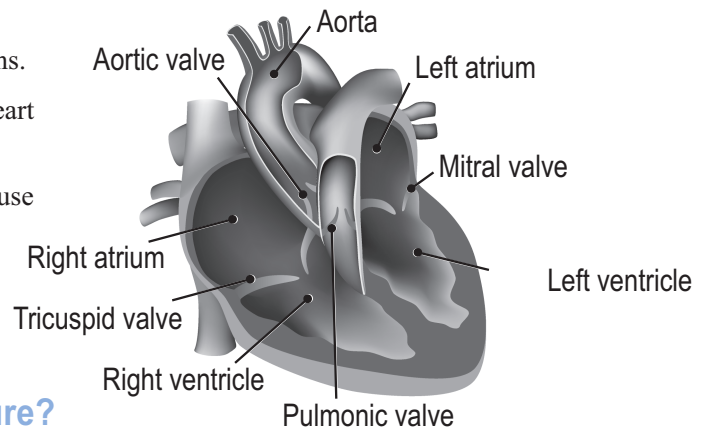


Managing Heart Failure: Information for patients and families

What is heart failure?

Heart failure is one of the most common reasons that people over age 65 go to the hospital. It affects an estimated 5 million Americans.

- Heart failure is not what it sounds like. It doesn't mean your heart has "failed." It just means it isn't working as well as it should.
- The heart pumps blood to the whole body. Heart failure can cause fluid to build up in the lungs and other parts of the body.
- Heart failure can occur if the heart has become stiff, weak, thickened, or enlarged.



What are the signs and symptoms of heart failure?

These may include:

- Shortness of breath at rest or with activity
- Shortness of breath that's worse when you lie down
- A tired or run-down feeling
- Swelling in the feet, ankles, or legs
- Weight gain that you can't explain
- Swollen abdomen, nausea, and loss of appetite
- Confusion, or fuzzy thinking
- Not being able to exercise as much as usual

Common causes of heart failure

- heart attack
- high blood pressure
- infections
- age
- disease of the heart valves

Less commonly, heart failure is caused by other conditions. Ask your doctor, nurse, or nurse practitioner why you developed heart failure.

How does my doctor or nurse practitioner know it's heart failure?

Your doctor or nurse practitioner will consider your signs and symptoms. He or she may recommend one or more tests or procedures to find out more about how your heart is working. This can help make the diagnosis of heart failure. Some of these tests may be repeated to see how treatment is working.

- **Chest x-ray** – Gives information about the size and shape of the heart, and can detect fluid in the lungs.
- **Electrocardiogram (EKG or ECG)** – Shows the electrical signals that cause your heart to beat. If the heart is enlarged or weak, signs on the ECG may be seen.
- **Echocardiogram (echo)** – Sound waves are passed through your chest using a small wand. Pictures from the sound waves give more information about the size and shape of your heart and how it is working.
- **Cardiac catheterization (cardiac "cath")** – A small tube is threaded into the heart from a blood vessel in the arm or leg. Dye is injected so that the heart and arteries show up on x-ray. Measurements of how your heart is working can also be taken.

How is heart failure treated?

The patient plays the most important role in managing heart failure by **reporting early signs of a problem** and **making lifestyle changes** that help the condition. **Medications** are available to help control symptoms. In some cases, **advanced therapies** such as implantable devices or surgery are used. Other treatments may be needed to address the problems that caused the heart failure.

Reporting early signs of problems

- Learning to recognize early signs of worsening heart failure, and reporting these to your doctor or nurse practitioner right away, is one of the most important parts of your treatment plan.
- Read the material in this packet on “My heart failure self management plan” and “How do you feel today” to learn what signs to report.
- The most important signs to report are **a weight gain of 3 or more pounds in 1 day, 5 or more pounds within 1 week**, or increasing **shortness of breath**.

Lifestyle changes

You can make important changes that will help you feel your best and help prevent heart failure from getting worse.

- Follow a **low-salt, heart-healthy diet** (information is included with this packet).
- **Limit fluids** (if you were asked to do so). You may be asked to drink no more than 2 liters of fluid (8 cups) per day.
- Take all of your medicine as prescribed.
- Limit or avoid alcohol.
- Do not use recreational drugs.
- Lose weight if needed.
- **Stay as active as possible** with guidance from your doctor, nurse practitioner, or physical therapist.
- **Don't smoke.**

Call **BID Needham Cardiology**
at **781-453-7750** to speak with
a cardiologist, nurse or nurse practitioner.
Monday - Friday 8 am - 4:30 pm

- Reduce stress and get enough rest.
- Get a **flu shot** each year!

Medications

Medications can be used to help your heart work better. Some reduce the strain on the heart; others remove fluid that is making the heart work too hard; still others make the heart beat stronger or in a more regular way.

If your heart failure medicine is working, you should start to feel better. **Don't stop taking the medicine when you feel better or your heart failure could get worse again.**

If you have side effects you think might be from the medicine, call your doctor, nurse or nurse practitioner right away.

Common types of medicine are:

Diuretics – These are “water pills.” They remove excess fluid which can strain the heart. Furosemide (Lasix) and torsemide (Demadex) are examples of diuretics. Some diuretics can lower your potassium levels, which can cause serious problems. You may be asked to take a potassium supplement.

About your medicines

- Be sure your doctor or nurse practitioner knows about everything you take or sometimes take at home. This includes prescription medicines, non-prescription medicines, vitamins, herbs, and supplements.
- Most patients with heart failure should not take certain pain relievers such as ibuprofen (Motrin, Advil) or naproxyn (Aleve). Ask your doctor, nurse or nurse practitioner if this applies to you, and find out what is safe to take if you need a pain medicine.
- If you have been told to take aspirin every day, never stop taking it without checking with the doctor or nurse practitioner first.

ACE inhibitors and ARBs – Angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs) help block hormones that can make your heart failure worse. Examples of ACE inhibitors are enalapril, captopril, and lisinopril. Examples of ARBs are valsartan (Diovan) and losartan (Cozaar).

Beta blockers – These help control the heart rate and blood pressure, which can help reduce the strain on the heart. Examples are metoprolol (Lopressor, Toprol) and carvedilol (Coreg)

ARNIs (Entresto) – A blood pressure medication that helps the heart grow stronger

SGLT2 inhibitors- work to reduce heart failure by reducing salt and fluid.

Spironolactone (Aldactone) – reduces fluid, retains potassium, and controls blood pressure.

CardioMems – a small, implantable sensor that helps clinicians monitor pulmonary pressures, or signs of congestion, from home. Placed during a heart catheterization, patients do daily readings (which take approximately 20 seconds). The information is sent to the patient’s medical team. They are able to adjust medications sometimes weeks before patients experience symptoms.

Advanced therapies

In some cases, advanced treatments might be used in patients with heart failure. Some treat the heart failure itself; others treat the underlying causes.

Implantable devices

- **Implantable cardioverter-defibrillator (ICD)**. This device detects life-threatening abnormalities in the rhythm of the heart beat. If a problem is detected, it delivers an electric shock to restore a normal rhythm.
- **Cardiac resynchronization therapy (CRT)** – A special type of pacemaker is used to stimulate the lower heart chambers to beat in a coordinated (synchronized) way. This can help improve the pumping action of the heart.
- **Left ventricular assist device** – Sometimes called LVAD, this is a type of mechanical pump that is implanted in the chest or abdomen. It helps the failing heart pump blood through the body.
- **CardioMems** – See below

Continuous intravenous (IV) medications

- Sometimes medicine is given continuously through an intravenous line. This can improve heart function in some patients with heart failure.

Surgery

- **Coronary artery bypass graft (CABG)** – If heart failure is related to blocked arteries that feed the heart muscle, this surgery may be done to open the arteries.
- **Heart valve surgery** – Sometimes heart failure is related to problems with the heart valves, which control the flow of blood from one heart chamber to the next. Heart valve surgery can repair or replace damaged valves.
- **Heart transplant** – Heart transplant is sometimes an option in the most serious cases of heart failure. More than 2,000 heart transplants are done each year in the U.S.

Key points about food and fluids

Watching what you eat and drink is a very important part of the treatment plan for heart failure. You will be given extensive information on following a “heart-healthy” diet, which includes choosing foods that are low in sodium and low in saturated fats. In patients with heart failure, limiting sodium is especially important. In some cases, your doctor or nurse practitioner will also ask you to limit the amount of fluid you drink each day.

Lowering sodium

- Lowering your intake of **sodium** is one of the most important steps you can take. Aim for **less than 2,000 mg. of sodium per day**.
- This means **no table salt**. Just one teaspoon of salt has 2,300 mg. of sodium.
- If you stop using table salt and don’t make any other changes, you will probably still have too much sodium in your diet. Much of our sodium comes from **processed foods**. Start reading nutrition labels to check the sodium content of various foods. In the example to the right, this food has 660 mg of sodium in a 1-cup serving.
 - If you had 2 cups, you would be getting 1,320 mg.
- Food that is labeled “reduced-sodium” or “no-salt-added” might still have too much sodium for you. Read the nutrition label to find out just how much sodium is in each serving.
- Foods labeled “low-sodium” have 140 mg. or less per serving and can be good choices. But remember – if you eat more than one serving, you are getting more than 140 mg. of sodium.
- Look at ingredients in packaged foods as well as the sodium content. Watch out for any ingredient that has “sodium,” “salt,” or “soda” as even part of its name (such as onion **salt**, **monosodium** glutamate, or **sodium** citrate). This will mean there is sodium in the product.
- Don’t use a product labeled as a “salt substitute” without checking with your doctor, nurse or nurse practitioner (it may interfere with your medicines).
- Choosing fresh foods over canned or prepackaged varieties will usually mean lower sodium.
- When eating out, choose restaurants that offer **fresh food**. Ask for salad dressing to be on the side so that you can control the portion. Choose foods that are not prepared with breading, sauces, or cheese. Ask that your food be prepared without salt, MSG, or soy sauce.

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 260	Calories from Fat 120
% Daily Value*	
Total Fat 13g	20%
Saturated Fat 5g	25%
Trans Fat 2g	
Cholesterol 30mg	10%
Sodium 660mg	28%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A 4%	Vitamin C 2%
Calcium 15%	Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories: 2,000	2,500
Total Fat	Less than 65g	80g
Sat Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g

Calories per gram:
Fat 9 Carbohydrate 4 Protein 4

Limiting liquids

Your doctor or nurse practitioner may ask you to limit fluids as part of your heart failure management. Limit fluids to 2 liters per day.

This sheet gives you an idea of what 2 liters a day looks like. If you've been asked to consume less than 2 liters, be sure to make adjustments accordingly.

- **2 liters per day is about 8½ cups, or 68 ounces.**
- Things that turn liquid right away in your stomach count as “liquids.” This includes ice cream, Jell-O, and popsicles.

What does 2 liters a day look like?

Here are the fluids that Mr. Smith drank today, adding up to 2 liters.



1 small cup of coffee =
1 cup (8 ounces)



1 serving Jell-O =
1/2 cup (4 ounces)



1 small soup =
1 cup (8 ounces)



1 serving milk =
1 cup (8 ounces)



1 bottle water =
2 cups (16 ounces)



1 Nutritional shake =
1 cup (8 ounces)



1 bottle juice =
2 cups (16 ounces)



Tracking your sodium intake

Information for patients with heart failure

If you are being treated for heart failure, please be sure to read the important information on sodium in “Heart-healthy food choices.” Patients with heart failure need to be especially careful about sodium intake. For most people, lowering daily sodium intake takes practice. Tracking the sodium content of foods you eat each day may help you keep your sodium intake in the range your doctor has recommended.

Remember:

- ∞ Read food labels to find serving size and sodium content per serving.
- ∞ Remember that the sodium content is “per serving.” If you eat more than one serving, you are getting more sodium.
- ∞ Ask your doctor what your daily sodium intake should be. Most patients with heart failure should not go over 1,500 - 2,000 mg. of sodium per day.

An example is given to get you started. Start your own record on the next page.

Example day	Food	Serving size	Mg. sodium per serving	Number of servings you had	Total sodium from this food per serving times number of servings you had)	Running daily total (add sodium content from each food to the running total)
	Orange juice	8 ounces	0 mg.	½ serving (4 ounces)	0 mg. \times ½ serving = 0 mg.	0 mg.
	Raisin bran	1 cup	180 mg.	2 servings (2 cups)	180 mg. \times 2 servings = 360 mg.	0 + 360 = 360 mg.
	1 % milk	1 cup	130 mg.	1 serving (1 cup)	130 mg. \times 1 serving = 130 mg.	360 + 130 = 490 mg.
	Lower-sodium turkey breast*	2 ounces	340 mg.	2 servings (4 ounces)	340 mg. \times 2 servings = 680 mg.	490 + 680 = 1,170 mg.
	Spaghetti	2 ounces	0 mg.	2 servings (4 ounces)	0 mg. \times 2 servings = 0 mg.	1,170 + 0 = 1,170 mg.
	No-salt added pasta sauce*	1/2 cup	30 mg.	2 servings (1 cup)	30 mg. \times 2 servings = 60 mg.	1,170 + 60 = 1,230 mg.
	Salad	1 cup	0 mg.	1 serving (1 cup)	0 mg. \times 1 serving = 0 mg.	1,230 + 0 = 1,230 mg.
	Lite Italian salad dressing	2 TBSP.	440 mg.	1 serving (2 tablespoons)	440 mg. \times 1 serving = 440 mg.	1,230 + 440 = 1,670 mg. Total today: 1,670 mg.

*Compare to regular varieties: Boar’s Head Honey Smoked Turkey = 480 mg. per serving; Prego Traditional Pasta Sauce = 610 mg. per serving.

My heart failure self-management plan

Your heart failure treatment will work best if you carefully follow your self-management plan.

1. Weigh yourself every day

One of the early signs of worsening heart failure is extra fluid in the body.

Weight gain is an early sign of extra fluid.

- Weigh yourself when you get up in the morning, after you go to the bathroom and before you eat.
- Weigh yourself either without clothes, or with the same type of clothes each day (such as light pajamas).
- Record your weight each day (chart is included).
- **Let your doctor know right away if you gain 3 or more pounds in 1 day, or 5 or more pounds within 1 week.**

2. Know when to call for help

Call your doctor, nurse, or nurse practitioner or BID Needham Cardiology 781-453-7750 for signs of worsening heart failure or if you think you are having side effects from your medications. Refer to “How Do You Feel Today” page.

3. Follow your medication, diet, and exercise plan

- Take your medicines as prescribed.
- Remember to cut back on sodium (salt) in foods. Limit fluids according to the instructions from your doctor or nurse practitioner.
- Follow the advice you are given about activity.

My heart failure discharge with Visiting Nurse plan

- The hospital team at BID Needham encourages you to be discharged with a visiting nurse to help you at home.
- The Care Transitions planning team will set up VNA services according to your insurance and needs.
- Your Visiting Nurse team will assist your primary care physician in caring for you after you are discharged.

How Do You Feel Today: **green**, **yellow** or **red**?

Use the color zones to help you decide if you need help. Share the chart with those close to you.

Green Zone: GOOD

green zone means GOOD

- You are not worried about how you are feeling
- Your symptoms are under control
- Your daily weight is stable
- You are taking your medicines as directed
- You are able to go back to your daily activities
- You are eating a low-salt, heart-healthy diet
- You are following your fluid restriction (if any)

No help needed now.
Keep following your
treatment plan.

Yellow Zone: CAUTION

yellow zone means CAUTION

Call your doctor, nurse or nurse practitioner, or BID Needham Cardiology at 781-453-7750 if you have:

- gained 3 or more pounds in 1 day or 5 or more pounds within 1 week
- worsening shortness of breath; short of breath at rest; can't do things you normally do because of shortness of breath
- problems sleeping due to shortness of breath, coughing, or wheezing, or needing to be more upright to sleep
- increased swelling in the feet, ankles, legs, or belly; rings or clothes feel tight
- dry, hacking cough that won't go away
- lightheadedness
- palpitations (pounding in the chest, or feeling the heart "skipping")
- extreme fatigue (very tired)
- nausea, vomiting, abdominal bloating, or inability to eat; loss of appetite
- return of symptoms that brought you to the hospital
- any other symptom that concerns you

Red Zone: EMERGENCY

red zone means EMERGENCY

Call 911 if you have any of the following:

- severe shortness of breath
- pain or discomfort in the chest, arm, or jaw that is not relieved with a short rest or with 1-2 nitroglycerin per your doctor's order
- dizziness that doesn't go away, or passing out
- throat swelling
- any other problem you believe to be an emergency

Call 911 for emergencies

Notes

