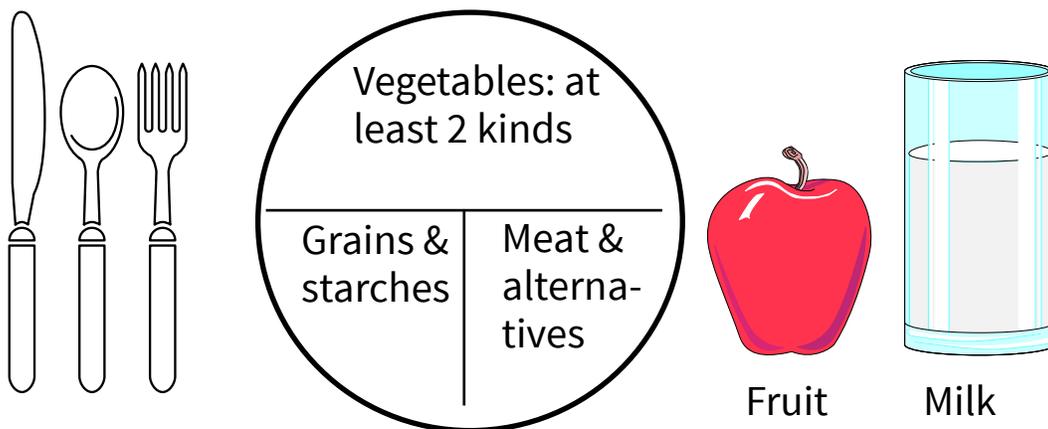
Healthy eating can lower your risk of heart disease by helping you to control your weight, lowering your cholesterol levels, and controlling high blood pressure. It can help you feel good and give you energy.

Reach and stay at a healthy weight with healthy eating and regular physical activity. If you are overweight, losing as little as 7-10% of your weight will help to improve your cholesterol level, blood pressure, and blood sugar control.

See the tips below to help you follow a healthy diet. For more information ask for the *DASH Diet*, the *Heart Healthy Eating Tips*, or the *Heart Healthy, Restricted Sodium Guidelines 1.5 to 2 Grams Sodium* booklets.

What makes up a healthy diet?

- **Eat regular meals and follow Canada's Food Guide** for the recommended number of servings in each food group. Watch your serving sizes.
 - › Eat plenty of fruit and vegetables.
 - › Make at least half of your grain products whole grain each day. Choose grain products that are lower in fat, sugar, and salt.
 - › Drink skim or 1% milk each day and select lower fat milk alternatives.
 - › Choose lean meats and alternatives prepared with little or no fat.
 - › Use a smaller plate. This is an example of a healthy meal:



- **Eat plenty of fibre (roughage).** Fibre is the part of food that is not digested. Fibre helps to control cholesterol and keeps you full. It also helps to control your blood sugars if you are diabetic. Vegetables, fruit, legumes, whole grains, and cereals are high in fibre.
 - › Focus on vegetables and fruits. It is recommended that you have at least 7 or 8 full servings of fruit or vegetables each day. Fresh, frozen, or canned without salt are all good choices. They make a great low fat snack. Include them in every meal or snack.
 - › Eat whole grain breads and cereals more often. Replace white bread and low fibre cereals with whole grain breads and cereals.
 - › Include dried peas, beans, and lentils in your meals. The fibre in these foods may help lower your blood cholesterol levels.
 - › Increase the amount of fibre you eat gradually to avoid gas, bloating, or diarrhea.
- **Eat smaller portions of meat, poultry, or fish.** Most of us eat more protein than we need. Two and a half ounces (75 grams) is a serving, about the size of a deck of cards.
 - › Eat at least 2 servings of fish each week. Select lean meat and alternatives prepared with little or no added fat and salt.
 - › Eat a meatless meal at least twice a week. Legumes, lentils, and tofu are great sources of low fat protein. Split pea soup, meatless chili, lentil soup, and hummus are good options.
- **Don't eat too much salt.** Too much salt increases your risk of developing high blood pressure. It is recommended that you have no more than 2300 mg of sodium each day. Some tips to reduce your salt intake:
 - › Don't use the salt shaker at the table.
 - › Try salt-free spice blends (for example, Mrs. Dash® Salt-Free, or McCormick's® No Salt Added Blends).
 - › Cook your own meals more often. Restaurant and take-out meals are usually very high in salt.
 - › As much as possible, limit processed meats such as bologna, bacon, and deli meats.
 - › Limit processed foods, salty snacks, canned soups, and frozen dinners.

- › Use only small amounts of salt in cooking and baking, or none at all.
- › If you do use canned foods, choose ones with “No Added Salt” or with less sodium and rinse well before using.
- **Don’t eat too much fat.** You do need some fat in your diet, but be careful about the type and how much fat you eat. You should limit the amount of saturated fats from butter, lard, coconut oil, drippings, and hydrogenated or partially hydrogenated vegetable oils. Unsaturated fats are better, such as canola oil, olive oil, and non-hydrogenated margarine.
 - › Eat fewer high fat foods such as potato chips, fried foods, processed meats, gravies and cream-based sauces, or fatty cuts of meat.
 - › Choose cooking methods like grilling, baking, broiling, steaming, poaching, boiling, or barbecuing to avoid adding extra fat.
 - › Choose low fat cuts of meat and cut off any extra fat.
 - › Avoid adding unnecessary fat to food. For example, use less margarine on bread and measure out small portions of oil for cooking.
 - › Buy low-fat dairy foods such as skim, or 1% milk, low-fat yogurt or cheese with less than 10% M.F. (milk fat).
 - › Watch for hidden sources of fat from foods like muffins, cakes, and biscuits. These are high in saturated fat and trans fats.
- **Include omega-3 fatty acids in your diet.** These are healthy fats that can help lower the risk of heart disease. The best way to get them is from eating specific foods. Fatty fish such as salmon, mackerel, sardines (packed in water), fresh herring, or trout are the best sources of omega-3. Plant sources of omega-3 fatty acids include canola oil, soybean oil, flaxseed oil, ground flax, and walnuts. Omega-3 supplements are available, but should only be taken after talking to your doctor.
- **Limit sugar, candy, pop, and sweet desserts.** Sugary foods and drinks are high in calories and can contribute to weight gain.
 - › Try to not add sugar to tea, coffee, and breakfast cereals. Your taste for sweetness will change over time. Use artificial sweeteners only if necessary.
 - › If you eat sweet desserts, try to keep the quantity down.
- **Limit your caffeine intake.** The link between caffeine and heart disease is still being studied. Moderate coffee drinking of 1-2 cups per day doesn’t seem to be harmful.

- **Talk to your doctor about alcohol.** Drinking too much alcohol can lead to serious health problems. Generally speaking, men should drink no more than 2 drinks a day and women should drink no more than 1 drink a day. Alcohol can interfere with how some medications work, so speak with your doctor or pharmacist before having alcohol.
- **Drink water** instead of pop, diet pop, or juice.
- **Learn how to read food labels and look at the serving size.**
 - › Compare food labels to choose products that have less saturated fat, trans fat, sugar, and sodium.
 - › The ingredient in the greatest amount is listed first on the food label. The ingredient in the least amount is listed last. Cut back on, or avoid, products that list a fat as the first ingredient or that list many fat and oil ingredients.
 - › In addition to ingredient lists, food labels include **Nutrition Facts** information. Where possible, choose foods with a % Daily Value (DV) of **less than 5%** for sodium or fat (in the amount you intend to eat). **Avoid foods with more than 15% DV for sodium and total fat.**
 - › Choose foods with **0 grams of trans fats.**

Choose carefully while eating out. Restaurant and take out foods can be very high in salt and fat.

- Choose restaurants that cooks food in many ways, not just fried.
- Ask how the foods are cooked. “Crispy” often means deep fried. Pan-fried or sautéed means cooked in fat.
- Order smaller portions or share with a friend.
- Ask for gravies, sauces, or salad dressing on the side and use only a little. Sauces such as béchamel, béarnaise, and hollandaise have a lot of fat. Ask for light salad dressing and use a small amount.
- Watch out for salads. Caesar salad and “salad items” at a salad bar (chicken salad, potato salad, pasta salad, etc.) are high in fat. If you are adding chicken or seafood to a salad, make sure it is grilled or baked instead of deep fried.
- Balance out the rest of your day with low fat, low salt foods.

A Mediterranean-style diet or the DASH diet (Dietary Approaches to Stop Hypertension) are heart-healthy diets that you can follow.

- A Mediterranean-style diet has
 - › More vegetables, fruits, legumes, nuts, seeds, and whole grains
 - › More fish
 - › Little meat
 - › Low fat dairy products
 - › Healthy oils such as olive oil

Extra help

There are many cookbooks to help you add variety to your meals. Any cookbook by the Heart and Stroke Foundation, Dietitians of Canada, or the Canadian Diabetes Association has very good information. You can find titles by these groups in most libraries and book stores.

Visit these websites for more information and recipe ideas:

- Dietitians of Canada:
 - › www.dietitians.ca
- Heart and Stroke Foundation:
 - › www.heartandstroke.com
- Pulse Canada for recipes using lentils, beans, and more:
 - › www.pulsecanada.com
- Ontario white bean producers for recipes using beans:
 - › <http://ontariobeans.on.ca>

Stress

How can I manage my emotions and stress?

Stress is a feeling you get when you think the demands of life are more than you can handle. “Stressors” are the things in our life that make us feel stressed.

What can cause stress?

Stress can happen with situations that are frustrating or negative as well as positive or welcomed changes.

Examples of stressors:

- Money problems
- Health problems
- Waiting in line
- Sitting in traffic
- Losing your keys
- Adjusting to the birth or adoption of a child
- Getting married and changing your daily routine
- Taking on new responsibilities after a promotion at work

What are the symptoms of too much stress?

Everyone has different feelings of stress. Some of these symptoms may include tense muscles, headaches, trouble sleeping, being easily frustrated, and poor concentration.

Being upset about having a heart problem is normal. You and your family may have strong feelings that last for weeks after your heart attack. People can feel down or ‘blue’, feel helpless, or be very worried that they can’t help their family/work/community in the same way, or worried about their future. These feelings generally go away on their own. You should see your doctor if you continue to feel depressed, lose or gain weight, or sleep too little or too much, 2 months or more after your heart attack.

To get extra help dealing with your emotions, ask your family doctor, family, or friends for suggestions, or check the resources at the back of this guide.

Take care of your health. Generally, the healthier you are, the better you are able to handle stress. It is important to:

- Follow instructions for taking your medication
- Eat well balanced, healthy meals
- Exercise regularly
- Get enough sleep
- Find a program to help you stop smoking (check the contact information listed near the end of this guide)
- Limit alcohol

How active can I be once I get home?

Physical activity is an essential part of good health and is an important part of recovery after a heart attack.

Once you are home, you can continue to do all of the things that you did in hospital but you may need help managing when you first go home. It is important that you keep a balance between rest and activity. We strongly recommend that you slowly return to your normal level of activity. This guide has information on how to get back to your normal routine safely, and avoid getting caught in a whirlwind of activity.

Energy conservation includes:

- Using common sense to find easier ways of doing things so you don't get tired out.
- Achieving a good balance between rest and activity.

How can I save my energy?

- Pace yourself.
- Stop before you become over-tired.
- Learn your limits for activities. If you want to do more activity, do so in small steps.
- Rest between tasks.

Exercise and physical activity

When you first go home, you should find a balance between rest and activity. The following exercise program is paced to allow time for your heart to heal.

Remember that any exercise or physical activity should feel good. During activity or exercise, you should not feel short of breath. If you cannot “walk and talk”, you need to slow your pace down.

Returning to heavy and very heavy activities should only happen after you talk with your doctor.

Ask your family doctor for guidelines about going back to any heavy activities.

Shoveling, ice hockey, scuba diving and high altitude activities are activities with higher risk. Please speak with your doctor before doing any of these activities.

Listening to your body

- Check your heart rate when doing tasks for the first time until you feel at ease doing the activity. Your heart rate should not go up by more than 5 beats in 15 seconds. (See the exercise and physical activity section of this guide for how to take your pulse.)

Warning signs of working too hard

Stop and rest if you have any of these warning signs:

- Feelings of pain, tightness, or discomfort in your chest, jaw, arms, neck or back.
- Finding it hard to get your breath.
- Feeling light-headed, dizzy, confused, or sick.
- Having irregular heartbeats.
- Feeling more tired than you expect after exercise.
- Feeling unusual pain or discomfort in your muscles or joints after exercise.
- Sweating more than usual.

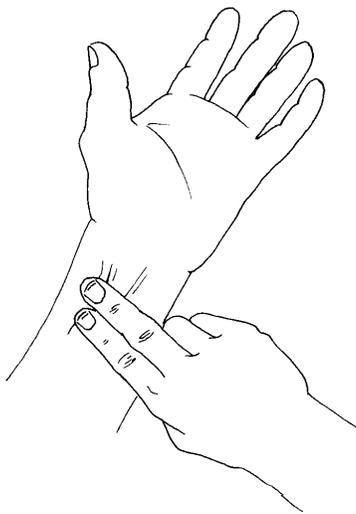
It is very important to keep the warning signs of working too hard in mind. Stop and rest if you notice any of these warning signs while you are active. When you start the activity again, do so at a slower pace. Always let your family doctor know if you keep getting these warning signs.

Counting your pulse

Your heart will beat faster when you exercise. To make sure you are doing what your heart needs, you can take your own pulse. Take it 2 times: while you are resting, and while you are exercising. Practice taking it while you are resting.

- Make sure you can see a watch or clock with a second hand, or use a timer.
- Using your first 2 fingers, find your pulse, either on the thumb side of your wrist or on your neck beside your Adam's apple.
- Count your pulse for 15 seconds. This is your resting 15 second pulse.

Your pulse should not go up by more than 5 beats in 15 seconds. If it does, you should slow down.



Stretching exercises

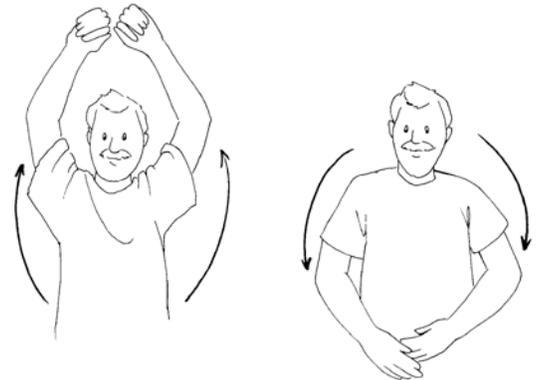
The stretching exercises will:

- Be a good warm up before exercising.
- Be a good cool down after you exercise.
- Help reduce stiffness you may have from bed rest.
- Help you move more easily.

You may start these stretches as soon as you return home. Do each stretch with a little rhythm and at a medium pace. It is important that you do not hold your breath as you do the stretches but keep breathing normally. Sit on a firm chair with a straight back and no arms. Repeat each stretch 3-5 times.

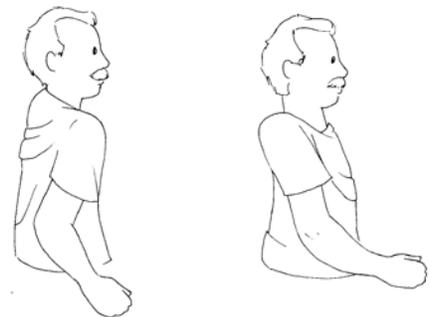
1. Arm lift

Breathe in as you lift your arms up and out to the sides. Touch your hands together over your head. Breathe out as you lower your arms.



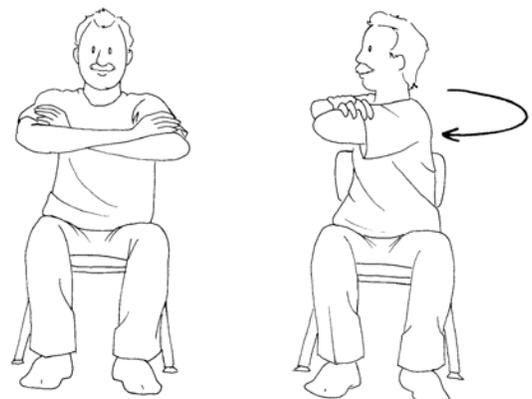
2. Shoulder circle

Circle your shoulders backwards. Now circle your shoulders forward. Repeat 5 times in each direction.



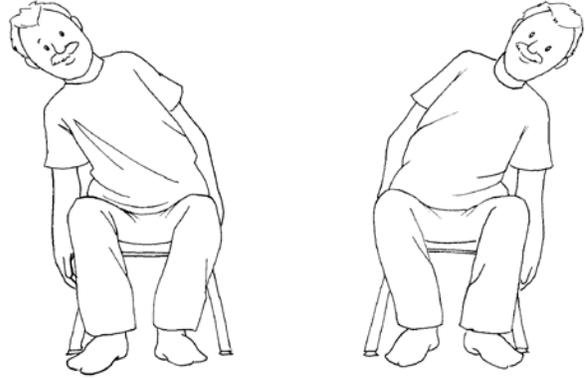
3. The twist

Fold your arms in front of you. Twist from the waist to the right and return to the centre. Now twist to the left. Repeat 5 times for each side.



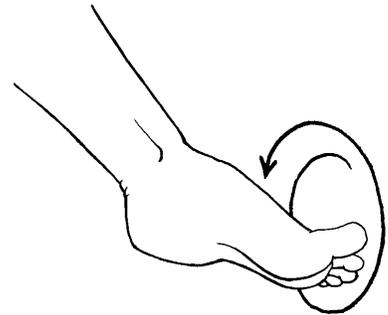
4. Side stretch

Sit up with your back straight. Lean slowly to one side and slide your arm down the side of the chair. Now slide back up and lean to the other side.



5. Ankle pumping

Lift one leg so your foot is slightly off the floor. Move your foot up and down in a pumping motion. Then circle your ankle in each direction. Put that foot back down on the floor. Repeat with the other foot.



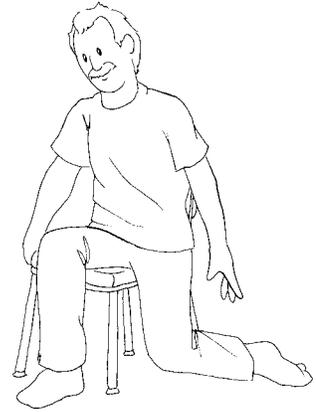
6. Hamstring stretch

Stretch one leg out in front of you. Reach toward your foot with both arms as far as you can go comfortably. Hold for 10-20 seconds. Do not bounce. Come back to sitting upright and repeat with the other leg.



7. Quadriceps stretch

Slide your bottom to the left side of the chair. Let your left leg drop off the edge so that your knee is facing the floor. Hold for 10-20 seconds, then come back to a sitting position. Repeat with the right leg.



8. Calf stretch

Stand a little way from a wall or the back of your chair. Bend one leg and put your foot on the ground in front of you. Keep the other leg behind straight. Both heels should be on the floor. Slowly move your hips forward until you feel the stretch. Hold for 20-30 seconds. Do not bounce. Repeat with the other leg.



An exercise program at home

The best kind of exercise for your heart and lungs is walking. Walking is often the simplest way for most of us to get exercise. You can walk outside, in the hallway of your apartment building, or at a local mall. Find what works best for you. If you have problems walking, try a stationary bike (“exercise bike”) or an activity where you can go at your own pace.

Check your pulse before you start exercising (at rest) and with exercise. Remember that your pulse should not go up by more than 5 beats in 15 seconds. If it does, you are working too hard. Slow down your pace.

Carry nitro spray with you at all times.

Do the stretching exercises in this guide before and/or after your exercise program. Be sure to add a 5 minute warm up and a 5 minute cool down once you are exercising for 20 minutes. See the next page for more info on warming up and cooling down.

Getting started

Begin your exercise/walk program at a level or pace that is comfortable for you.

If you are new to exercise, a good starting point is to exercise for 5-10 minutes, once or twice a day.

If you have been able to comfortably walk longer than 5-10 minutes while in the hospital, then begin at home with the amount of exercise you have been doing in the hospital.

Bit by bit, increase your exercise time by 1-2 minutes a day, as long as you feel well and have no warning signs you are over-doing it (see page 17 for warning signs).

Once you are able to exercise for 15-20 minutes at a time, you can aim for one exercise session a day.

Increase your exercise time bit by bit.

Your goal is at least 30 minutes of exercise time, 5 days per week. The time it takes to reach this goal will be different from person to person.

Warming up and cooling down

Once you are exercising for 20 minutes, it is important to add a warm up and cool down to your exercise program. A warm up will slowly get your heart ready for the work you are about to do. Warming up also makes the coronary arteries open wider, so more blood and oxygen go to your heart. It will lessen any risk of injuring muscles and joints. To warm up, exercise at a slower pace for the first 5 or 10 minutes. You may also do the stretches listed earlier in this guide as a warm up.

A cool down helps your heart rate and blood pressure slowly return to resting levels. It decreases the chance of getting abnormal heart rhythms, light-headedness and dizziness. To cool down, end by exercising at a slower pace for 5-10 minutes. Do the leg stretching exercises (numbers 6-8) listed earlier in this guide. This will lessen muscle soreness and improve your flexibility.

Strengthening exercises

Strengthening exercises with light weights (up to 5-10 pounds) can be helpful. You should check with your family doctor first.

Climbing stairs and hills

Try to avoid walking up more than one flight of stairs at a time. If you have more than one floor to go up at home, go slowly. If you go up a hill, walk more slowly than your usual pace and stop for rests. Check your pulse and how you feel the first few times.

When can I have sex?

Sexual activity (sex) is an important part of a healthy lifestyle. Sex takes about the same amount of energy as walking for 5 minutes and then climbing 2 flights of stairs. You can safely have sex if you can walk for 5 minutes and then climb 2 flights of stairs without getting short of breath or physically uncomfortable.

Some suggestions:

- Return to sexual activity with your usual partner.
- Talk with your partner about your concerns.
- If you do not feel ready for sex, there are other ways to be intimate. You can cuddle, caress, or look for other things that make you feel good.
- Find a peaceful, familiar place.
- Choose a time when you and your partner are relaxed and rested.
- Do not have sex right after you exercise or eat.
- Some positions may be more comfortable for sex (heart patient on the bottom, both of you lying on your side, or sitting face to face). Don't try any major changes in sexual positions if it makes you or your partner tired or anxious. Anxiety and feeling tired can make the heart work harder.

You or your partner may have questions or concerns about sexual activity.

Some common concerns are:

- Feeling scared that you could hurt your heart while having sex.
- Feeling less interested in sex because you feel depressed, scared, and/or nervous.
- Being unable to have or keep an erection because of your medications.
- Feeling anxious when you have a normal sexual response (increased heart and breathing rate, tensing of muscles).

Talk about your concerns with your doctor.

If you have taken medications such as sildenafil (Viagra®), vardenafil (Levitra®) within the last 24 hours, or tadalafil (Cialis®) within the last 48 hours (2 days), you should not use nitroglycerin as this may cause a serious drop in your blood pressure, and cause harm.

Medications

There are many different heart medications and most patients are controlled on a combination of medications chosen by their doctor. The goals of treatment with these medications are:

- To lower the risk of future heart attacks.
- To lower the chance of dying from heart disease.
- To control symptoms or your risk factors such as high blood pressure and high cholesterol.

A member of the health care team will talk about your medications with you. You will get a medication calendar to help you know when to take your medications.

Medications for heart disease

Antiplatelet medicines stop platelets from sticking together and forming blood clots that may block heart arteries. Antiplatelet medicines include ASA (Aspirin®), clopidogrel (Plavix®), and ticagrelor (Brilinta®). These drugs are usually used in combination to help prevent future heart attacks. They may also be used to protect against blood clots forming within your stent(s) if you had an angioplasty.

Beta blockers are used to lessen the workload on your heart, lower blood pressure and heart rate, improve heart function if the heart pumping function is weak, and lower the risk of future heart attacks. Some examples are metoprolol, atenolol, bisoprolol, and carvedilol.

ACE (Angiotensin-converting enzyme) Inhibitors and ARBs (Angiotensin receptor blockers) are used to prevent future heart attacks, lower blood pressure, and strengthen the heart pumping function. Some common ACE-I are perindopril, ramipril, and trandolapril. Some common ARBs are candesartan, telmisartan, and valsartan.

Cholesterol lowering medications (statins) are used to lower the risk of future heart attacks and stroke, as well as lowering the risk of your symptoms returning. Cholesterol blockages cause narrowing of the heart arteries. Statins help lower cholesterol levels and control blockages in your heart arteries. You may be prescribed a statin even if your cholesterol levels are normal.

Nitroglycerin (nitro) is used to open up your blood vessels so your heart gets a better blood flow and oxygen supply. Nitro is only used to prevent or treat chest pain (angina). Nitro can be in the form of a spray, tablets, or a patch. When you go home you should be prescribed a nitro spray to be used for angina when needed.

You may be prescribed all or some of these medications depending on your situation.

Stopping smoking, diet, exercise, and medications are key to preventing future heart attacks.

Important facts to remember about your medications:

Take your medications exactly as ordered. Never stop taking your medication(s) without talking to your doctor first.

Always carry an updated list of your medications (name, strength, and dose) in your wallet. This will come in handy if you see a new doctor or are admitted to the hospital unexpectedly.

Plan to take your medication around daily routines (mealtimes, bedtime). Check your medication calendar for medication times. If you miss a dose of your medication, call your pharmacist for advice. **Never double your next dose.**

Natural and herbal remedies can change the way your heart medications work. Tell your doctor, pharmacist, and other health care providers about any over-the-counter products you use. Just because something is natural does not mean that it is safe.

Keep your medications in their original bottles or containers (unless you are filling a weekly pill box). Do not take non-prescription medication (such as cough and cold medicines) without first checking with your doctor or pharmacist.

See the resource section at the back of this booklet for information on provincial medication assistance programs. Talk with your family doctor, nurse, or a social worker about your concerns about getting the medications that are prescribed to you.

When should I see my family doctor?

See your family doctor within 1 week of leaving the hospital.

Give your family doctor the report from the hospital cardiologist (heart doctor). This report summarizes your hospital stay and the plan of care recommended by the hospital cardiologist.

If you have any of these symptoms, talk to your family doctor:

- Your heart beats very quickly or it misses a lot of beats.
- You gain 3 pounds in 2 days or 5 pounds in a week.
- Your legs and feet swell.
- You sweat and feel weak for no reason.
- The chest discomfort/angina happens more often, lasts longer and/or is more intense than usual.
- The chest discomfort/angina does not go away with the usual amount of nitroglycerin.
- You have chest discomfort/angina at rest.

What is cardiac rehabilitation?

The cardiac rehabilitation program combines exercise, education, support, and risk factor reduction to improve your heart health.

The health care team includes: nurses, dietitians, physiotherapists, and consultation with a cardiologist, as needed. Referral to other health professionals is on an as-needed basis.

What are the benefits of cardiac rehab?

Cardiac rehabilitation may help to:

- Improve your energy
- Increase your fitness level
- Strengthen your heart
- Decrease your symptoms of angina or shortness of breath
- Control your diabetes
- Control/decrease your blood pressure

- Control/lower your cholesterol level
- Control/decrease your weight
- Improve your flexibility and muscle strength
- Strengthen your bones
- Help you return to work
- Help you become a non-smoker
- Decrease anxiety and depression

The exercise classes are one hour, once or twice a week. During the exercise classes, you will use treadmills, arm cycles, and leg cycles. Every class has a group warm-up and cool-down. A home-based exercise program is also available for eligible participants. A specific exercise program will be made for you based on your exercise stress test, medical history and goals.

What will I learn about in the education sessions?

- Heart disease and how your heart works
- Risk factors for heart disease
- Behaviour change
- Medications
- Nutrition
- Exercise
- Managing stress
- Managing your heart disease
- Strategies for weight management

We strongly recommend that you attend a cardiac rehab program if possible.

Resources: who can help me in the community?

This list was up-to-date when the booklet was written but certain programs may have been added while others may have been cancelled. You may need a referral from your doctor to attend some of these programs.

Social worker

A social worker can help you and your family with concerns related to your illness, or hospital stay. He/she can give you information about available services to help you during your recovery. Ask your nurse to contact the social worker, or call for more info if you have questions.

Nova Scotia Pharmacare Programs

These are medication programs available for all Nova Scotians, depending on your family situation and based on family income. There are Family and Seniors' Pharmacare programs as well as medication assistance to folks in receipt of income assistance through the Department of Community Services.

Phone: 902-429-6565

Toll free: 1-800-544-6191

Website: <http://novascotia.ca/DHW/msi>

Heart and Stroke Foundation

Contact your provincial Heart and Stroke Foundation for details about cardiac rehabilitation, education, or support programs near you.

Heart and Stroke Foundation - Nova Scotia Phone: 902-423-7530 Toll free: 1-800-423-4432	Heart and Stroke Foundation - New Brunswick Phone: 506-634-1620 Toll free: 1-800-663-3600
Heart and Stroke Foundation - Prince Edward Island Phone: 902-892-7441	Heart and Stroke Foundation - Newfoundland and Labrador Phone: 709-753-8521

Cardiac rehabilitation programs

These programs offer exercise, education, risk factor modification (help with lowering your risks), and support:

Cardiovascular and Pulmonary Health in Motion - Halifax Phone: 902-473-3846	Community Cardiovascular Hearts in Motion - Dartmouth, Sackville, Spryfield Phone: 902-473-3744
One Door Chronic Disease Management Centre – Pictou County Phone: 902-752-7600 x4700	Heart Health Clinic (to register for Hearts in Motion) – Antigonish, Canso, Guysborough, Port Hawkesbury, Sherbrooke Phone: 902-867-4500 x4720
Cardiac and Pulmonary Rehab - Cape Breton Health Authority Phone: 902-563-8566	Extended Warranty II Valley Cardiac Rehabilitation - Kentville Phone: 902-679-2657 x1360
Cardiac Rehabilitation – South Shore Health Authority Phone: 902-543-4604 x2222	

Quit smoking programs

Smokers' Helpline – Nova Scotia
Toll free: 1-877-513-5333

Emotional concerns

For more information on self-help groups contact:

Self-Help Connection

Phone: 902-466-2011

Toll free: 1-866-765-6639

Website: <http://selfhelpconnection.ca>

For more information on mental health resources contact:

Canadian Mental Health Association – Nova Scotia Division

Toll free: 1-877-466-6606

Website: www.cmha.ca

For more information on psychologists in private practice contact:

Association of Psychologists of Nova Scotia

Phone: 902-422-9183

Website: www.apns.ca

For more information on social workers in private practice contact:

Nova Scotia Association of Social Workers

Phone: 902-429-7799

Website: www.nsasw.org

This resource list does not have all programs available in your area.

Please contact the Heart and Stroke Foundation for a more complete listing.

If you have access to the Internet, visit the Heart and Stroke Foundation website at www.heartandstroke.ca for more information.

Important tips

Avoid smoking and second-hand smoke for life.

Gradually get more active.

Take all prescribed medications exactly as your health care providers tell you.

Do not stop taking any medication unless your doctor tells you to.

Order more medications before you run out.

Follow ‘Eating Well with Canada’s Food Guide’.

What if I get chest pain/discomfort at home?

At the first sign of chest pain or your usual discomfort, stop what you are doing, sit or lie down, and rest.

Spray 1 nitro spray on or under your tongue.

Relax and wait 5 minutes.

If the chest pain/discomfort is still there, take a 2nd nitro spray.

Wait another 5 minutes.

Take a 3rd spray if you still have chest pain/discomfort.

If the chest pain/discomfort is not completely gone after 3 sprays taken in 15 minutes, call 911 for paramedics to take you to the nearest emergency department right away.

Do not drive yourself.

The paramedics can start treating your chest pain/discomfort as soon as they arrive.

Do not eat, drink, or smoke while using nitro spray for chest pain/discomfort.

Time is muscle.

Questions for the health care team:
