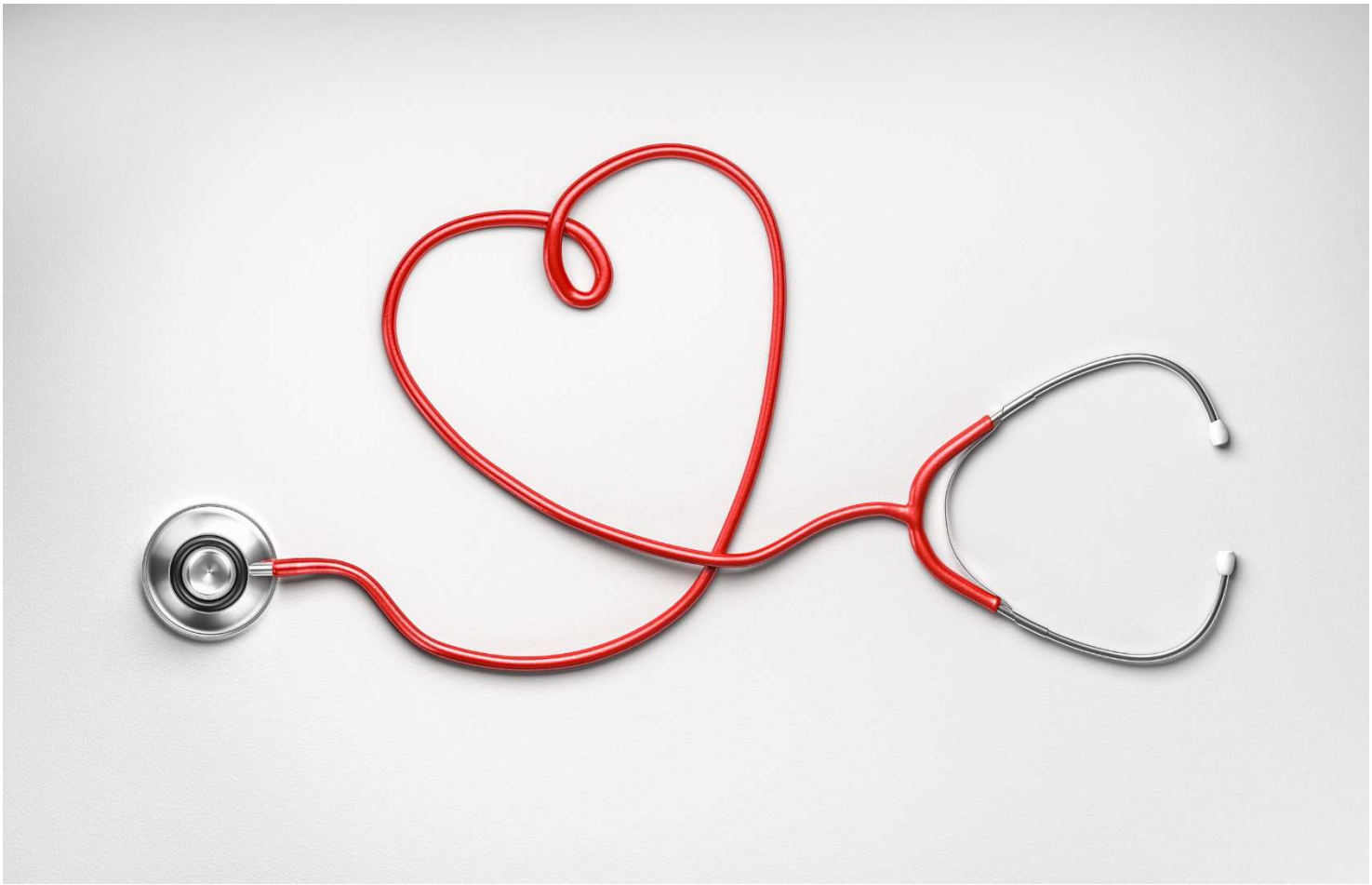
Living Well with Heart Failure

A guide to help you understand and learn to live well with heart failure.



Excellent health and care for everyone, everywhere, every time.

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July 2025

About this guide

This guide aims to educate both patients and members of their support team about heart failure, how to manage heart failure symptoms, when to contact your healthcare team, lifestyle interventions and medications.

There is a lot of information in this guide. There may be information that does not apply to you. If you have any questions about the contents of the guide or would like more information, please speak with your healthcare team.

Tip:

For auditory and/or visual learners, Cardiac Services BC has created 8 videos to help you better understand heart failure.

Scan to watch heart failure videos

For more information visit: Cardiacbc.ca/HF

Territorial Acknowledgement

Before Canada and BC were formed, Indigenous peoples lived in balance and interconnectedness with the land and water in which the necessities of life are provided. Health disparities persist, which are due to the impacts of colonization and Indigenous-specific racism. Healthy lands, healthy people. Island Health Acknowledges and recognizes these homelands and the stewardship of Indigenous peoples of this land; it is with humility we continue to work toward building our relationship.

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Contents	Pages

Cardiac Services BC
Provincial Health Services Authority

Heart Failure Zones

Check Weight Daily

- Weigh yourself in the morning before breakfast, after you empty your bladder. Write it down. Compare your weight today to your weight yesterday.
- Follow your health care provider's instructions about how much fluid to drink.
- Take your medicine exactly as recommended by your healthcare provider.
- Check for swelling in your feet, ankles, legs, and stomach.
- Avoid excess salt by cooking at home and limiting processed foods.
- Balance activity and rest periods.

Which heart failure zone are you in today?

Safe Zone

ALL CLEAR – This zone is your goal!

Your symptoms are under control, and you have:

- No new or worsening shortness of breath.
- No chest discomfort, pressure, or pain.
- No new or worsening swelling in 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 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 to breathe when you are lying down.
- You have to sleep sitting up or with extra pillows.

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.

Updated: March 2025

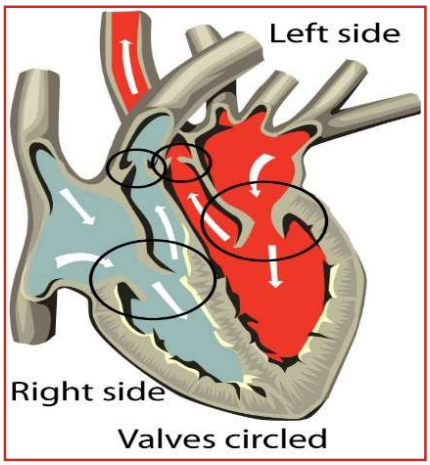
This handout is based on patient education materials originally co-created by Cardiac Services BC and the BC Heart Failure Network in 2012.

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 a 2-sided pump. The *right side* of the heart pumps 'used' blood from the body to your lungs. In the lungs, your blood is loaded 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 larger than the right side. That is because it must 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 function properly.

Heart failure usually gets worse over time. People can learn to live active, healthy lives by managing their heart failure with medications, changes in their diet, weighing daily and staying active.

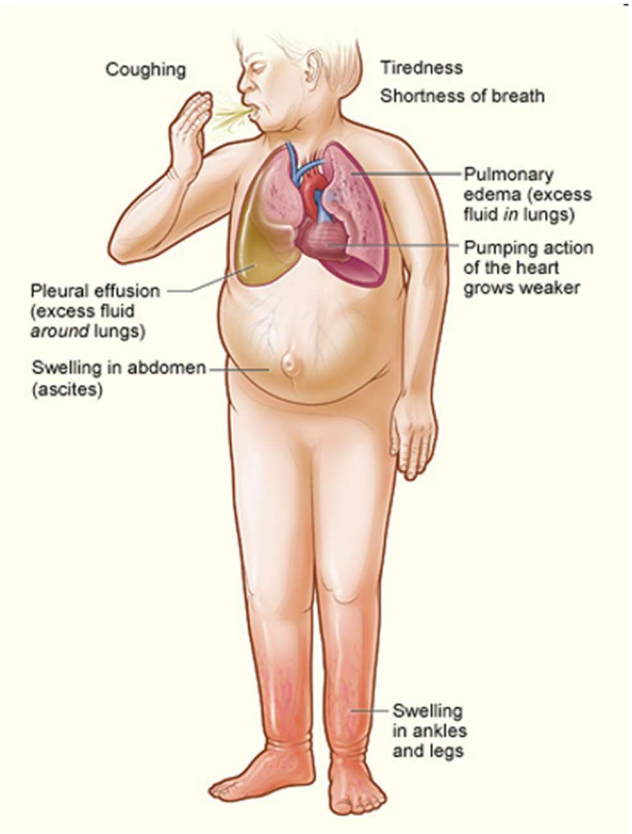
There are two main types of heart failure:

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

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

Common Symptoms of heart failure

- Shortness of breath with physical activity or when lying flat. You may need many pillows to get comfortable or sleep upright in a chair.
- Waking up with shortness of breath during your sleep (or while sleeping.)
- Dry cough, which you may notice is worse when laying down.
- Fatigue, loss of energy or extreme tiredness.
- Unexplained weight gain of 4lbs over 2 days or 5lbs in one week. This may be an early sign of water retention.
- Swelling in the legs, ankles or feet.
- Bloating or swelling in the abdomen.
- Decrease or loss of appetite.
- Palpitations or extra/irregular heartbeats.
- Confusion or difficulty thinking clearly.



What causes heart failure?

Heart failure has many causes, including:

- Heart attack (myocardial infarction)
- Blood clots or plaque in the arteries of the heart
- Valvular heart disease
- Abnormal heart rhythms
- Infiltrative diseases (cardiac amyloidosis, Sarcoidosis, Fabry's disease)
- High blood pressure (hypertension)
- Alcohol use
- Substance use
- Exposure to chemotherapy or radiation
- Family history
- Smoking
- Sleep apnea
- Severe anemia
- Severe kidney disease
- Obesity

Testing for heart failure

There is no single test to identify the cause of heart failure. You may be asked to complete several different tests. Your care team reviews your test results to determine the cause of heart failure. These tests may include:

- **Blood tests** to screen/monitor heart failure (NTproBNP).
- **Electrocardiogram (or ECG)** to look at the electrical activity of the heart.
- **Chest x-ray** to look at the size of your heart.
- **Echocardiogram (ECHO)** is an ultrasound of the heart to look at the structure and function of your heart and measure your ejection fraction. There are two types of echocardiograms: transthoracic echo (external) or transesophageal echo (internal).
- **Exercise stress test** (ETT) to look at how your heart responds to exercise.
- **Holter Monitor** to look at your heart rhythm and electrical activity over a longer time frame.
- **MIBI** is a scan to assess blood flow to the heart muscle.
- **Coronary CT scan** to assess the heart arteries for narrowing or blockages.
- **Coronary angiogram** is a semi-invasive procedure to look for narrowing or blockages in the arteries of your heart.
- **Cardiac MRI** provides detailed images of your heart muscle and arteries.
- **Nuclear medicine scan** (MUGA) to get a close look at the pumping of your heart.
- **Medical Genetic Testing** is a blood/saliva test to help diagnose cause of heart failure.
- **PET CT Scan** – a nuclear medicine scan to look for abnormal tissue, such as cardiac sarcoidosis.
- **Technetium pyrophosphate scan** (Tech PYP) is a nuclear medicine scan to assess for cardiac amyloidosis.
- **Cardiac Biopsy** is a semi-invasive procedure where a piece of heart tissue is sampled.

More about Ejection Fraction

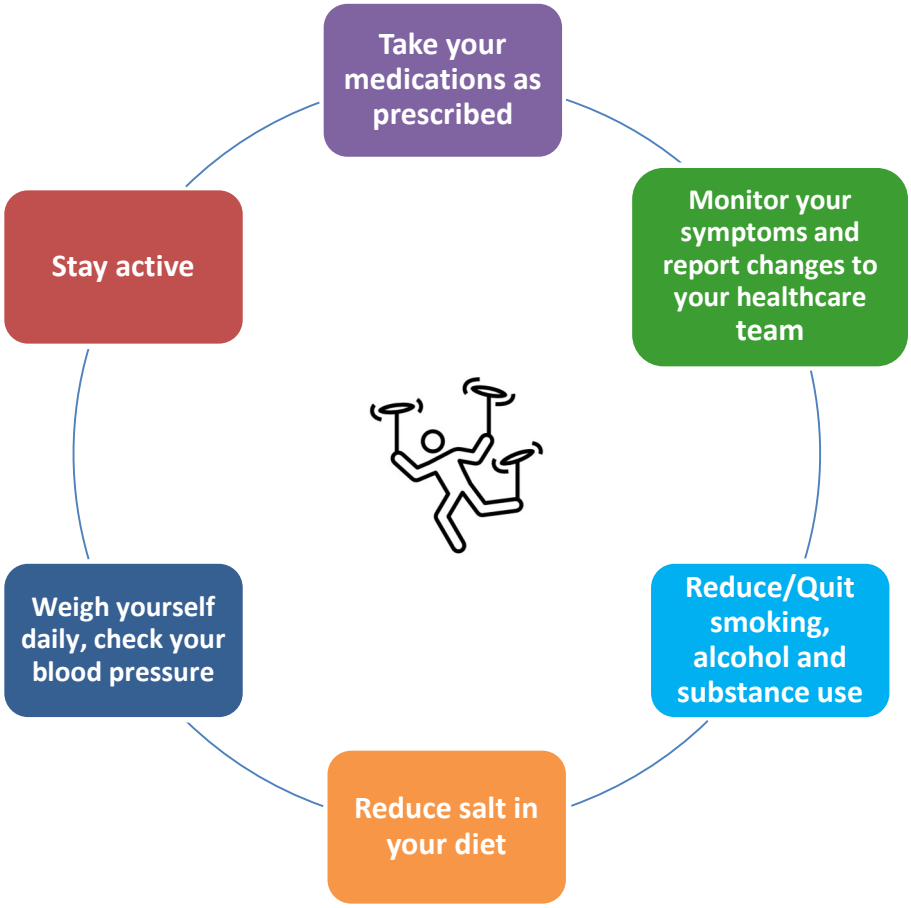
Ejection fraction (EF) is a measurement used to assess how well the heart is pumping blood. It represents the percentage of blood that is pumped out of the heart's left ventricle with each heartbeat. This test is usually done during an echocardiogram (ECHO), a nuclear medicine scan (MUGA) or a cardiac MRI. For a healthy heart, the ejection fraction is typically between 55-65%. Less than 55% means your heart is not pumping as strongly as it should be.

Your ejection fraction can go up and down, depending on your heart condition and how well the treatment is working. It is important to know what your ejection fraction reading is as it helps to guide management.

Treatment for heart failure

Your participation is the key to managing heart failure!

Your care team 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!



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

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

Heart Failure Medications

It is very important to take your medications as prescribed. Medications are first line treatment for heart failure. Tips for taking medication:

- Carry an updated list of your medications with you that includes the name and doses of your medications.
- Remember to bring your medications with you to your medical appointments.
- Consider asking your pharmacist to blister pack your medications, use a dosette (pill organizer), or calendar to help you remember to take your medication.

What is Guideline-Directed Medical Therapy?

The Canadian Cardiovascular Society (CCS) sets the standards for heart failure management in Canada, known as "Heart Failure Guidelines." These are the guidelines that your health care team follow to treat heart failure. You may not be on all the types of medications listed here. If you are not on one of these medications and are wondering why, please ask your health care provider or pharmacist.

1. Angiotensin receptor-neprilysin inhibitors (ARNI) (sacubitril-valsartan), angiotensin converting enzyme inhibitors (ACEi) ("prils"), or angiotensin-receptor blockers (ARBs) ("sartans")
2. Beta-blockers ("lols")
3. Mineralocorticoid receptor antagonists (MRAs)
4. Sodium-glucose cotransporter-2 (SGLT2) inhibitors ("flozins")

Optional therapies: furosemide, metolazone, bumetanide (diuretics), ivabradine, vericiguat

Each of these 4 classes of medication works in a unique way, however they work best when used together. On average, each of these medicines adds an extra 1-2 years of life expectancy for a patient living with heart failure.

ARNI, ACEi, ARBs

Commonly used drugs:
ARNI – Sacubitril/Valsartan (Entresto)
ACEi ("prils") – Perindopril, ramipril
ARB ("sartans") – Candesartan, valsartan
How they work: Mainly act by reducing salt and water retention, opening or dilating certain blood vessels in the body. This action can help lower blood pressure and reduce the resistance on the heart muscle.
What to watch for:

- Symptoms of low blood pressure (dizziness, lightheadedness mostly when you change position from lying/sitting to standing.)
- ACEi & ARNI may cause a dry cough.
- Routine bloodwork to check kidney function and potassium (risk of high potassium.)

Beta-Blockers

Commonly used drugs:
Bisoprolol, Carvedilol, Metoprolol
How they work: They block the action of certain chemicals (adrenaline) that make the heart work harder and increase blood pressure. As a result, the heart does not have to work as hard and beat as fast.
What to watch for:

- Symptoms of low blood pressure or heart rate.
- You may feel tired (low energy) when you first start this medicine. This gets better as your body gets used to the medication.
- Low mood, vivid dreams.
- Do not stop this medication suddenly unless your healthcare provider tells you to.

MRA's

Commonly used drugs:
Spironolactone, Eplerenone
How they work: They block a stress hormone (aldosterone) that make the heart stiff and cause scarring. They also work as a "diuretic" or "water pill" that helps get rid of excess fluid.
What to watch for:

- Expect ongoing bloodwork for kidney function and potassium (risk of high potassium.)
- Spironolactone: can cause breast or nipple tenderness. This is more common in men. Please let your healthcare provider know if you experience this.

If you have been told you have high potassium levels in your blood, please refer to Appendix 1

SGLT2i's

Commonly used drugs:
Dapagliflozin (Forxiga), Empagliflozin (Jardiance)
How they work: They remove excess water to reduce blood pressure and the amount of resistance the heart needs to pump against.
What to watch for:

- Genital yeast infection or bladder infection (less than 1 in 100 people). You can reduce this risk by paying close attention to your hygiene.
- This medicine is also used to treat diabetes. Other diabetes medicines may need to be adjusted when you take this medicine.

Ivabradine (Lancora)

How it works: Slows down heart rate, which can improve symptoms of heart failure.
What to watch for:

- Blurred vision
- Symptoms of low blood pressure
- Headache

Diuretics

Commonly used drugs:

Furosemide (Lasix), Bumetanide (Burinex), Metolazone (Zaroxolyn)

How they work: Diuretics work in the kidneys to get rid of extra fluid and salt in your body. Many people call these medications "water pills." They can help alleviate symptoms like swelling in your ankles/feet/abdomen or in your lungs that causes breathlessness.

What to watch for:

- Symptoms of low blood pressure.
- Muscle cramps.
- Dehydration (lost more than 4lbs in 2 days or 5lbs in a week.)
- Feelings of excessive thirst, a dry mouth, or feeling very tired or weak.

Regular use of diuretics will require routine blood work to monitor kidney function.

What do I need to know about non-prescription (over the counter) medications?

Things to avoid while taking medication for your heart:

- Alcohol
- Cough or cold medicines (avoid products containing pseudoephedrine and limit to 3 days max)
- Black licorice
- Anti-inflammatory medicines (such as Advil, Ibuprofen, Motrin, Naproxen, Aleve, Celebrex)

What do I need to know about alternative therapies?

Some examples of alternative therapies include:

- Herbal medicine
- Natural health products
- Traditional medicines and therapies

The government does not control or regulate alternative medicines and therapies as strictly as prescription medications. This means we do not always know if they are safe or useful for you. They can potentially change the effectiveness of your prescribed medications.

Safety Tip:

Always discuss your alternative therapies with your community Pharmacist and how they may interact with your prescription medications.

SICK DAYS

Home Management Plan

Signs of DEHYDRATION

MILD dehydration

- Dry mouth
- Light-headedness
- Headache

SEVERE dehydration
(symptoms of mild dehydration and..)

- Intense thirst
- Lower blood pressure than usual
- Reduced urine output and darker colored urine
- Weakness
- Cool clammy skin

How is Heart Failure Impacted by SICK DAYS (or Hot Days)?

When you are sick, it is easy to become dehydrated. If you become dehydrated, certain heart failure medications can be PAUSED to prevent side effects. **This means some medications can be temporarily PAUSED for 1-3 days.** These medications include:

Heart Failure medications that can be PAUSED	Name of Medications
ACE-inhibitors (ACEi)	Ramipril, perindopril
Angiotensin receptor blockers (ARBs)	Candesartan, valsartan
Angiotensin receptor blocker/neprilysin inhibitor (ARNI)	Entresto (sacubitril/valsartan)
Mineralcorticoid receptor blocker (MRA)	Spironolactone, eplerenone
Sodium-glucose co-transporter-2-inhibitor (SGLT2)	Dapagliflozin, Empagliflozin
Diuretics	Furosemide, bumetanide, metolazone

Please restart these medications when you are feeling better.
Speak with your healthcare team

How to Manage Dehydration at Home

- Continue to weigh yourself even when you are sick.
- Continue to drink 6-8 cups of fluid/day. You may need to temporarily increase this amount until dehydration resolves.
- Limit high sugar or caffeinated beverages.
- Continue to monitor sodium intake.
- Over-the-counter medicines such as ibuprofen (Advil, Motrin) and naproxen (Aleve) should be avoided.
- **Acetaminophen (Tylenol) is a safe option for fever and pain.**

Check Your Weight Every Day

Why:

- Checking your weight every day lets you know if your body is retaining fluid.
- Excessive fluid build-up in your body increases the workload on the heart.
- When you report weight gain early to your healthcare team, 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 2kg (4lb.) in 2 days ⇒ You are retaining fluid.
- More than 2.5kg (5lb.) in 1 week ⇒ You should call your healthcare team.

For further directions, please refer to the **Heart Failure Zones Handout** on the inside cover of this booklet

When:

- Same time every day
- Preferably before breakfast

How:

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

Record your weight each day on the calendar on the next page (or you may prefer to use your own method such as a notebook, or a computer)

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

Your dry weight (when you do not have excess fluid in your body): _____

If your weight increases by:

- More than 2kg (4lb.) in 2 days ⇒ You are retaining fluid.
- More than 2.5kg (5lb.) in 1 week ⇒ You should call your healthcare team.

Month _____

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Limiting Sodium (Salt)

Sodium is a mineral found in food, table salt and sea salt. Your body needs sodium, but too much can cause your body to retain (hold on to) fluid. This fluid buildup can cause swelling in your feet, ankles, legs, or abdomen. Fluid can also buildup in your lungs, causing shortness of breath.

The recommended sodium intake for patients living with heart failure is 2000mg-3000mg/day.

For reference: 1tsp of salt is 2300mg!

Tips to reduce sodium:

- Eat fresh foods most of the time and prepare home-cooked meals. Limit added salt to meals.
- Season your food with herbs, spices, lemon juice, dry mustard and garlic.
- Remove the saltshaker from the table.
- Limit processed foods such as deli meats, pickled vegetables (olives, pickles), salted snack foods (chips, popcorn, dips), salted nuts, smoked meat and fish.
- Limit canned foods. Choose products labelled “low sodium” “lower” “less” or “reduced salt/sodium.”
- Caution when using sports drinks (Gatorade, Poweraid, etc.)

Can I use salt substitutes?

Generally, we do not recommend using salt substitutes. Many salt substitutes use potassium instead of sodium. Please check with your healthcare team before using these products.

Refer to Appendix 2 at the end of this book for more ideas on lower sodium options and general information on a heart-healthy diet.

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.
- Keep the sodium content for 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 + Trans Fat 0g	1%
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 3 oz = **74mg**	Chicken Pie 1 serving frozen = **889mg**
Tomato 1 small = **14mg**	Tomato Soup 1 cup = **960mg**
Pork Tenderloin 3 oz = **58mg**	Ham 3 oz = **1095mg**

Limiting Fluid

Your healthcare team may talk with you about restricting oral fluid intake. This is determined in part by your heart failure medications, your symptoms, your blood pressure, and individual factors. The concern is that your body may become overloaded with too much fluid. This puts extra "stress" on your heart.

Generally, targeting 6-8 cups of fluid/day is recommended.
Check with your healthcare team to determine what is best for you.

What counts as fluid?

Any food or drink that is liquid at room temperature is considered a fluid.

This includes:

- Water
- Milk
- Juice
- Pop
- Coffee
- Tea
- Alcohol
- Soup

Tip:
Water should be your first fluid of choice.
If you do not like plain water, consider adding lemon, lime, cucumber or sugar-free flavouring to your water.

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

Why People Living with Heart Failure Should Stay 'active'

Why is activity important?

Being active is one of the best ways to stay healthy. The goal is to be active most days of the week for 30 minutes. Any amount of activity is better than none! If 15-30 minutes of continuous activity is not an option, increments of 5 minutes three time a day is equivalent to 15 minutes. Start slow, pace yourself, and take rest breaks when needed. It won't take long to see yourself gradually improving.

Tip:
Moderate intensity exercise is beneficial to most people!

Balancing Rest and Activity- ***How much is too much?***

- Spread your activities throughout the day or choose which activities to do each day and prioritize what needs to be done.
- Plan your activity for a time when you feel most rested, i.e. first thing in the morning or after a nap.
- If you are quite fatigued after an activity or tired the following day this is your body's way of telling you that you have done too much.
- Be patient, it may take a while for your body to find a good balance between activity and rest.
- Ensure that you can TALK while doing your activity. The talk test can be done by saying your 10-digit phone number without losing your breath.

What are some <u>safe</u> activities for patients LIVING with heart failure?

- Walking, riding an e-bike
- Light housework, laundry, and cooking
- Gardening
- Light vacuuming
- Stretching
- Grocery Shopping

What are some activities to avoid or use caution with?

- Activities that involve working with your hands above your head
- Lifting or pushing heavy objects
- Straining or holding your breath
- Sit ups or pushups (full body weight)
- Heavy housework or yard work (this may be possible at some point but start slow and pace yourself)
- Using a hot tub or sauna

Types of exercise:

The most common types of exercises are either **aerobic/cardiovascular** or **strength** or a combination of both.

Aerobic exercise focuses on getting your heart rate elevated and improves your body's ability to use oxygen. Strength exercise focuses on contracting your muscles against resistance such as weight or gravity. Please plan to start with aerobic exercise such as walking once you have a routine in place you may add in strength exercises.

When to Stop an Exercise

Stop the exercise if:

- ❖ You feel lightheaded or dizzy
- ❖ You feel more tired than usual
- ❖ You feel shorter of breath than usual

Call 9-1-1 if:

- ❖ You feel pressure or pain in your chest, neck, jaw or shoulders that does not go away with rest
- ❖ You feel like throwing up (nauseated)
- ❖ You feel your heart skipping beats and this is new for you
- ❖ You get a shock from your implanted heart device (ICD)

Starting aerobic exercise:

Step 1 Warm up (RPE 1-2)

Take at least 5 minutes to warm up. Walk or cycle slowly for 5 minutes to allow your body time to start circulating blood and preparing for additional work.

Step 2 Conditioning (RPE 3-5)

Gradually increase the exercise to a steady, moderate pace. While working at a moderate pace, you should be able to still talk (for example say your 10-digit phone number without losing your breath). Start with 5-10 minutes of continuous activity and gradually increase each day with the goal of 30 minutes.

Step 3 Cool down (RPE 1-2)

Take 5-10 minutes to slow down your exercise prior to stopping. This helps your heart slowly return to its resting state and prevents blood from pooling in your lower legs.

Rate your Exercise Effort	Talk Test
0 Nothing at all	Resting
0.5 Very, very easy	**Sing** You have enough breath to sing
1 Very easy	
2 Easy	
3 Moderate	**Talk** You have enough breath to carry on a conversation
4 Somewhat hard	
5 Hard	
6	**Gasp** You can not say more than 4-6 words without gasping
7 Very hard	
8	
9 Very, very hard	You can not say more than 2 words without gasping
10 Maximum	You can not talk at all

Tips for exercise:

- Stick with it, so it becomes a habit
- Schedule exercise sessions into your daily routine
- Exercise at the same time each day
- Include a variety of exercises to avoid boredom
- Wear loose, comfortable clothing and supportive shoes
- Choose to walk whenever you can instead of driving (i.e. park in the parking spot furthest away)
- If possible, choose the stairs instead of the elevator
- Wait 1 hour after eating a meal to exercise
- Adjust your pace when walking in hilly areas, you may need to slow down
- Exercise indoors when it is too cold, too hot, or too humid outside (shopping mall or arena)
- Count the fluids you drink during the activity as part of your daily fluid amount
- Keep an exercise record, this will help you see the progress you are making
- Check your heart failure zone before you start exercising. Are you in the green zone?
- Be patient with yourself, if you miss a day or two, don't be afraid to start up again

Emotions Associated with Heart Disease

Stress

Stress is the *body's response to a real or perceived threat*. Stress can help motivate us and solve a problem. In this situation, stress is manageable and helpful. When stress is unhelpful, people may feel overwhelmed. It can be difficult to concentrate and make decisions. Many people experience physical symptoms such as sweating, a racing heart or tense muscles. Over time, this stress can have a big impact on physical health—such as, increasing your risk of worsening heart disease.

What are stressors?

Stress-provoking situations are called *stressors.* They are all around us, almost all the time. Once you can identify your stressors, you can start to learn how to deal with them. Examples are:

Major events such as losing a loved one, moving or receiving a new health diagnosis.

Routine events such as traffic jams, work pressures or family responsibilities.

Ongoing events such as not being able to afford food, housing or not being able to find a job.

What can I do about it?

- Talk about your problems—simply expressing your feelings can help a lot. This may be with a close loved one or someone on your healthcare team.
- Simplify your life—it is okay to say 'no'. Be assertive.
- Physical activity can be a great way to reduce stress and improve your mood.

Depression

Depression can affect anyone but people living with heart failure are more likely to become depressed.

Depression is different from grief, sadness related to an event or low energy. It is a medical condition where a person feels sad, loses interest in daily activities, withdraws from people and often feels hopeless.

If you are experiencing at least 5 of the symptoms listed below for a 2-week period or longer, please reach out to your healthcare team:

- Sadness
- Loss of interest in activities that you usually enjoy
- Changes in appetite
- Significant unintentional weight loss or weight gain
- Sleep problems
- Loss of energy

- Difficulties with concentration or memory
- Decrease in normal social activities or withdrawing from friends and family
- Feelings of worthlessness, helplessness or hopelessness

Anxiety

Anxiety describes a few problems including generalized anxiety (a combination of worries felt most of the time), panic attacks (intense and sudden feelings of anxiety), and posttraumatic stress disorder (repeated memories of traumatic experiences, often associated with high levels of fear).

Sometimes, anxiety disorders are triggered by a specific event or stressful life experience. Like depression, people living with heart failure are more likely to experience anxiety. Symptoms can include:

- Uncontrollable worry
- Feeling "on edge" or irritable
- Muscle tension
- Sleep problems
- Increased heart rate
- Sweating
- Lightheadedness

What can I do about it?

Talk to your healthcare team about proven treatments for depression/and or anxiety.

- Counselling
- Medication
- Support Groups
- Self-help strategies

Websites/Resources:

Canadian Mental Health Association	www.cmha.ca
Island Health Mental Health and Substance Use	https://www.islandhealth.ca/our-services/mental-health-substance-use-services/adult-mental-health-substance-use-services
Vancouver Island Crisis Line	1-888-494-3888 (available 24/7) https://www.vicrisis.ca/

For Family and Caregivers

If you care for someone with heart failure, you could find yourself facing new responsibilities. Caregivers play a very important role in supporting family or loved ones living with heart failure. Caregivers' roles may vary from joining you at appointments/tests, managing appointments, managing medications, monitoring symptoms, and assisting with day-to-day activities. This can be extremely helpful to the person living with heart failure, but it could come with its own challenges.

Tips to prevent caregiver stress

Too much stress can harm your health, especially if you care for someone for a long time. Here are some ways to help prevent and manage caregiver stress:

- Ask for help and accept help when offered
    - Look to others to help share the care
    - Make a list of ways others can help you, for example, pick up groceries or cook a meal
    - If additional supports are required, please consider a self-referral to **Community Health Services** by calling your local Public Health Unit.
- Balance help with encouraging the person to do things for themselves
- Take care of yourself: get exercise, eat well, sleep, and take time away

Signs of caregiver stress

When you are focused on caring for someone else, you might not realize your own health is suffering. At times, you might feel overwhelmed, physically or emotionally. This is called 'caregiver stress'.

Watch for these signs of caregiver stress:

- feeling tired all the time or having trouble sleeping
- gaining or losing a lot of weight
- feeling guilty, like you are not doing enough
- feeling overwhelmed and irritable
- having conflicts with the person you care for
- having conflicts with family members
- feeling you don't have time for yourself or to be with others
- having no interest in doing activities you used to enjoy
- feeling emotional and moody, maybe crying often
- worrying about having enough money now and for the future
- using substances to help manage your feelings such as smoking more, drinking more alcohol, taking medications to help sleep or improve your mood, or taking illegal drugs

Learning to Live with Heart Failure

Commonly Asked Questions

Can I drive?

Generally, people can drive when their heart failure is well managed. If your healthcare provider feels your health affects your ability to drive safely, it must be reported to the Superintendent of Motor Vehicles. You may have restrictions on your driver's license, or it may be removed. It is all about public safety.

Different rules/regulations may apply if you are a commercial driver. Please discuss with your healthcare team.

Can I work?

In many cases, people who have heart failure can continue to work part-time or full time. This depends on the cause and severity of your heart failure, as well as the demands of your job. It is important to discuss your situation with your healthcare team, so they can support you in creating a safe work environment.

What about having sex?

Intimacy and sex are part of a healthy and meaningful life. When symptoms are well controlled, people living with heart failure can engage in a healthy sex life. It is important to monitor your symptoms and listen to your body. We recommend using the "Heart Failure Zones" and the "Talk Test" to ensure your level of effort is safe for you.

Did you know? Sexual intercourse is the equivalent of walking up two flights of stairs. There are other ways to be intimate that are less likely to put stress on your heart such as oral sex, masturbation, cuddling, hugging, and kissing.

Talk with your healthcare provider about any problems having sex including libido or erectile dysfunction.

Can heart failure be cured?

Heart failure is a chronic condition and there is no cure. With lifestyle changes and treatment options, you can manage your condition very well.

Do I have to stop drinking alcohol?

Less alcohol is better. The Canadian Centre on Substance Use and Addiction (CCSA) issued new guidelines (2023) on the bases that Canadians have a right to know that alcohol use comes with risk. Key points are:

- 0 drinks per week – not drinking has many benefits such as better health and better sleep.
- 2 drinks per week – you are likely to avoid alcohol-related consequences for yourself or others.
- 3-6 drinks per week – your risk of cancer increases at this level.
- 7 standard drinks or more per week – your risk of heart disease or stroke increases significantly.
- Each additional drink increases the risk of alcohol-related consequences.

Do I have to stop smoking?

Smoking is often a physical and psychological addiction. Many people find it very challenging to quit. Smoking increases your risk of developing heart disease and stroke. It causes a buildup of plaque in your arteries, increases the risk of blood clots, reduces oxygen in your blood and makes your heart work harder. If you are a smoker, you are 2 times more likely to have heart attack and 2 times more likely to die from heart attack. Smoking is the leading cause of premature death in Canada.

Here are some benefits of quitting smoking:

- Quitting smoking immediately reduces your risk of heart attack and stroke.
- As per Heart and Stroke Foundation- within 5 years your risk of having a stroke will be nearly that of a non-smoker; within 10 years your risk of dying from lung cancer is cut in half; and within 15 years your risk of heart disease will be like someone who never smoked at all.
- You will save money.
- Your life insurance and home insurance premiums may go down.
- Smoking will no longer control your life.
- You will feel proud of your ability to overcome addiction.
- Your sense of smell and taste will improve.

Ask for help. *Talk with your healthcare provider. There are medically approved smoking cessation aids to help overcome any withdrawal symptoms and have success.*

Is it safe for me to fly? Is it safe for me to travel?

Travel can continue to be part of your life after your heart failure diagnosis. Things to consider prior to travelling:

- Prior to booking, speak with your health care team to ensure you are safe to travel.
- Obtain travel health insurance/cancellation insurance prior to your trip. Some travel insurance providers have restrictions for pre-existing conditions and/or recent medication changes.
- Bring a list of your current medications and information on your medical history.
- Pack enough medication to last your whole trip and some extra!
- Keep all medications in original packaging from your pharmacy.
- Know how to access health care where you will be travelling/staying.

Is it safe for me to have vaccinations?

People living with heart disease should receive routine immunizations. These include annual influenza, Covid-19 and pneumococcal conjugate (Pneumonia) vaccinations. Speak with your primary care provider or your community pharmacist about which vaccines you are eligible for.

The shingles vaccine (Shingrix) is also recommended for people >50 years of age, however, there may be a cost associated with this vaccine.

Advance Care Planning

What you need to know:

Advanced care planning is the process a capable adult follows to identify their goals, values, and beliefs related to their health and care. A person may consider:

- What matters most to me?
- What brings me joy and quality of life?
- What abilities are critical to my life that I can't imagine living without?
- Who would make decisions for me if I was not capable of doing so?

Start the conversation

Once you have thought about how your values, beliefs and wishes would guide your decisions in the event of a health crisis, the first step is to speak with those close to you and your health care providers to make sure they know and understand your wishes and are willing to honour them.

Talk to your primary care provider

It is important for you to discuss your questions and wishes with your primary care provider to make sure your planning is based on accurate medication information. Following this conversation, your doctor or nurse practitioner may complete a Medical Order for Scope of Treatment (MOST) to guide other members of your health care team in a medical emergency.

Make your plan

Please visit the following websites for tools and resources to help you with advance care planning:

Websites/Resources:

Island Health Advance Care Planning	https://www.islandhealth.ca/our-services/advance-care-planning/advance-care-planning
Province of British Columbia Advance Care Planning	Advance Care Planning - Province of British Columbia
HealthLink BC Advance Care Planning	Advance Care Planning | HealthLink BC

End-of-life Care and Palliative Care

The goal of heart failure management is to improve your heart function and help you lead a high quality of life. Unfortunately, heart failure is a progressive illness that worsens over time. In its progression, your ability to do daily activities decreases and your symptoms can become more challenging, despite best efforts and medicines.

Advancing heart failure means medical therapies are not working as well as before. Your symptoms return and are more difficult to control. You may find you're visiting your care providers or hospitals more often. These are warning signs that your condition is changing.

What is next for me?

When heart failure advances and medical therapies are not as effective, the focus shifts to addressing the symptoms you feel. This type of care is called *supportive or palliative care.*

What is palliative care?

Palliative care is a holistic approach that improves quality of life of patients and their families. Palliative care focuses on:

- Relieving pain and symptoms with medications and complementary therapies (massage and physiotherapy can be used to treat symptoms of pain, fatigue, and shortness of breath.)
- Managing physical disability with community support services such as home care, cleaning service and transportation. Assistive devices may be utilized to keep you as independent as possible.
- Psychological, social and spiritual support.
- Caregiver support.

If you would like more information about palliative care or end-of-life care, talk to your health care team. You can also review the links/resources listed below.

Websites/Resources:

Palliative Care (Plan P) Benefits Program	https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/pharmacare/plans/plan-p-bc-palliative-care-benefits-program
What Really Matters Now	Advanced Heart Failure Resources\What Really Matters Now (BC).pdf

Glossary of Terms

Angina: is chest pain or discomfort that occurs when the heart muscle does not get enough oxygen-rich blood. It is usually a symptom of an underlying heart problem, such as coronary artery disease, where the arteries that supply blood to the heart become narrowed or blocked.

Arrhythmia: is a condition where the electrical impulses that regulate the heartbeat are disrupted. The heart beats with an irregular rhythm, either too fast, or too slow, or erratically.

Atrial Fibrillation/Atrial Flutter: are both types of arrhythmias that occur in the atria (upper chambers of the heart.) Atrial fibrillation is rapid and an irregular pattern. Atrial flutter is rapid but in a regular pattern.

Cardiomyopathy: refers to a group of diseases that affect the heart muscle, making it harder for the heart to pump blood and deliver oxygen to the body. Over time, this can lead to heart failure.

Cardiac Amyloidosis: is a condition where abnormal proteins build up in the heart tissue. These proteins cause the heart muscle to become stiff, thickened and less able to pump blood effectively. This is a rare disease.

Cardiac Sarcoidosis: is a form of sarcoidosis, an inflammatory disease in which clusters of cells (granulomas) form in various organs. When these granulomas develop in the heart, they can disrupt the heart's normal function, leading to various heart problems.

Coronary Angiogram or Angioplasty: is a diagnostic imaging test (using X-rays) used to visualize the heart's blood vessels for blockages or narrowing. Coronary Angioplasty is a semi-invasive procedure that widens blocked or narrowed coronary arteries, often using a balloon or stent.

Coronary Artery Bypass Graft (CABG): is a surgical procedure that re-routes blood flow around blocked or narrowed coronary arteries using a healthy blood vessel from another part of the body, improving blood flow to the heart muscle. This is often referred to as "open heart surgery."

Coronary Artery Disease: is a narrowing or blockage of your coronary arteries, which supply oxygen-rich blood to your heart. Coronary artery disease may or may not cause symptoms.

Diastole: is the phase of the heartbeat when the heart muscle relaxes and allows the chambers to fill with blood.

Dyspnea: an uncomfortable feeling of not being able to breathe well enough or get enough air

Edema: is the buildup of fluid in the body's tissues, often affecting the legs, ankles and feet.

Heart failure with mid-range ejection fraction: is a category of heart failure where the left ventricle pumps between 41%-50%.

Heart failure with preserved ejection fraction: is a category of heart failure where the left ventricle pumps between 51-65%.

Heart failure with reduced ejection fraction: is a category of heart failure where the left ventricle pumps between 10-40%.

Hemoglobin A1C: is a blood test that measures your average blood sugar (glucose) levels over the past 2-3 months.

Hyperlipidemia: is an excess of lipids or fats in your blood.

Implanted Cardiac Device/Defibrillator (ICD): is a battery-powered device placed under the skin that keeps track of your heart rate. Thin wires connect the ICD to your heart. If a certain abnormal heart rhythm is detected, the device will deliver an electric shock to restore a normal heartbeat.

Myocardial infarction (MI): also known as "heart attack" is caused by decreased or complete cessation of blood flow to a portion of the heart muscle.

Orthopnea: is a medical term for shortness of breath when lying down.

Pacemaker: is a battery-powered device that prevents the heart from beating too slowly.

Paroxysmal nocturnal dyspnea (PND): is a sudden shortness of breath that awakens a person from sleep, often accompanied by coughing and a need to sit or stand up to breath easier.

Systole: is the phase of a heartbeat during which the heart muscle contracts, pushing blood out of the heart.

Trans-esophageal Echocardiogram (TEE): is an echocardiogram where a probe containing a transducer is inserted into the esophagus to obtain detailed images of the heart, from inside the body.

Ventricular Tachycardia/Fibrillation (VT/VF): are types of abnormal heart rhythms. It occurs when the lower chamber of the heart beats too fast to pump well and the body doesn't receive enough oxygenated blood.

Additional Links

Regional	
Island Health website Heart Function Clinics	https://www.islandhealth.ca/our-services/heart-health-services http://www.islandhealth.ca/heartfunctionclinics
Living Well with Heart Failure Video	https://vimeo.com/405073579
Provincial	
Cardiac Services BC	http://www.cardiacbc.ca/health-info/heart-conditions/heart-failure Scan the QR code to watch up-to-date heart failure videos: Scan to watch heart failure videos
HealthLink BC • HealthLink BC offers a variety of services from the nurses' health line, pharmacy support, dietician support, exercise professionals	https://www.healthlinkbc.ca/ or call 8-1-1
QuitNowBC (smoking cessation)	https://quitnow.ca/
National	
Heart and Stroke Foundation	www.heartandstroke.ca 1.888.473.4636
HEARTLIFE Foundation *The patient voice for heart failure*	www.heartlife.ca info@heartlife.ca
The Heart Hub (Our Heart Hub)	https://ourhearthub.ca/

Appendix 1: Potassium Management

Potassium is a mineral in your body. It helps nerves, muscles and your heart work properly.
In some people with heart failure, medications and other conditions such as kidney disease, can cause potassium to build up in the blood. Too much or too little potassium in your blood can cause problems with the rhythm of your heart. **Ask your healthcare provider before restricting potassium rich foods.**

What can I do if my potassium level is too high?

1. **Choose fresh foods more often** – Your body absorbs less potassium from fresh fruits, berries, vegetables, and whole grains. Limit processed foods, fruit and vegetable juices, canned soups and sauces as they are more likely to affect your potassium level.
2. **Limit meat portions and frequency** – Eating too much animal protein can raise your potassium level. Try replacing some meat or game meat with plant-based protein such as beans and lentils.
3. **Limit potassium additives** – Some packaged foods have potassium additives which are easily absorbed by your body. Potassium additives are often used as salt substitutes or as preservatives. Look for the word "potassium" on ingredient lists and eat less processed foods.
   Common potassium additives to limit: potassium chloride, potassium phosphate, potassium lactate, potassium citrate. See table on next page for examples of foods that may contain potassium additives. Here is an example of an ingredient list.

INGREDIENTS: CARBONATED WATER, CARAMEL COLOR, PHOSPHORIC ACID, ASPARTAME, NATURAL FLAVORS, POTASSIUM CITRATE, CAFFEINE.

4. **Keep your bowels moving**: Regular bowel movements can remove excess potassium from the body. Exercise and having enough fibre in your diet can help to keep your bowel movements regular. Boost your fibre intake by including vegetables, fruits, whole grains, beans, lentils, nuts and seeds regularly.
5. **Keep blood sugars in your target range if you have diabetes** – high blood sugars can cause your potassium level to rise.
6. **Double boil (Boiling water twice)** – in lots of water, boil peeled and cut higher potassium root vegetables (potato, sweet potato, yam), then drain water. Next, add fresh water, boil again, drain and rinse vegetables. This can reduce potassium by about 50%. Ask your Dietitian for more information about soaking methods.
   Drain and rinse all canned vegetables, beans and lentils prior to use.
   TIP: For more accurate blood test results, test potassium in the morning before you eat but are well hydrated, drink water before you go

Examples of High Potassium Foods: Limit these foods if your potassium level is high.

Minimally processed or whole foods	Processed	Processed with potassium additives
 Potatoes (unless double boiled)	 Chocolate bars	 Salt substitutes
 Tomato sauce	 Tomato-based soups	 Processed meats/ Ham / Hot dogs
 Dried fruits	 Fruit/vegetable juices	 Low sodium dill pickles
 Coconut water/ Coconut milk	 Chocolate milk	 Low sodium canned soups
 Dairy products/ Soy milk (Limit to 1 cup/day)	 Potato chips	 Low Sodium V8 Juice
 Coffee (Limit to 2 cups/day)	 French fries	 Breaded strips/ Nuggets

Adapted from BC Renal's Potassium Management Guide

Appendix 2: Lower Sodium Alternatives

How can I improve the flavour of food without adding salt?

Herb Shaker Recipe	
½ tsp basil	1 tbsp dry mustard
½ tsp white pepper	1 tsp thyme
1 tbsp onion powder	½ tsp thyme
1 tbsp garlic powder	¼ tsp rosemary
½ tsp paprika	
Directions: Mix the above ingredients into an empty spice shaker with a few grains of raw rice to allow for easy flow.	

No-Salt Vinaigrette	
½ cup red wine vinegar	2 cloves garlic, crushed
1/3 cup olive oil	1 tsp lemon juice
1 tbsp Italian seasoning	1/8 tsp white pepper
Directions: Whisk together red wine vinegar, olive oil, Italian seasoning, garlic, lemon juice and white pepper in a small bowl until well combined. Let stand for 15 minutes prior to service. *This doubles as a marinade as well.*	

Soy Sauce Substitute	
1/3 cup beef broth (no salt added)	½ tsp garlic powder
1/3 cup red wine vinegar	1/8 tsp black pepper (pinch)
1 tbsp molasses	1 ¼ cup water
¼ tsp ground ginger	
Directions: Combine all ingredients in a small pot and boil gently over 5-10 minutes until the mixture is reduced to about 1 ½ cups. Store covered in refrigerator for up to 4 days. Stir or shake before using. *If you won't use the full recipe within a week, freeze extra portions in ice cube trays (or small container) for later use.*	

Homemade Herb and Spice Blends

Keep these handy in an airtight container for everyday use.

Italian Blend *For tomato-based soups and pasta dishes, pizza and focaccia*	2 tbsp each of dried basil and dried marjoram 1 tbsp each of garlic powder and dried oregano 2 tsp each of dried thyme, crushed dried rosemary and crushed red pepper
Curry Blend *For rice, lentils, vegetable dishes and chicken*	2 tbsp each of turmeric and ground coriander 1 tbsp of ground cumin 2 tsp each of ground cardamom, ground ginger and black pepper 1 tsp each of powdered cloves, cinnamon and ground nutmeg
Mexican Chili Blend *For chili with beans, enchiladas, tacos, fajitas, chicken, pork and beef*	3 tbsp chili powder 1 tbsp each of ground cumin and onion powder 1 tsp each of dried oregano, garlic powder and cayenne pepper ½ tsp cinnamon
Greek Blend *For seafood, poultry and herbed bread*	3 tbsp each of garlic powder and dried lemon peel 2 tbsp dried oregano 1 tsp black pepper

Websites/Resources:

Eating for a Healthy Heart	https://www.heartandstroke.ca/-/media/pdf-files/canada/lwwhd/living-well-heart-disease-nutrition-vol2-en.ashx
Healthy Eating: Eating Heart-Healthy Foods	https://www.healthlinkbc.ca/healthwise/healthy-eating-eating-heart-healthy-foods
The DASH Diet	https://www.heartandstroke.ca/healthy-living/healthy-eating/dash-diet