

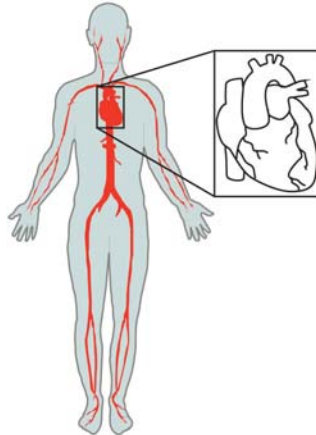


Understanding Heart Failure

The Basics

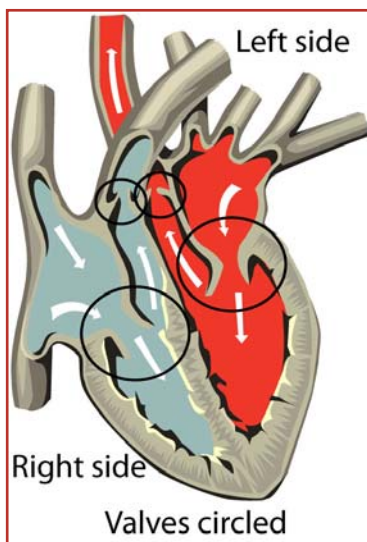
How does the heart work?

Your heart is a muscle about the size of your fist. It works like a pump, pumping blood and nutrients around your body.



The heart is actually a 2-sided pump. The *right side of the heart* pumps 'used' blood from the body to the lungs. In the lungs, your blood is loaded up with oxygen. The *left side of the heart* pumps 'fresh' blood full of oxygen from the lungs to the rest of the body. The left side of the heart is usually the larger than the right. That is because it has to pump hard to get the blood out to all parts of your body.

Each side of the heart has 2 chambers. Valves link the chambers and keep blood pumping in the right direction. These valves open and close with each heartbeat.



What is Heart Failure?

Heart failure is when your heart is not pumping as strongly as it should. Your body does not get the right amount of blood, oxygen, and nutrients it needs to work properly.

Heart failure usually gets worse over time. While heart failure cannot be cured, people do learn to live active, healthy lives by managing their heart failure with medication, changes in their diet, weighing daily and physical activity.

There are two main types of heart failure:

- **A weak pump:** When the heart muscle is weak, it gets larger and 'floppy'.
- **A stiff pump:** When the heart muscle cannot relax between beats because the muscle has become stiff. The heart cannot properly fill with blood between beats.



A large 'floppy' heart

Both types of heart failure reduce the blood flow and oxygen to your body.



What causes Heart Failure?

Heart failure has many causes including:

- Heart attack
- High blood pressure
- Heart valve problems
- Heart defects at birth
- Lung conditions
- Excessive use of alcohol or drugs

Other possible causes of heart failure include:

- Obesity
- Sleep apnea
- Infections affecting the heart muscle
- Abnormal heart rhythm
- Severe anemia
- Severe kidney disease
- Overactive thyroid gland
- Exposure to chemotherapy or radiation

Not sure what caused your heart failure? Ask your doctor or nurse practitioner.

Signs of Heart Failure

You may notice any of the following signs.

♥ You feel short of breath when you do daily activities.



♥ You find it harder to breathe when resting or lying down.

♥ You wake up at night feeling short of breath.

♥ You find it easier to sleep by adding pillows or by sitting up in a chair.



♥ You cough often, especially when lying down.

♥ Your cough is either dry and hacking, or moist and you cough up mucus (which could be slightly pink).

♥ You feel your heart beat faster and it does not slow down when you rest.

♥ You feel your heart racing, jumping, or pounding in your chest.

♥ You cannot walk as far you normally can.

♥ You are tired all the time and have no energy to do daily activities.

♥ You feel lightheaded or dizzy, especially when you stand up or increase your activity and this is new for you.



♥ You cannot eat as much as you normally would.

♥ You are not hungry and do not feel like eating.



♥ You feel bloated or your clothes feel tighter than normal.

♥ You have swelling in your feet, ankles, legs, or even up into the belly (abdomen).



♥ Sudden increase in body weight where you gain more than 4 pounds (2 kilos) in 2 days.

♥ You feel uneasy, like something does not feel right.

♥ You feel confused and have trouble thinking clearly (and this is new for you).



Tests to identify heart failure

There is no single test for heart failure. Instead your doctor does a number of tests. The doctor looks at all the test results to determine if you have heart failure.

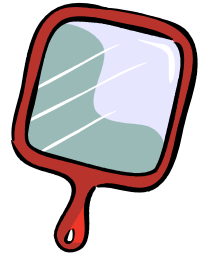
Tests can include:

- Blood tests to check certain enzymes
- Chest x-ray to look at the size of your heart
- Electrocardiogram (or ECG) to look at the electrical activity of the heart
- Exercise stress test to look at how your heart responds to exercise
- Nuclear medicine scan to get a close look at the pumping of your heart
- Angiogram to look for blockage in your heart arteries
- Echocardiogram or ultra sound of the heart to look at the movements of your heart and measure your ejection fraction

More about Ejection Fraction

This test is usually done during an echocardiogram or a nuclear medicine scan. Your ejection fraction can go up and down, depending on your heart condition and how well the treatment is working. It is good to know what your ejection fraction reading is. The reading is given as a percentage with normal being between 55 and 70%. Less than 55% means your heart is not pumping as strongly as it should be. Your ejection fraction helps your doctor or nurse treat your heart failure.

How is heart failure treated?



Look in the mirror - the key to treatment is you.

Your doctor relies on you to make changes in your lifestyle and eating habits. While there is a team of health care providers working with you to manage your heart failure, you are the one in charge.

Treatment is focused on helping you live a longer and healthier life. This includes:

- Monitoring your symptoms
- Reducing salt in your diet
- Increasing your daily activity through regular exercise
- Keeping your blood pressure low
- Maintaining a healthy weight
- Stopping unhealthy habits such as smoking
- Taking your medications as prescribed

For some people, surgery and medical devices are needed to treat the problem that led to the heart failure. Treatments could include:

- Coronary bypass surgery
- Valve repair or replacement surgery
- Implanted device such as a pacemaker and/or defibrillator
- Mechanical device to help the heart pump
- Heart transplant

For novel new ideas on heart failure treatment consult your health care provider.



Plan today for the future

Your heart failure may get worse over time. Start thinking now about how you wish to be cared for if your disease progresses. This is called 'advanced care planning'. Advance care planning allows you to have a say in your health care if you are unable to speak for yourself.

Talk to your family and your doctor about helping you live well with heart failure and about the care you do or do not want in the future.

Things to think about and consider:

- ♥ What does it mean to live well with heart failure?
- ♥ What is important to you to make your life the best it can be?
- ♥ What is important to you as your condition progresses?
- ♥ What worries and concerns do you have?
- ♥ How will your progressing heart failure affect you and your family?
- ♥ Who or what gives you support when you need it?
- ♥ If you are not able to make your own health care decisions, who will you want to make them for you? Does that person know what you want?
- ♥ Do you have written instructions for how you want to be cared for if you cannot make decisions for yourself (this is called an advance directive).

Why learn to manage your heart failure?

When you take charge of your health and learn to manage your heart failure, it helps you:

- ♥ Improve the quality of your life.
- ♥ Feel confident that you can manage your heart failure.
- ♥ Control your condition so it will not control you.
- ♥ Know when to ask for help from your care team.
- ♥ Limit the need to go to the hospital for care.
- ♥ Prevent or limit heart failure complications as the disease progresses.

Talk with your family and your care team about your disease and care plan.

People who learn to manage their heart failure are more likely to live a longer, healthier life than those who do not.

For more information on heart failure

- ♥ BC's Heart Failure Network
www.bcheartfailure.ca
- ♥ Interior Health Authority Heart Failure Online Education
www.bcheartfailure.ca/for-patients-and-families/e-learning-module-on-hf/
- ♥ HealthLinkBC on Heart Failure
www.healthlinkbc.ca/kb/content/special/hw44415.html#tp17534
- ♥ Canadian Cardiovascular Society
www.ccs.ca
- ♥ Canadian Heart Failure Network
www.chfn.ca
- ♥ Heart Failure Society of America
www.hfsa.org

Heart Failure Zones

Check Weight Daily

- ♥ Weigh yourself in the morning before breakfast. Write it down. Compare your weight today to your weight yesterday.
- ♥ Keep the total amount of fluids you drink to only 6 to 8 glasses each day. (6-8 glasses equals 1500-2000 mL or 48-64 oz)
- ♥ Take your medicine exactly how your doctor said.
- ♥ Check for swelling in your feet, ankles, legs, and stomach.
- ♥ Eat foods that are low in salt or salt-free.
- ♥ Balance activity and rest periods.



Which Heart Failure Zone Are You Today? Green, Yellow, or Red

Safe Zone

ALL CLEAR – This zone is your goal!

Your symptoms are under control.

You have:

- No shortness of breath.
- No chest discomfort, pressure, or pain.
- No swelling or increase in swelling of your feet, ankles, legs, or stomach.
- No weight gain of more than 4 lbs (2 kg) over 2 days in a row or 5 lbs (2.5 kg) in 1 week.



Caution Zone

CAUTION – This zone is a warning

Call your Health Care provider (eg. Doctor, nurse) if you have any of the following:

- ▲ You gain more than 4 lbs (2 kg) over 2 days in a row or 5 lbs (2.5 kg) in 1 week.
- ▲ You have vomiting and/or diarrhea that lasts more than two days.
- ▲ You feel more short of breath than usual.
- ▲ You have increased swelling in your feet, ankles, legs, or stomach.
- ▲ You have a dry hacking cough.
- ▲ You feel more tired and don't have the energy to do daily activities.
- ▲ You feel lightheaded or dizzy, and this is new for you.
- ▲ You feel uneasy, like something does not feel right.
- ▲ You find it harder for you to breathe when you are lying down.
- ▲ You find it easier to sleep by adding pillows or sitting up in a chair.



Health Care Provider _____ Office Phone Number _____

Danger Zone

EMERGENCY – This zone means act fast

Go to emergency room or call 911 if you have any of the following:

- You are struggling to breathe.
- Your shortness of breath does not go away while sitting still.
- You have a fast heartbeat that does not slow down when you rest.
- You have chest pain that does not go away with rest or with medicine.
- You are having trouble thinking clearly or are feeling confused.
- You have fainted.



The information in this document is intended solely for the person to whom it was given by the healthcare team.

For more information refer to: www.bcheartfailure.ca



Why People with Heart Failure Should Keep 'Active'

What does it mean to be 'active'?

Activity and exercise - People often use these two terms to mean the same thing. All physical activities and exercise do involve increasing the heart rate and strengthening muscles.

There is, however, a small difference in their meanings. Physical activity is when you are using energy to move your body to get from place to place. Exercise is a type of physical activity. The difference is - exercise is planned. We exercise to improve or maintain fitness or health.

Why activity is important

Keeping active is one of the best ways to keep healthy. Any amount of activity is better than none at all.

Keeping active helps you:

- ✓ Sleep better
- ✓ Feel less tired
- ✓ Feel less breathless
- ✓ Feel more confident and in control



Studies show that daily activity is good for you. It can help you to live better and longer.

Getting started

- ♥ Always check with your health care provider first before starting an activity to make sure you find an activity that matches your personal needs and ability.
- ♥ Start off slowly and pace yourself.

Is the activity level right for me?

Get to know your body. It is important that you feel comfortable doing the activity.



As long as you can talk without being too short of breath the level of activity is okay.

Balance activity and rest

- ♥ Be active at a time when you feel rested, such as first thing in the morning or after nap.
- ♥ Choose which activities to do each day.
- ♥ Spread your activities throughout your day.
- ♥ If you are tired after an activity or the next day, then you have tried to do too much.
- ♥ It may take your body a while to find a balance between activity and rest, so don't give up.



Activities most people with heart failure can do

- ✓ Walking
- ✓ Light housework
- ✓ Gardening
- ✓ Light vacuuming
- ✓ Stretching
- ✓ Laundry
- ✓ Grocery shopping



When to stop an activity

Stop the activity if you:

- Cannot carry on a conversation, sing, or whistle without being short of breath.
- Feel weak, tired, or dizzy.
- Feel sick to your stomach (nauseated).
- Feel your heart is pounding or racing.
- Feel your heart beating irregularly and this is new for you.
- Have pain in your chest, neck, jaw, arm, or shoulder.

Stop and rest. Sit in a comfortable chair. Do not go to bed for a nap.

Activity most people with heart failure should not do

- ✗ Activities that involve working above your head such as painting or washing walls, washing windows, vacuuming curtains.
- ✗ Lifting or pushing heavy objects.
- ✗ Straining or holding your breath to do an activity.
- ✗ Sit ups or push ups.
- ✗ Climbing a lot of stairs.
- ✗ Heavy housework or yard work.
- ✗ Going into sauna or hot tub.

Learn more about how important activity is

Review the 'Actionset' called '[Heart Failure: Activity and Exercise](#)' on the HealthLink BC web site.

www.healthlinkbc.ca/kb/content/actionset/aa87369.html

Check the [BC Heart Failure Network](#) web site.

Tips about activity

- ✓ Stick with it, so it becomes a habit.
- ✓ Include a variety of different activities so you do not get bored doing the same thing all the time.
- ✓ Wear loose, comfortable clothing and supportive shoes.
- ✓ Count the fluids you drink during the activity as part of your daily fluid amount.



What if you don't feel confident doing activities and exercises on your own?

There are many community-based programs designed specifically for people with heart disease.

To find a program in your community:

- Talk to your health care provider
- Call HealthLink BC at 8-1-1
- Go to the HealthLink BC website (www.healthlinkbc.ca).
 - Click on the 'Find' button.
 - Type in 'cardiac rehabilitation' in the 'What?' box.
 - Type in your location in the 'Where?' box.
 - Click the 'Go' button.
 - Choose a program.
- Contact the Physical Activity Line (PAL)
 - 1-877-725-1149
 - www.physicalactivityline.com
 - info@physicalactivityline.com



Limiting Fluid When You Have Heart Failure

What is a fluid?

Any food or drink that is liquid at room temperature. This includes water, ice, milk, juices, soft drinks, hot drinks, alcohol, soups, gelatin desserts, ice cream, popsicles, and liquid nutrition supplements (such as Ensure or Boost).

Why do you have to limit fluid?

When you have heart failure, fluid can build up causing swelling in your feet, legs or belly making your heart work harder. Fluid can also build up in your lungs, which may cause you to have trouble breathing.

How much fluid can you have in a day?

You should have **no more than 1.5 to 2 litres of fluid in a day**. You may find you are thirsty to begin with. As you gradually reduce your fluid intake, your body will adjust!

Guide to Fluid Measures

2 tablespoons	=	30 ml	=	1 ounce
1 glass	=	250 ml	=	8 ounce
1 pint	=	500ml	=	16 ounce
1 litre or 1 quart	=	1000 ml	=	32 ounce
2 litres	=	2000 ml	=	64 ounce

Total amount of fluid per day
1.5-2 litres = 48-64 ounces = 6-8 glasses

How do you know when you have too much fluid?

To keep track of whether your body is holding on to too much fluid, weigh yourself daily.

Here is how to weigh yourself:

- ♥ Weigh yourself at the same time every day. The best time is first thing in the morning.
- ♥ Weigh yourself after emptying your bladder (gone pee).
- ♥ Wear the same amount of clothing each time.



You are holding on to too much fluid when:

- Your weight increases by more than 2 kg or 4 lb in two days.
- or
- Your weight increases by more than 2.5 kg or 5 lb in a week.

Contact your health care provider right away if you are holding too much fluid.

Tips for reducing your fluid intake

- ♥ Use smaller cups and glasses.
- ♥ Measure the amount of fluid your mugs and glasses hold. They may measure more than 250 ml or 8 ounces!
- ♥ Sip your fluids slowly.
- ♥ Write down the amount you drink each day until limiting your fluid becomes a habit.

(More tips on page 2.)



More tips for reducing your fluid intake

- ♥ Sip your fluids throughout the day. Keeping track of fluids is the only way to learn how to make the 1.5 to 2 litres of fluid last you through the day.
- ♥ You may find it easier to use a reusable water bottle. Measure how much the bottle holds so you know exactly how much water you are drinking.
- ♥ Drain the fluid from canned fruit.
- ♥ Be aware of foods with high water content like watermelon, yogurt, and pudding.
- ♥ If you can, swallow your pills with soft food like yogurt or porridge.



- ♥ Limit the amount of sodium you eat to 2000mg or less each day. Salt will make you thirsty. For more information, refer to the handout *Limiting salt (sodium) when you have heart failure*.



- ♥ Try not to eat sweet foods. They can make you thirsty. If you have diabetes, controlling your blood sugar also helps control your thirst.
- ♥ Try not to drink alcohol. Alcohol dehydrates your body and makes you thirsty.

Tips to deal with thirst

- ♥ Rinse your mouth with water often, but do not swallow.
- ♥ Brush your teeth often.
- ♥ Use a mouth wash. However, do not use a mouth wash that contains alcohol. They tend to dry out your mouth.
- ♥ Snack on a small piece of cold or frozen fruit such as a frozen grape or cold orange slice. Try cold crisp vegetables too.
- ♥ Chew sugar-free gum.
- ♥ Suck on a lemon wedge, lemon candy, or sour candy.
- ♥ Use lip balm to keep your lips from drying out.
- ♥ Don't overheat your home. Consider using a humidifier to increase the moisture in the air.
- ♥ Ask your pharmacist about gels or sprays that can add moisture to your mouth.

For more tips and resources for limiting fluid, call HealthLink BC (dial 8-1-1) to speak to a health care professional. You can also refer to www.healthlinkbc.ca (or [click here](#)).

Daily Weight Information

Patient Name: _____

Heart Function Clinic or Physician's office: _____

Health Care Provider: _____

Contact phone number: _____

Check Your Weight Every Day

Why:

- ♥ Checking your weight every day lets you know if your body is retaining fluid.
- ♥ Excess fluid build up in your body makes your heart work harder.
- ♥ When you report weight gain early to your health care provider, they can help you prevent your heart failure from getting worse. This can help prevent a hospital admission.

If your weight increases by:

- More than 2 kg (4 lb) in two days, or
- More than 2.5 kg (5 lb) in 1 week



You are retaining fluid.

You should call your health care provider.



For further directions, please refer to 'Heart Failure Zones' information sheet.

When:

- ♥ Same time every day
- ♥ Preferably before breakfast

How:

- ♥ After you have emptied your bladder (gone 'pee')
- ♥ Wear the same amount of clothing

Record your weight in the attached calendar.

(**or** You may prefer to use your own method such as a notebook, a computer.)

Remember to bring your record to your doctor or clinic appointment.



Your 'Dry Weight' (when you don't have excess fluid in your body): _____

Write down your weight each day compare today's weight to yesterday's weight.

If your weight increases by:

- More than 2 kg (4 lb) in two days, or  You are retaining fluid.
- More than 2.5 kg (5 lb) in 1 week  You should call your health care provider.

Month _____						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday



Limiting Sodium (Salt) When You Have Heart Failure

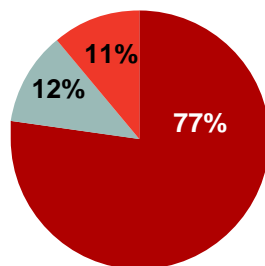
Sodium is a mineral found in food, table salt, and sea salt. Your body needs some sodium, but too much sodium causes your body to hold on to (or retain) fluid. This fluid build-up makes your heart work harder. The fluid build-up can cause swelling in your feet, legs, or belly. Fluid can also build up in your lungs, making it hard for you to breathe.

If your weight increases by more than 2 kg (4 lb) in two days, or 2.5 kg (5 lb) in 1 week, you are retaining fluid. If this happens, you should call your health care provider right away.

You should restrict the amount of sodium you eat to 2000mg or less each day.

In the average Canadian diet, where does sodium come from?

- In ready-made processed foods and restaurant meals (77%)
- Naturally occurring in food (12%)
- Added to food in cooking and at the table (11%)



How to avoid salt (sodium)?

- ♥ Eat fresh foods most of the time and prepare home-cooked, low sodium meals.
- ♥ Frozen foods are acceptable if they do not have added salt or sodium additives (which are used as preservatives).

- ♥ Remove the salt shaker from the table. Don't add salt, flavoured salts or seasonings high in salt to your foods.
One teaspoon of salt contains 2300mg of sodium!



- ♥ Season your food with herbs, spices, lemon juice, dry mustard, and garlic. Try one of the many seasoning blends which contain no salt such as Mrs. Dash.
- ♥ Stay away from eating:
 - processed foods
 - deli meats
 - pickled foods
 - salted snack foods such as potato chips, pretzels, dips, and salted nuts
- ♥ Limit the amount of canned foods you eat. Choose products labelled 'low sodium'. Foods labelled 'lower', 'less' or 'reduced in salt or sodium' may still be high in sodium (including soups and meats).
- ♥ Eat out less often.
 - Ask restaurants to provide information on low sodium choices.
 - Restaurant meals and fast foods are always higher in salt than home cooked low sodium meals.
 - For more info, please refer to *Low Sodium (Salt) Eating Out* fact sheet at <http://www.healthlinkbc.ca/healthyeating/low-sodium-choices.html>



Can I use Salt Substitutes?

Some salt substitutes use potassium instead of sodium. Check with your doctor or dietitian before using a salt substitute because some people need to limit how much potassium they have each day.

Keep your sodium intake to less than 2000mg each day.

As you gradually reduce the amount of salt you are eating, your taste buds will adjust!

How do I know how much sodium is in food?

Here are some helpful tips when reading the nutrition label:

- ♥ Look at the serving size – the amount of sodium listed is per serving (not the whole package).
- ♥ Keep track of the total amount of sodium you eat.
Remember: Your maximum recommended daily amount of sodium is **no more than 2000mg per day from all sources.**
- ♥ Keep the sodium content of each meal below 650mg – this helps spread out your sodium intake over the day preventing excessive thirst and/or fluid retention.
- ♥ By law, foods labelled 'low sodium' must contain 140mg or less per serving.

Other ingredients high in sodium include: baking soda, brine, monosodium glutamate (MSG), soy sauce, fish sauce, garlic salt, celery salt, or any ingredient with 'sodium' as part of its name.

Nutrition Facts			
Serving Size: Per ½ cup (125ml)			
Amount	% Daily Value		
Calories	140		
Total Fat	0.5g	1%	
Saturated Fat	0.2g	1%	
+ Trans Fat	0g		
Cholesterol	0mg	0%	
Sodium	390mg	16%	
Total Carbohydrate	28g	9%	
Dietary Fibre	5g	20%	
Sugars	9g		
Protein	7g		
Vitamin A	2%	Vitamin C	0%
Calcium	8%	Iron	15%

Look what happens to the sodium content of foods when they are processed

Unprocessed	Processed
Cucumber 7 slices = 2mg	Dill pickle 1 medium = 569mg
Chicken Breast 3oz = 74mg	Chicken Pie 1 serving frozen = 889mg
Tomato 1 small = 14mg	Tomato Soup 1 cup = 960mg
Pork Tenderloin 3 oz = 58mg	Ham 3oz = 1095mg



Beta Blockers

Most common Beta Blockers

- Ask your health care provider to check off the one you are taking.
- Bisoprolol (Monacor)
 - Carvedilol (Coreg)
 - Metoprolol (Lopressor)
 - Other _____

What are Beta Blockers?

Beta Blockers are a group of medications that relax the heart muscle and slow down the heart rate. These medications also block the effects of your body's stress hormones. Stress hormones narrow blood vessels making it harder for your heart to pump blood around your body. Blocking your stress hormones relaxes blood vessels, making it easier for your heart to pump.

What are Beta Blockers used for?

- Heart failure
- High blood pressure
- Fast heart rate or irregular heart rhythms
- Angina chest pain
- After a heart attack

How do Beta Blockers help with heart failure?

Beta Blockers can:

- Lower your blood pressure so your heart doesn't have to work as hard
- Slow the progress of your heart failure
- Improve your quality of life
- Help you live longer

What if you miss taking a dose?

If it is almost time for your next dose, skip taking the dose you missed and just take your next scheduled dose.

Never take two doses at the same time.

If you have questions about taking your medications, or missed doses, contact your pharmacist or your health care provider. In British Columbia, you can also call 8-1-1.

Do not take any of the following without checking with your health care provider

- ✗ Alcohol
- ✗ Cough or cold medicines
- ✗ Black licorice
- ✗ Herbal products
- ✗ Chinese medicines
- ✗ Anti-inflammatory medicines (such as Advil, Ibuprofen, Motrin, Naproxen, Aleve, Celebrex)
- ✗ Other medicines you can buy at a pharmacy

Health care provider contact information

Did you know? It can take several weeks, and sometimes months, before you notice your heart failure improving and you start feeling better.

Did you know? People often feel worse for the first 1 to 2 weeks after starting beta blockers or after the dose is changed. You might feel more tired than usual, or notice your heart failure symptoms are worse.

Common Side Effects

If you get any of these side effects, talk with your health care provider about how best to deal with them.
Contact your health care provider if any of these side effects do not go away or get worse.

Feeling tired all the time



Dizzy or lightheaded

A very slow heart rate (medication slows down your heart too much) – can make you feel dizzy



Short of breath or trouble breathing



Cold hands or feet

Numbness or tingling in your hands or feet

Changes in mood

Feeling down or depressed

Trouble sleeping

Nightmares

Could lose sexual desire

Liquid bowel movements (diarrhea)

If you are taking diabetic medication, beta blockers can mask or hide signs of a low blood sugar. For example, you might not feel shaky or feel your heart racing. However, you will have other signs of a low blood sugar such as hunger and sweating.

Medication Tips

♥ Before you start taking a beta blocker, make sure you tell your health care provider:

- If you have a history of breathing problems (such as asthma)
- If you have peripheral vascular disease (such as cold hands or feet, or pain in legs after walking)

♥ If you have high blood pressure, talk with your health care provider before using any products that might raise your blood pressure such as:

- Cough or cold drugs
- Diet pills or other stimulants
- Ibuprofen
- Natural products

✘ **Do not** suddenly stop taking beta blockers. It can make your heart failure worse.

♥ If you have low blood pressure, do not do anything that can lower your blood pressure even further.

- ✘ **Do not** drink alcohol.
- ✘ **Do not** do any strenuous exercise.
- ✘ **Do not** take really hot showers or baths, or use a hot tub.

♥ **Contact your health care provider right away** if you have any of these signs of a very bad reaction to the beta blocker:

- Wheezing
- Chest tightness
- Itching skin
- Seizures
- Swelling of face, lips, tongue, or throat
- If you feel like you are going to faint or collapse

To learn more about Beta Blockers, go to the HealthLinkBC web site (www.healthlinkbc.ca) or call 8-1-1.



ACE Inhibitors

Most common ACE Inhibitors

Ask your health care provider to check off the one you are taking.

- Ramipril (Altace)
- Perindopril (Coversyl)
- Trandolapril (Mavik)
- Enalapril (Vasotec)
- Lisinopril (Prinivil, Zestril)
- Quinapril (Accupril)
- Other _____

What are ACE Inhibitors?

ACE Inhibitors are a group of medications that keep your body from making stress hormones. Stress hormones constrict or narrow blood vessels making it harder for your heart to pump blood around your body.

ACE Inhibitors cause blood vessels to relax, allowing your blood to flow more easily. This reduces the work of your heart and lowers your blood pressure.

What are ACE Inhibitors used for?

ACE Inhibitors are used to treat:

- Heart failure
- High blood pressure

ACE Inhibitors also help:

- Prevent kidney damage in people with diabetes or at risk for kidney disease
- The heart recover after a heart attack

How do ACE Inhibitors help with heart failure?

ACE Inhibitors may:

- Slow the progress of your heart failure
- Help you live longer
- Improve your quality of life
- Prevent you from needing to be in the hospital for HF treatment

When used as a part of your heart failure treatment plan along with your other heart failure medications, ACE

Inhibitors might help:

- Lessen your shortness of breath
- Reduce the swelling in your legs and belly
- Increase your energy



What if you miss taking a dose?



If it is almost time for your next dose, skip taking the dose you missed and just take your next scheduled dose.

Never take two doses at the same time.

If you have questions about taking your medications, or missed doses, contact your pharmacist, your health care provider, or in British Columbia call 8-1-1.

Do not take any of the following without checking with your health care provider

- ✗ Alcohol
- ✗ Cough or cold medicines
- ✗ Black licorice
- ✗ Herbal or Chinese medicines
- ✗ Aboriginal herbs
- ✗ Anti-inflammatory medicines (such as Advil, Ibuprofen, Motrin, Naproxen, Aleve, Celebrex)

Common Side Effects	What to do
Dry cough 	This might go away after a while. If your cough gets worse or becomes a problem for you, contact your health care provider.
Skin rash Itchiness Fever and chills	Contact your health care provider if these side effects do not go away within 2 days of starting the medication.
Dizzy Lightheaded 	When changing position such as moving from lying to sitting and sitting to standing, get up slowly. Contact your health care provider if these side effects continue or get worse.
Serious but not Common Side Effects	
Swelling of your face, lips, tongue Trouble breathing, Difficulty swallowing	Stop taking the ACE Inhibitor. Contact your doctor right away or go to your nearest emergency department.

Medication Tips

- ♥ ACE Inhibitors might make you dizzy or lightheaded for the first few days, but this usually improves over time.

 - If your dizziness does not get better, your health care provider might need to change the type or amount of ACE Inhibitor you are taking.
- ♥ It can take several weeks, and sometimes months, before you notice an improvement in your heart failure.
- ♥ ACE Inhibitors could increase the potassium level in your body. Do not take potassium supplements unless prescribed by your health-care provider.

 - Check with your health care provider before using products that contain potassium such as salt substitutes.
- ♥ If you have low blood pressure, do not do anything that can lower your blood pressure even further:

 - ✗ Do not drink alcohol.
 - ✗ Do not do any strenuous exercise.
 - ✗ Do not take a really hot shower or bath, or use a hot tub.
- ♥ If your medication dose is being increased or decreased, your health care provider will want to do a blood test to check your potassium level and kidney function.
- ♥ Contact your health care provider if you have diarrhea and/or vomiting that lasts more than two days.

 - This can cause you to lose too much water and could cause problems with your kidneys.

For more about ACE Inhibitors, go the HealthLinkBC web site (www.healthlinkbc.ca) or call 8-1-1



Diuretics

Most common Diuretics

- Ask your health care provider to check off the one you are taking.
 - Furosemide (Lasix)
 - Metolazone (Zaroxolyn)
 - Hydrochlorothiazide (HydroDIURIL, Moduret)
 - Bumetanide (Burinex)
 - Other _____

What are Diuretics?

Diuretics are medications that help your kidneys get rid of any extra water and extra salt in your body. Many people call these medications 'water-pills'.

What are Diuretics used for?

- Heart failure
- High blood pressure
- Other health problems that cause fluid to build-up in the body

How do Diuretics help with my heart failure?

Diuretics can:

- Lower your blood pressure so your heart doesn't have to work as hard
- Prevent or reduce shortness of breath, swelling and bloating
- Help you urinate ('go pee') more so your body has less fluid and your heart doesn't have to work as hard to pump
- Improve your quality of life

What if you miss taking a dose?

If it is almost time for your next dose, skip taking the dose you missed and just take your next scheduled dose.

Never take two doses at the same time.

If you have questions about taking your medications, or missed doses, contact your pharmacist, your health care provider. In British Columbia, you can also call 8-1-1.

Do not take any of the following without checking with your health care provider

- ✗ Alcohol
- ✗ Cough or cold medicines
- ✗ Black licorice
- ✗ Herbal products
- ✗ Chinese medicines
- ✗ Anti-inflammatory medicines (such as Advil, Ibuprofen, Motrin, Naproxen, Aleve, Celebrex)
- ✗ Other medicines you can buy at a pharmacy

Health Care Provider contact information

To learn more about diuretics, go to the HealthLinkBC web site (www.healthlinkbc.ca) or call 8-1-1.

Common Side Effects

Always tell your health care provider if you have any side effects

- Urinating or going pee often
This can last up to 4 hours after you take your diuretic.
- Feeling dizzy or lightheaded
- Feeling sick to your stomach (nauseated) or not having an appetite
- Feeling very tired or weak



- muscle cramps
- Dehydration (when you have lost too much fluid)
You may be dehydrated if you have
 - Lose more than 4 lbs in 2 days or 5 lbs in a week.
 - A really dry mouth.
 - If you are very thirsty.
 - If your urine (pee) is dark-coloured.
 - If you are extremely dizzy.

Contact your health care provider right away if side effects do not go away or get worse

Medication Tips

- ♥ While taking a diuretic, weigh yourself every day and record your weight.
Call your health care provider if you gain more than 4 lbs (2 kg) in 2 days or 5 lbs (2.5 kg) in 1 week.
- ♥ Always check with your health care provider before you stop taking your diuretic. If you stop taking your diuretic, your heart failure could get worse.
- ♥ Drink no more than 1.5 to 2 litres of fluid each day.
1.5-2.0 litres = 48-64 ounces = 6-8 glasses
(Refer to [Limiting Fluid resource](#) to learn more)
- ♥ If you get an upset stomach from taking your diuretic, take your pills with meals.
- ♥ Get up slowly when changing position such as moving from lying to sitting and sitting to standing.
- ♥ Balance rest with activity to conserve your energy.
- ♥ Take your last dose preferably before noon so you don't have to get up often during the night.
- ♥ Limit the amount of time you spend in the sun and always wear sun screen (even on cloudy days).
- ♥ Always tell your health care provider if you are taking high blood pressure medications, digoxin, anti inflammatory medication, or steroids.
- ♥ Always tell your health care provider you have diabetes, kidney disease, liver disease, or gout.
- ♥ Check your blood pressure at least once a week or have it checked by your health care provider.
- ♥ Make sure your blood is tested regularly to check the levels of potassium and sodium, and to check your kidney function.
- ♥ If you have low blood pressure, do not do anything that can lower your blood pressure even more.
 - ✗ Do not drink alcohol.
 - ✗ Do not do any heavy exercise.
 - ✗ Do not take really hot showers or baths, or use a hot tub.



Angiotensin II Receptor Blockers (ARBs)

Most common ARBs

Ask your health care provider to check off the one you are taking.

- Candesartan (Atacand)
- Losartan (Cozaar)
- Valsartan (Diovan)
- Irbesartan (Avapro)
- Other _____

What are ARBs?

ARBs are a group of medications that keep your body from making stress hormones. Stress hormones constrict or narrow blood vessels making it harder for your heart to pump blood around your body.

ARBs cause blood vessels to relax, allowing your blood to flow more easily. This reduces the work of your heart and lowers your blood pressure.

What are ARBs used for?

Used to treat:

- ♥ Heart failure
- ♥ High blood pressure

ARBs also help:

- ♥ Prevent kidney damage in people with diabetes or at risk for kidney disease
- ♥ The heart recover after a heart attack

How do ARBs help with heart failure?

ARBs may:

- ♥ Slow the progress of your heart failure
- ♥ Help you live longer
- ♥ Improve your quality of life
- ♥ Prevent you from needing to be in the hospital for heart failure treatment

When used as a part of your heart failure treatment plan, along with your other heart failure medications, ARBs

may help:

- ♥ Lessen your shortness of breath
- ♥ Reduce the swelling in your legs and belly
- ♥ Increase your energy



What if you miss taking a dose?


If it is almost time for your next dose, skip taking the dose you missed and just take your next scheduled dose.

Never take two doses at the same time.

If you have questions about taking your medications, or missed doses, contact your pharmacist, your health care provider, or in British Columbia call 8-1-1.

Do not take any of the following without checking with your health care provider

- ✗ Alcohol
- ✗ Cough or cold medicines
- ✗ Black licorice
- ✗ Herbal or Chinese medicines
- ✗ Aboriginal herbs
- ✗ Anti-inflammatory medicines (such as Advil, Ibuprofen, Motrin, Naproxen, Aleve, Celebrex)

Common Side Effects	What to do
Dizzy Lightheaded 	Get up slowly when changing position such as moving from lying to sitting or sitting to standing. Contact your health care provider if these side effects continue or get worse This side effect may be the strongest after your first dose especially if you also take a diuretic
Lowering of blood pressure	Get up slowly when changing position such as moving from lying to sitting or sitting to standing Contact your health care provider if these side effects continue or get worse.
Diarrhea	Contact your health care provider if it lasts more than 2 days
Serious but not Common Side Effects	What to do
Swelling of your face, lips, tongue Trouble breathing, Difficulty swallowing	Stop taking the ARBs Contact your doctor right away or go to your nearest emergency department

Do you know? That it can sometimes take several weeks or months before your symptoms improve and you start to feel better.

Medication Tips

- ♥ ARBs might make you dizzy or lightheaded for the first few days, but this usually improves over time.
 - ♥ If these symptoms do not get better, your health care provider might need to change the amount of the ARB you are taking
- ♥ If you have symptoms of low blood pressure, you may want to avoid activities that will lower your blood pressure even further such as:
 - ✗ drinking alcohol
 - ✗ doing strenuous exercise
 - ✗ taking a really hot shower or bath
 - ✗ using a hot tub
- ♥ ARBs could increase the potassium level in your body. Do not take potassium supplements unless prescribed by your health-care provider.
 - ♥ Check with your health care provider before using products that contain potassium such as salt substitutes
 - ♥ Your health care provider will do a blood test to check your potassium level and kidney function from time to time
- ♥ Contact your health care provider if you have diarrhea and/or vomiting that lasts more than two days.
 - ♥ As it may cause you to lose too much water which could cause problems with your kidneys

For more information about ARBs, go the HealthLinkBC web site www.healthlinkbc.ca) or call 8-1-1



Aldosterone Blockers

A group of medications also called aldosterone inhibitors or aldosterone antagonists.

Most common Aldosterone Blockers

- Ask your health care provider to check off the one you are taking.
 - Spironolactone (Aldactone)
 - Eplerenone (Inspra)

What are Aldosterone Blockers?

Aldosterone is a steroid hormone that helps your kidneys control the amount of sodium, potassium, and water in your body.

Aldosterone blockers have two actions. By blocking this hormone:

- Your kidneys hold onto more potassium.
- Your kidneys get rid of more salt (sodium) and water by increasing how much you urinate ('pee').

What are Aldosterone Blockers used for?

- Heart failure
- High blood pressure
- Other health problems that cause fluid to build-up in the body

How do Aldosterone Blockers help with heart failure?

- Less water in your body lowers your blood pressure so your heart doesn't have to work as hard
- Decreases your shortness of breath
- Decreases swelling in your legs and bloating in your stomach
- Could prevent you from needing treatment for heart failure in the hospital

What if you miss taking a dose?

If it is almost time for your next dose, skip taking the dose you missed and just take your next scheduled dose.

Never take two doses at the same time.

If you have questions about taking your medications, or missed doses, contact your pharmacist, your health care provider. In British Columbia, you can also call 8-1-1.

Do not take any of the following without checking with your health care provider

- ✗ Potassium supplements
- ✗ Salt substitutes
- ✗ Alcohol
- ✗ Cough or cold medicines
- ✗ Black licorice
- ✗ Herbal products
- ✗ Chinese medicines
- ✗ Anti-inflammatory medicines (such as Advil, Ibuprofen, Motrin, Naproxen, Aleve, Celebrex)
- ✗ Other medicines you can buy at a pharmacy without a prescription

Health Care Provider contact information

To learn more about Aldosterone Blockers, go to the HealthLinkBC web site (www.healthlinkbc.ca) or call 8-1-1.

Common Side Effects

Always tell your health care provider if you have any side effects.

- | | |
|--|--|
| <ul style="list-style-type: none">• High levels of potassium in your blood• Urinating or going pee too often• Feeling dizzy or lightheaded• Dehydration (when you have lost too much fluid)
You may be dehydrated if you:<ul style="list-style-type: none">– Lose more than 4 lbs in 2 days or 5 lbs in a week.– Have a really dry mouth.– Are very thirsty.– Are extremely dizzy.– Your urine (pee) is a really dark-colour. | <ul style="list-style-type: none">• Feeling sick to your stomach (nauseated)• Not having an appetite• Headache• Muscle cramps• For men: Breast tenderness
Enlarged breasts <p>Less common side effects</p> <ul style="list-style-type: none">• Rash• Menstrual irregularities and breast tenderness in women |
|--|--|

Contact your health care provider right away if side effects do not go away or get worse.

Medication Tips

- ♥ While taking an aldosterone blocker, weigh yourself every day and record your weight.
 - Call your health care provider if you gain more than 4 lbs (2 kg) in 2 days or 5 lbs (2.5 kg) in 1 week.
- ♥ Do not drink more than 1½ to 2 litres of fluid each day.
1½ - 2.0 litres = 48 - 64 ounces = 6 - 8 glasses
(Refer to [Limiting Fluid resource](#) to learn more)
- ♥ To keep from feeling sick to your stomach, eat food right before or after taking the medication.
- ♥ Do not take potassium supplements or eat foods high in potassium such as dried fruit, potatoes, orange juice, bananas, and avocados.
(To learn more about potassium in food refer to the patient education resource)
- ♥ Your health care provider might arrange for regular blood tests to check your potassium and sodium levels, and kidney function.
- ♥ Always check with your health care provider before you stop taking your aldosterone blocker. If you stop taking this medication, your heart failure could get worse.
- ♥ Always tell your health care provider if you are taking high blood pressure medications, digoxin, anti inflammatory medication, or steroids such as cortisone.
- ♥ Always tell your health care provider if you have diabetes, kidney disease, liver disease, or gout.
- ♥ If you have low blood pressure, do not do anything that can lower your blood pressure even more.
 - ✗ Do not drink alcohol.
 - ✗ Do not take really hot showers or baths, use a hot tub.



Digoxin (Lanoxin or Toloxin)

What is Digoxin?

Digoxin is a medication that:

- Slows your heart rate down
- Helps the heart beat stronger

This medication might be added to your treatment plan to improve some symptoms of your heart failure.

What is digoxin used for?

For people with **heart failure**, we use digoxin to help the heart beat stronger and pump better.

For people with **irregular heart rhythms** (such as atrial fibrillation), we use digoxin to help the heart beat slower.

How does digoxin help with heart failure?

When digoxin strengthens the pumping action of the heart, it should help you:

- Feel less tired
- Feel stronger
- Feel less short of breath
- Have less swelling of the feet and ankles

Digoxin helps control some of the electrical impulses in the heart. This slows the heart beat down and helps it to beat with a more regular rhythm. This adds to the effects of a stronger pumping action.

Digoxin helps keep your heart failure symptoms from getting worse.

What if you miss taking a dose?

If you remember within 12 hours of when were to take the missed dose, take it as soon as you remember.

If you are due to take your next dose in less than 12 hours, do not take the missed dose. Wait and take your next dose when you normally take it. Continue to take your digoxin as scheduled

If you have questions about taking your medications, or missed doses, contact your pharmacist or your health care provider.

Do not take any of the following without checking with your health care provider

- ✗ Herbal medicines
- ✗ Alcohol
- ✗ Cough or cold medicines
- ✗ Black licorice
- ✗ Chinese medicines
- ✗ Anti-inflammatory medicines (such as Advil, Ibuprofen, Motrin, Naproxen, Aleve, Celebrex)
- ✗ Other medicines you can buy at a pharmacy

Health care provider contact information

To learn more about Digoxin, go to the HealthLinkBC web site (www.healthlinkbc.ca) or call 8-1-1.

Common Side Effects

Always tell your health care provider if you have any side effects.

- | | |
|---|--|
| <ul style="list-style-type: none">• Feeling weak or tired• Feeling sick to your stomach (nauseated)• Throwing up (vomiting)• Abdominal pain• Do not feel like eating (lost your appetite) | <ul style="list-style-type: none">• Skin rash, itchiness• Feeling dizzy or lightheaded• Headache• Changes in your vision:<ul style="list-style-type: none">– Red, green or yellow color disturbances– Things look slightly blurry– Sensitive to bright light– Seeing flashing lights |
|---|--|

CONTACT your health care provider right away if any of these side effects do not go away or get worse.





Medication Tips

- ♥ Take your digoxin at the same time every day.
- ♥ Take your digoxin 1 hour before eating or 2 hours after eating.
- ♥ If you take an antacid, high fibre foods, or fibre supplements, always wait 2 hours before you can take your digoxin. These things can reduce the amount of digoxin absorbed by your body.
- ♥ **Never stop taking digoxin all of a sudden.** It can make your heart failure worse.
- ♥ You need your heart rate and blood pressure checked regularly while taking digoxin.
 - If you can check your heart rate and blood pressure at home, ask your health care provider when to call with any changes in your heart rate or blood pressure.
- ♥ Digoxin is broken down in your body by your kidneys. Let your health care provider if you are having any kidney problems or have kidney disease. You might need a blood test to check how well your kidneys are working.
- ♥ You might be sent for a blood test to check the level of digoxin in your blood, especially when you first start taking it. This tells your health care provider if the dose needs changing. This blood test is best done 8 or more hours after your last dose.
- ♥ **Contact your health care provider right away or go to the nearest Emergency Department** if you have any of these signs of too much digoxin in your body:
 - Your heart is beating very slow (less than 50 beats a minute) and you feel weak or dizzy.
 - You have nausea and vomiting that does not go away.
 - You have diarrhea, maybe even with blood in it or it looks black.
 - You feel very confused, are seeing things that are not there (hallucinating), or have unusual thoughts or behaviour.
 - You have trouble seeing, everything looks green or yellow, everything is blurry, or you see 'halos' around objects.



Foods High in Potassium

**Foods with more than 200mg per serving
Based on ½ cup servings
(Unless indicated otherwise)**

Fruits	Vegetables	Other foods
Apricots (fresh) Avocado Banana Breadfruit Cantaloupe Coconut dried (unsweetened) Dried Fruits Durian Guava Honeydew Jack fruit Kiwi Nectarines Orange (1 medium) Passion fruit Peach (medium) Pear (medium) Persimmon, Japanese (medium) Plantain Pomegranate Pummelo Rhubarb Tangerine	Artichoke (cooked) Asparagus (boiled) Beets Beet Greens (boiled) Bok Choy (cooked) Broccoli Brussels Sprouts Celery (cooked) Corn (cooked) Carrots (raw or grated) Kohlrabi Mushrooms (dried and cooked) Parsnips (cooked) Potatoes Pumpkin Rutabaga Seaweed (dried) Spinach (cooked) Squash (acorn, butternut, hubbard, zucchini) Sweet Potato	Swiss Chard (cooked) Tomatoes (medium, raw) Tomato Paste Tomato Sauce Yams <div style="text-align: center;"></div> <div style="background-color: #c6e0b4; text-align: center; padding: 5px;">Juices</div> Carrot Coconut water Grapefruit * check with your health care provider before taking as it may interact with your heart pills Orange Passion fruit Pomegranate Prune Tomato Vegetable
<div style="text-align: center;"></div>		Black licorice Bran muffin Bran cereals Chocolate Coconut milk (1/2 cup, 249 mg) Dried Beans Dried Peas Edamame Lentils Milk and Dairy products (limit to 1 cup/day = 366mg) Maple Syrup Molasses Nuts Salt Substitute Seeds Soya flour
<div style="text-align: center;"></div>		<div style="text-align: center;"></div>

What should your blood Potassium level be?	
Danger - too low	→ Lower than 3 mmol/L
Safe (Normal)	→ 3.5-5.0 mmol/L
Caution	→ 5.0-6.0 mmol/L
Danger - too high	→ Higher than 6.0 mmol/L

Foods with Less Potassium

Note: Almost all foods contain some potassium.

Watch your serving size. A larger serving of a low potassium food can make it a high potassium food.

To check the amount of potassium in food not on this list, check <http://ndb.nal.usda.gov/ndb/search/list>

One serving = 1/2 cup

Enjoy up to 5 servings per day

Fruits	Vegetables	
Apples	Alfalfa Sprouts	Okra
Applesauce	Asparagus (fresh)	Onions
Apricots (canned)	Bamboo shoots, (canned)	Parsley
Berries (blackberries, blueberries, boysenberries, cranberries, gooseberries, loganberries, raspberries, strawberries)	Bean Sprouts	Peas, green (raw)
Casaba Melon	Beet greens (raw)	Peppers (Raw: Red, Green)
Cherries	Bitter melon	Potato (when double boiled)
Coconut (raw/shredded)	Bokchoy (raw)	Radicchio
Crabapple	Broccoli (raw)	Radishes
Currants, fresh	Cabbage	Seaweed (raw)
Figs fresh	Collards	Shallots
Fruit Cocktail (canned)	Carrots (when double boil)	Spinach (raw)
Grapes (red/green)	Cauliflower	Summer squash
Grapefruit	Celery (raw)	Spaghetti Squash
★ check with your health care provider before taking as it may interact with your heart pills	Cilantro	Swiss Chard (raw)
Kumquat	Corn (canned)	Turnip (when double boiled)
Lemon /Lime	Cucumber	Water chestnuts (canned)
Longans	Eggplant	
Lychee	Fennel bulb (when double boiled)	Juices
Mandarin Orange	Gai lan (Chinese Broccoli)	Apple juice
Mango	Green beans	Apricot Nectar
Oranges (1/2cup only)	Green onions	Papaya nectar
Pineapple	Jicama (when double boiled)	Peach Nectar
Plums	Kale (boiled)	Pear Nectar
Watermelon	Leeks	Pineapple Juice
	Lettuce	Grape Juice
	Mushrooms, raw	
	Mustard Greens	

Double boiling root vegetables lowers the amount of potassium



- Peel, cube or slice vegetables
- Add double the amount of water
- Bring to a boil, then drain the water
- Add fresh water, finish cooking, and drain again

Limit servings of root vegetables to 1/2 cup per day (or as discussed with your dietitian)



Herbs and Herbal Supplements

Herbs and herbal supplements can be harmful to people taking heart medications.

Always tell your health care provider about any herbs or herbal supplements you are taking.

Bring the herbs and herbal supplements you are taking to every medical visit so they can be checked.

What are herbs and herbal supplements?

Herbs and herbal supplements are plants that are used for medicinal purposes. Some people call them botanicals or herbal remedies.

Why should you be careful taking these products?

We do not always know what the active ingredients are in many herbs and herbal supplements.

Herbs and herbal supplements:

- Can act in the same way as medications. This means they can be dangerous to your health if not taken correctly, if taken in large amounts, or if taken in combination with other medications.
- Can interact with heart medications. This could cause the medication to not work as it should, magnify the medication's side effects, or cause a life-threatening reaction.
- Have not been studied to the same extent as other medications.
- They are classified as dietary supplements not medications. Therefore they are not regulated the same way other medications are regulated. The rules for making dietary supplements are not as strict.

Tips

- ♥ Before you cook with herbs contact your health care provider
- ♥ Always talk to your health care provider or pharmacist before taking herbs or herbal supplements. They can review the herbal medicine and tell you whether it could impact your heart medication.
- ♥ If you are not sure what is considered an herb or herbal supplement, see the list on the next page.
- ♥ **Never** use herbs or herbal supplements if you are taking one of these medications:
 - aspirin
 - digoxin
 - diuretics
 - hypoglycemic medications such as insulin
 - Non-steroidal anti-inflammatory medications such as ibuprofen (Advil, Motrin), naproxen (Aleve), Celebrex
 - spironolactone
 - warfarin

Health care provider contact information

If you have questions about herbs or herbal supplements, contact your health care provider or pharmacist.

To learn more about herbal supplements, go online to MedlinePlus. Click on the tab 'Drugs & Supplements' then select 'Herbs and Supplements' (or [click here](#)).

Herb or Herbal Supplement	Reasons for taking	Possible problems when you have a heart condition or you are taking heart medication
Aloe Vera (Oral)	For constipation or indigestion To prevent skin irritation	Causes abnormal heart rhythms in pregnancy and in children
Angelica (Dong quai)	Appetite loss, indigestion, infection, pre-menstrual tension syndrome	Can increase the risk of bleeding, especially when taking warfarin
Arnica	To reduce aches, or pain from injury To relieve constipation	Raise blood pressure and can be toxic to the heart
Black Cohosh (Cimicifuga racemosa)	To relieve symptoms of menopause or pre-menstrual tension syndrome	Lowers blood pressure Can increase the risk of bleeding (cause more bleeding) Can be toxic to liver
Beta carotene	Antioxidant helps get rid of substances that harm the body (free radicals)	Increases the risk of death
CoQ10 (Co-enzyme Q10, Ubiquinone, Ubiquinol)	To increase your energy To treat heart failure or other heart conditions	Does not improve heart function Can decrease the effect of warfarin
Danshen (Salvia miltiorrhiza-root)	To treat heart conditions	Can increase the risk of bleeding (cause more bleeding)
Echinacea	To prevent colds	Interferes with an enzyme in the liver that helps clear medications out of the body
Ephedra (Ma Huang)	To treat asthma, obesity	Increases heart rate and blood pressure Could cause death if taken with certain heart medications
Feverfew	To treat/prevent migraines, arthritis	Can interfere with the clotting of your blood
Fish Oil	A common supplement	Can increase the risk of bleeding, especially if used in excess
Flaxseed	To lower cholesterol.	Can increase the risk of bleeding
Ginger	To relieve nausea, lower cholesterol, stop your blood from clotting, aid in digestion	Can interfere with the clotting of your blood Can interfere with how heart or high blood pressure medications work
Garlic	To lower cholesterol To prevent and treat colds and infections	If you are taking aspirin, warfarin or other anticoagulants, it can increase your risk of bleeding
Ginkgo	To improve circulation, memory. To prevent altitude sickness	If you are taking aspirin, warfarin or other anticoagulants, it can increase your risk of bleeding Interferes with the actions of diuretics (Lasix)
Ginseng	To improve memory, physical capacity, immune system and to slow aging	Increases blood pressure and heart rate. Do not take if you have high blood pressure (hypertension) Can increase blood levels of digoxin Can increase the risk of bleeding
Goldenseal	To treat constipation, Can also acts as an anti inflammatory	Increases blood pressure, causes high blood pressure Can interfere with blood thinners (anticoagulants)
Hawthorn	To treat high blood pressure and heart failure	Do not take if you are taking digoxin and blood pressure medications
Kelp	Commonly used supplement	Can increase effects of blood pressure and anticoagulant medication Causes low blood pressure and increases risk of bleeding
Licorice root	To treat coughing, stomach ulcers and liver cirrhosis	Increases blood pressure: Do not take if you have a heart condition or on heart medications
Nettle	To treat bladder infections, kidney infections, and kidney stones	Do not take if you have fluid retention caused by heart failure or poor kidneys
St Johns Wort	To treat depression and injuries	Can increase the risk of bleeding Can decrease the effect of digoxin Should not be taken with certain antidepressants
Yohimbine	To treat impotence	Increases heart rate Increases or decreases blood pressure

Adapted from Cleveland Clinic and Mayo Clinic information on herbs and herbal supplements.



Warfarin (Coumadin)

What is warfarin?

Warfarin is a medication that stops blood clots in your body from forming or getting bigger.

Warfarin is sometimes called a 'blood thinner'. It does not actually thin your blood. It just makes you bleed more easily.

Why are you taking warfarin?

People take warfarin for different reasons.

Ask your health care provider to check off the reason why you are taking it.

- Atrial fibrillation
- Heart valve
- You have had a clot
- Other _____

How does warfarin help?

If you have a health problem that increases the chances of you getting a blood clot, warfarin prevents clots from forming.

If you already have a blood clot, warfarin prevents the clot from getting any bigger.

Why do you have to get blood tests all the time?

You must have your blood tested regularly while taking warfarin. You must have blood tests often at first. This test helps your health care provider adjust the dose to the right amount for you.

The blood test to check your blood clotting is called International Normalized Ratio (INR).

It is not always easy to keep your INR at the right level because many things affect your blood's clotting.

When the INR is:	Your health care provider will tell you how much to:
<ul style="list-style-type: none"> • too low 	<ul style="list-style-type: none"> • increase the dose of warfarin
<ul style="list-style-type: none"> • too high 	<ul style="list-style-type: none"> • decrease the dose of warfarin

What if you miss taking a dose?

Always let your health care provider know if you miss a dose. Missing a dose can affect your INR results. Not knowing you missed a dose, your health care provider could change your dose more or less than it should be changed.

If it is almost time for your next dose, skip taking the dose you missed. Take your next dose at the scheduled time.

Never take two doses at the same time.

If you have questions about taking your medications or missed doses, contact your pharmacist or health care provider. In British Columbia, you can also call 8-1-1.

Do not take any of the following without checking with your health care provider

- ✗ Any new medication
- ✗ Alcohol
- ✗ Cough or cold medicines
- ✗ Black licorice
- ✗ Herbal products
- ✗ Chinese medicines
- ✗ Other medicines you can buy at a pharmacy

Common Side Effects

Always tell your health care provider if you have any side effects.

- | | |
|---|---|
| <ul style="list-style-type: none">• Bruising easily• Small amounts of bleeding from gums when you brush and floss your teeth• Getting small nose bleeds• Taking a long time to stop bleeding when you have a cut | <ul style="list-style-type: none">• Red spots on the skin• Feeling tired• Feeling slightly lightheaded• For women, having heavier than usual menstrual periods |
|---|---|

CONTACT your health care provider right away if side effects do not go away or get worse. Arrange to see a health care provider as soon as possible if you have a serious fall or injury.

When to go to Emergency or call 9-1-1

If your INR gets too high, there is a greater chance you could start bleeding and need to get help.

Signs you are bleeding somewhere:

- Bloody or black stools ('poo')
- Pink, red, or dark brown urine ('pee')
- Coughing up blood
- Throwing up blood or throwing up what looks like coffee grounds
- Bleeding from the gums, nose, or eyes that will not stop
- Bleeding into the whites of the eyes
- Painful, blue, or purple toes
- Swelling of the abdomen or pain in the back that does not go away
- Severe headache

If your INR is too low, there is a greater chance you could get a blood clot and need to get help.

Signs you have a blood clot somewhere:

- Sudden weakness in one or both of your arms or legs
- Changes in your vision
- Slurred speech
- Dizziness or fainting
- Pain or swelling in your lower legs
- Prolonged or severe headache
- Chest pain
- Shortness of breath

Health Care Provider contact information

To learn more about warfarin go to the HealthLinkBC web site (www.healthlinkbc.ca) or call 8-1-1.

Medication Tips

- ♥ Wear medical alert identification that tells others you are taking warfarin.
- ♥ Always check with your health care provider before you stop taking warfarin. If you stop suddenly, you could have a stroke.
- ♥ Keep active. Regular activity helps circulate your blood and can help prevent clots from forming.
- ♥ Most activities are safe. However, do not take part in any activities where injury is common, such as contact sports.
- ♥ Some medicines can increase your INR and increase the chances of bleeding.
 - While taking warfarin, do not take:
 - aspirin
 - ibuprofen
 - herbal products
 - herbal supplements
 - fish oil (Omega 3 fatty acids)
 - If you take vitamin E, do not take any more than 400 units (IU) a day.
 - Always check with your health care provider before taking any other medicines you can buy from the pharmacy without a doctor's prescription.
- ♥ If you become pregnant or wish to get pregnant, you should not be taking warfarin. Talk to your health care provider.
- ♥ To reduce the chances of bleeding:
 - Use a soft toothbrush.
 - Use an electric razor.
- ♥ Alcohol can affect how the warfarin works on your blood.
- ♥ Always tell your health care provider if you are taking any of these medications:
 - aspirin
 - digoxin
 - antibiotics
 - steroids
 - clopidogrel
 - amiodarone
 - anti-inflammatory medications such as ibuprofen (Advil, Motrin) or naproxen (Aleve), or Celebrex
- ♥ Vitamin K helps your blood clot. While taking warfarin, it is important to keep the amount of vitamin K in your diet the same. If the amount of vitamin K you eat changes from day to day, it can make your INR results go up and down. Remember, if your INR gets too high or too low, the chances of you bleeding or getting a clot increases.

Foods high in vitamin K:

green leafy vegetables such as broccoli, lettuce, cabbage, Swiss chard, spinach, kale, asparagus, parsley, seaweed, Collards, beet and turnip greens, amaranth leaves, brussel sprouts

If you normally eat any of these foods, eat similar amounts eat day.

When you travel:

- ♥ You might need to get an INR blood test before you travel and/or while you are away. Check with your health care provider.
- ♥ To keep your blood circulating when sitting for long periods, make sure you stretch your legs and move your body each hour.

For more details on Vitamin K in food refer to the www.healthlinkBC.ca and BC's Heart Failure website www.bcheartfailure.ca