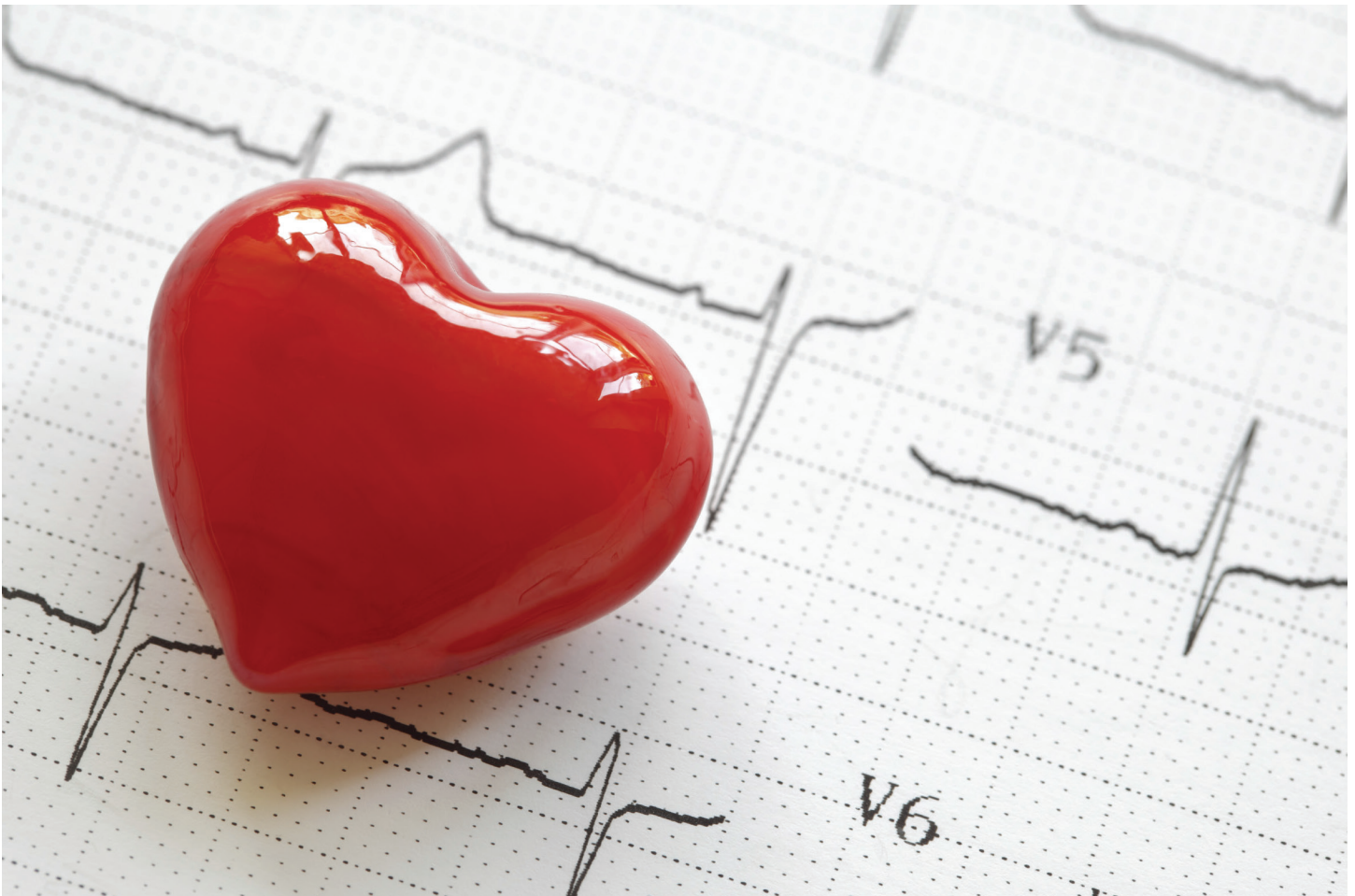




Heart Failure: A Guide for Patients, Families and Caregivers



This patient information booklet was produced by the Hartford HealthCare Congestive Heart Failure Team.

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What is Heart Failure?

Heart failure is a long-term condition that affects your heart's ability to pump blood. You may have heard this condition called Congestive heart failure, CHF or water in your lungs.

With medical treatment and lifestyle changes, you can continue to live a full and active life.

There are two types of heart failure:

- **Systolic** heart failure – This means that your heart muscle has weakened and cannot pump blood strongly
- **Diastolic** heart failure – This means that your heart is unable to fill with enough blood

The goal of this booklet is to give you the tools to have the best quality of life by keeping your heart as strong and healthy as possible

Did you know:

- Over 6 million Americans live with heart failure
- Heart failure does not mean your heart isn't working at all



Signs and Symptoms of Heart Failure

When the heart can't pump enough blood to meet the body's needs, you may experience some of the following:



Difficulty breathing or shortness of breath at these times:

- When you are moving or active
- At rest
- While sleeping or lying flat
 - You may notice that you need to sit up or prop yourself up with extra pillows to sleep comfortably



- Cough or wheezing that won't go away
- White or pink-tinged mucus when you cough



- Swelling in the feet, ankles, legs or stomach. However, you might notice swelling in any part of your body
- Rapid weight gain
- You may find that your clothes, belt, or shoes feel tight



- Feeling tired all the time
- Fatigue with everyday activities such as shopping, climbing stairs, carrying groceries or walking



- Lack of appetite, not wanting to eat
- Feeling full or can't eat very much at a time
- Feeling bloated or sick to your stomach



- Confusion, impaired thinking or memory loss
- Feeling sad or depressed or unable to make decisions

If you are experiencing these symptoms, call your provider: _____

Steps to Manage Your Heart Failure

Many people lead full, enjoyable lives by managing their heart failure.

Heart failure can be managed by taking these steps:








Keep reading through the booklet to review all these steps.





Heart Failure Symptom Zones

How Am I Doing Today?




Doing Great!

				
Breathing well	Weight normal, no weight gain	No swelling of feet, ankles or legs	Physical activity level normal	No chest pain, nausea or fatigue
Great job! Continue:	Daily weights	Take medication as directed	Low salt diet	Attend scheduled appointments

Warning!

					
Difficulty breathing when active or lying down	Dry, hacking cough	Sudden weight increase 3 lb/day or 5 lb/week	Increased swelling	Increased tiredness	Swollen abdomen or loss of appetite
Take Action!	Call your provider as soon as possible				

Emergency!

		
Severe tiredness or difficulty breathing at rest	Sudden confusion or dizziness	Chest pain
Emergency!	Call 911 or go to the hospital	



Weigh Yourself Daily

Weight gain from water can start **up to two weeks** before you feel any symptoms.

Things you need to do:

Weigh yourself **EVERY DAY** and write it down.

- Around the same time
- After urinating
- Before having anything to eat or drink
- Wearing the same amount of clothing
- Using the same scale

Call your provider if you gain 3 pounds in one day or 5 pounds in one week.

- Bring the weight chart to all appointments.

“Just Ask”

- Ask your provider, “What is my target weight?”



Tips for Managing Medication

- Bring all your medication BOTTLES to every appointment, including all the over-the-counter and herbal medications you take.
- Have an UPDATED list of your medications with you at all times. Medications can change often.
- Use a pill box to keep track of when to take your medications.
- Try to buy all of your medications from one pharmacy. This will allow the pharmacist to check for medication problems.
- Keep taking your medications as prescribed, even if you feel well. Feeling well means the medications are working and you should not stop taking them.
- DO NOT STOP taking your medications without speaking with your provider first.
- DO NOT take a double dose of medication if you miss a dose.
- Check your blood pressure and heart rate as instructed by your provider.



Diuretics (Water Pills)

Diuretics remove extra water that builds up in your body and cause you to urinate more often. This will make it easier for your heart to pump.

Side effects and special instructions:

- Weigh yourself every day so your provider can prescribe the best dose for you.
- Some diuretics remove potassium from your body, and others help you hold onto potassium. Your provider will be checking your potassium regularly.
- You may be more comfortable if you take this medication in the morning so that your sleep will not be interrupted by trips to the bathroom. If you have to take 2 doses a day, taking the second one before 6:00 pm can decrease late night bathroom trips.

These medications include

- furosemide/Lasix
- torsemide/Demedex
- bumetanide/Bumex
- metolazone/Zaroxolyn
- hydrochlorothiazide/Hydro- DIURIL
- chlorothiazide/Diuril

The diuretic that I take is: _____ **Date:** _____

ACE Inhibitors

(Angiotensin Converting Enzyme Inhibitors) or

ARB

(Angiotensin Receptor Blockers)

These medications lower your blood pressure and make it easier for your heart to pump blood.

Side effects and special instructions:

- At first, these medicines may cause mild weakness or dizziness. This should go away as your body gets used to the medication. If the dizziness is very bad, call your provider right away.
- Sometimes, ACE Inhibitors can cause a harmless dry cough. Speak with your provider if this happens so they can change you to medication that does not have this effect.
- ACE/ARB Inhibitors can affect the potassium in your body. Your provider will check your potassium regularly.
- Speak with your provider before you take medicines such as Advil, Motrin, Aleve, ibuprofen, or naproxen. These can affect how your ACE/ARB Inhibitor works.

These medications include

- losartan/Cozaar
- valsartan/Diovan
- irbesartan/Avapro
- candesartan/Atacan
- telmisartan/Micardis
- lisinopril/Zestril
- enalapril/Vasotec
- ramipril/Altace
- captopril/Capoten

8 The ACE/ARB that I take is: _____ **Date:** _____

ARNI

(Angiotensin Receptor – Neprilysin Inhibitor)

This is a medication that contains an ARB and a neprilysin inhibitor. The ARB lowers blood pressure, making it easier for your heart to pump blood. The neprilysin inhibitor helps your body get rid of excess sodium and water.

Side effects and special instructions:

- This medication replaces an ACE inhibitor or ARB
- If switching from an ACE inhibitor to an ARNI, you must wait 36 hours after stopping your ACE inhibitor before starting an ARNI. Be sure to discuss this with your prescriber.
- The side effects are similar to those for ACE inhibitors and ARBs, listed above (mild weakness, dizziness, increased potassium).
- Be careful if using Non-Steroidal Anti-inflammatory agents like Advil, Motrin, Naproxen and Aleve because this combination can harm your kidneys and worsen heart failure.

These medications include

- Entresto
(valsartan/sacubitril)

The ARNI that I take is: _____ Date: _____

Beta Blockers

(Angiotensin Receptor – Neprilysin Inhibitor)

Beta blockers lower your heart rate and make it easier for your heart to pump blood.

Side effects and special instructions:

- When starting this medication, you may experience weakness, tiredness or dizziness. This should go away as your body gets used to the medication.
- Take this medicine with food.
- You may have fewer side effects if you take this medication at a different time from your other medications.
- This medication can hide the symptoms of low blood sugar in diabetic patients. Diabetics should check blood sugars regularly.

These medications include

- carvedilol/Coreg
- metoprolol succinate/
Toprol XL
- bisoprolol/Zebeta

The Beta Blocker that I take is: _____ Date: _____



Potassium Supplements

Potassium is important to keep your heart pumping regularly. If your potassium level is too low or too high, your heartbeat can become dangerous.

Side effects and special instructions:

- Your provider will check your potassium regularly.
- If you have new muscle cramping or severe muscle weakness, do not stop taking your medications but **CALL YOUR PROVIDER.**

These medications include

- Potassium chloride ER
- Klor-Con
- K-Tab
- Klor-Con

The potassium supplement that I take is: _____

Date: _____

Potassium-sparing diuretics

These medications are used to get rid of extra fluid and raise potassium in the body.

Side effects and special instructions:

- Your provider may need to check your potassium levels while you are on this medication
- This medication may make you urinate more often. You may be more comfortable taking this in the morning
- This drug can cause dizziness, headache or upset stomach. Call your provider if these effects do not go away.

These medications include

- spironolactone/
Aldactone
- eplerenone/Inspra

SGLT2 Inhibitors

These medications are used to slow worsening of heart failure and preserve heart function, which can lower the risk of having to go to the hospital.

These medications work by allowing your kidneys to remove extra sodium found in your urine.

Side effects and special instructions:

- Your provider may tell you to drink extra fluid while on this medication
- This medication may affect your blood glucose levels. Your provider may have you monitor your blood glucose levels at home
- Contact your provider if you have painful urination or vaginal or penile discharge

These medications include

- dapagliflozin/Farxiga
- canagliflozin/Invokana
- empagliflozin/Jardiance

Hydralazine/Isosorbide Dinitrate

This medication lowers blood pressure and is also used to treat heart failure. It helps widen the blood vessels making it easier for blood to flow through and easier for the heart to pump.

Side effects and special instructions:

- This medication may cause headache, dizziness, tiredness, weakness or upset stomach.
- To lower the chance of feeling dizzy or passing out, rise slowly if you have been sitting or lying down.
- Avoid taking this medication in combination with other medications that contain nitrate. If you are unsure if you are currently taking one, please discuss with your doctor or pharmacist.

These medications include

- BiDil/ hydralazine & isosorbide dinitrate

Ivabradine

This medication can help lower your heart rate, so your heart does not have to work as hard. This medication has been shown to reduce the risk of hospitalization in patients with chronic heart failure.

Side effects and special instructions:

- This medication may cause headaches, dizziness, weakness or may cause a heartbeat that does not feel normal.
- This medication may cause changes in vision. Although rare, contact your provider if this occurs.

These medications include

- Corlanor/ivabradine

Digoxin

This medication helps an injured or weakened heart pump more efficiently. This medication can help with the symptoms of heart failure and reduce the risk of hospitalization due to heart failure.

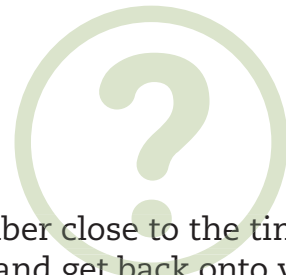
Side effects and special instructions:

- This medication may cause headache, dizziness, tiredness, weakness, upset stomach and fast or slow heart beats.
- You will need to have your blood work checked for digoxin levels periodically to make sure levels are appropriate.

These medications include

- Digitek
- Digox
- Lanoxin/digoxin

Frequent Medication Questions



What do I do if I miss a dose of medication?

Take your medication as soon as you remember. If you remember close to the time of your next dose (within 1-2 hours), then skip that missed dose and get back onto your normal schedule. Do NOT take 2 doses at the same time.

How can I ensure that I take my medications correctly?

Pillboxes can help you organize your medications and prevent you from missing doses. Nurses or caregivers can help you fill your pillboxes. Some pharmacies are able to package your pills in pre-filled bubble packs. Your nurse or pharmacist can help arranged this for you.



Are there any medication side effects I should know about?

Most heart failure medications can lower your blood pressure or cause you to become dizzy with sudden position changes (standing). Be sure to rise slowly from a lying or sitting position to prevent falls.

Are herbal remedies, vitamins, supplements or teas safe to take with my prescribed medications?

Many of these can react poorly with your medications and make you sicker. You should always check with a pharmacist or your provider before adding any supplements, over-the-counter medications, or other remedies to your regimen.

Can I take all my medications together?

Some medications can interact with each other. Your pharmacist will know which medications to space apart and which can be taken together.

Can I still drink coffee?

Limit your caffeine intake to 1-2 cups per day. This should be included in your fluid intake amounts.

Can I still drink alcohol?

Alcohol can worsen your heart failure symptoms and react badly with your medications. Speak to your provider about whether alcohol is safe for you at this time.

Can I skip a dose of diuretic if I have an appointment or social engagement?

It is okay to occasionally delay a medication or take a dose early, but don't skip doses altogether.



Tips for Healthy Eating

People with Heart Failure need to avoid having too much sodium (salt) in their diet

- Sodium (salt) acts like a sponge and makes your body hold onto water
- That extra water can worsen heart failure symptoms and cause weight gain, swelling and problems breathing



Here at the Heart and Vascular Institute, we recommend having less than 1500 mg of sodium (salt) per day. This equals 2/3 of a teaspoon of salt a day.

If it says “salt,” it IS salt.

For example: sea salt, kosher salt, celery salt, onion salt, garlic salt, Himalayan salt, black salt.

Many prepared seasonings have high levels of salt, such as steak seasoning, Sazón, Adobo.

Some salt alternatives have high levels of potassium, so speak to your provider before adding these to your diet.



Reading a Nutrition Label

Nutrition Facts	
Serving Size 1oz (28gm/35pieces)	
Servings Per Container 16	
Amount Per Serving	
Calories 170 Calories from Fat 130	
%Daily Value*	
Total Fat 14g	9%
Saturated Fat 2g	9%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 115 mg	5%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	10%
Sugar 1g	
Protein 7g	
A 0% * Vitamin C 0%	
Calcium 0% * Iron 20%	
Percent daily values are based on a 2000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories per Gram	
Fat 9 * Carbohydrate 4 * Protein 4	

First, check the serving size. If you double the serving size, then you have to double the sodium.

Look at the % of sodium on the label. Choose foods with 5% or less.

Keep track of the milligrams per serving to make sure you eat less than 1500 mg of sodium per day.

Key Words To Know

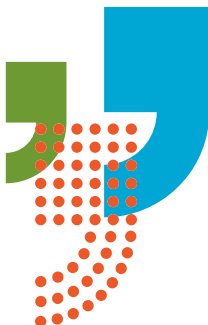
These words can let you know that the item is safer for your diet:

- “Sodium Free” – 5mg sodium or less
- “Very Low Sodium” – 35mg or less
- “Low Sodium” – 140mg or less




These words can let you know that the sodium level may still be too high and to choose a better option:

- “Reduced Sodium”
- “Less Sodium”
- “Light Sodium”
- “Lower Sodium”

“No Salt Added” & “Unsalted” – May still have naturally occurring sodium in the product but generally in a small amount.



Sodium Zone Guide

 <p>GREEN ZONE "ALL CLEAR"</p>	Less than 5% sodium per serving	Eat these foods throughout your daily diet.
 <p>YELLOW ZONE "Slow Down" WARNING</p>	6-9% sodium per serving	Eat these foods in MODERATION.
 <p>RED ZONE "EMERGENCY"</p>	Greater than 10% sodium per serving	Eat these foods rarely or avoid altogether



Food Choices That Have Less Salt

Food Groups	Food Choices
<p data-bbox="266 302 391 331">Starches</p> <div data-bbox="196 407 467 527">  </div>	<p data-bbox="553 317 1166 352">Breads: Rolls, wraps (less than 5% sodium)</p> <p data-bbox="553 354 1373 457">Cereals: Shredded wheat, puffed rice or wheat, regular or quick-cook (not instant) oatmeal, farina, cream of wheat, wheatena, cereals with a low percent of sodium</p> <p data-bbox="553 459 1016 495">Crackers: Low-sodium, unsalted</p> <p data-bbox="553 497 1352 533">Rice: White, brown, wild, basmati (no seasoning packet)</p> <p data-bbox="553 535 1419 571">Grains: Plain couscous, quinoa, bulgur (no seasoning packet)</p> <p data-bbox="553 573 1127 609">Pasta: Cooked without salting the water</p>
<p data-bbox="196 646 451 676">Fruits/vegetables</p> <div data-bbox="196 726 467 846">  </div>	<p data-bbox="553 663 1122 699">Fruits: Fresh, canned, jarred and frozen</p> <p data-bbox="553 701 719 737">Fruit juices</p> <p data-bbox="553 739 1349 806">Vegetables: Fresh, plain frozen (without sauces/ butter/ seasonings)</p> <p data-bbox="553 808 1360 875">"No-salt-added" canned vegetables and tomato products Low-sodium tomato or low-sodium V8 juices</p>
<p data-bbox="245 924 402 953">Milk/Dairy</p> <div data-bbox="196 968 467 1087">  </div>	<p data-bbox="553 955 1029 991">Low-fat milk, yogurt, sour cream</p> <p data-bbox="553 993 1435 1060">Cheeses: Swiss, cream, fresh mozzarella, ricotta, low-sodium cottage cheese</p>
<p data-bbox="228 1123 418 1152">Meat/Protein</p> <div data-bbox="196 1182 467 1302">  </div>	<p data-bbox="553 1142 1373 1209">Fresh meats: Beef, pork, chicken, turkey, veal, lamb (read package to be sure it has not been enhanced)</p> <p data-bbox="553 1211 1276 1247">Fish: Fresh fin fish, scallops, clams, oyster, shrimp</p> <p data-bbox="553 1249 1073 1285">Whole eggs, egg whites, egg beaters</p> <p data-bbox="553 1287 1114 1323">Peanut butter, unsalted nuts and seeds</p>
<p data-bbox="261 1367 386 1396">Desserts</p> <div data-bbox="266 1415 386 1535">  </div>	<p data-bbox="553 1425 1230 1493">Ice cream, sherbet, sorbet, popsicles, fudgsicles Jell-o, custard, Sponge cake, pound cake</p>
<p data-bbox="233 1587 414 1617">Condiments</p> <div data-bbox="266 1646 386 1766">  </div>	<p data-bbox="553 1604 1308 1707">Spices: Any fresh or dried herbs, Mrs. Dash, salt-free McCormick seasoning Lemon juice, lime juice</p> <p data-bbox="553 1709 1271 1745">Regular (not fat-free) mayonnaise, yellow mustard</p> <p data-bbox="553 1747 1403 1782">Sauces: Low-sodium barbeque sauce, Mrs. Dash marinades</p>

Note: The list of low-sodium foods can go on forever; this list is to give you some ideas. If a food comes in a package, be sure to **always look at the label and choose items with a low percentage of sodium (5% or less is ideal).**

Tips for Dining-Out

Want a great tasting meal you can feel good about?
“Just ask”!

“Just ask” for:

- Seasonings, rubs or marinades that do not contain salt.
- Baked, broiled or roasted in lemon or wine.
- Dressings, sauces and gravies on the side and use a small amount for flavor.
- Lemon juice or oil and vinegar on salads instead of traditional salad dressings.
- Lean meats cooked without high-sodium ingredients.
- Fresh fruit or salad instead of soup.
- Sherbet or ice cream instead of pastries, pies, pudding, and cake for dessert.

Other tips to follow:

- Carry your own favorite spice or sodium-free spice blend, such as Mrs. Dash.
- Plan ahead and review the menu for the nutrition facts before going out.
- Avoid the bread basket; a roll or slice of bread can add up to 300 mg sodium to the meal.
- Take the salt shaker off the table.



Tips for Fluid Intake

Some providers prefer that you limit your fluid intake. If your provider has given you a specific amount then you should keep to that amount, but here at the Heart and Vascular Institute, we recommend no more than 60 oz daily of fluid intake.

- 60 oz = 7.5 cups = 1800 mL
- 1800 mL = 1.8 liters

Ask your provider if you should be limiting your daily fluid intake.

Fluid is anything you can eat and drink, as well as anything that melts at room temperature

Examples of Fluids			
Water	Milk	Milk in cereal	Ice cream
Coffee	Juice	Soup	Ice cubes/chips
Tea	Soda	Sauces/gravy	Popsicles
Hot cocoa	Lemonade	Jell-o	Sherbet

Tips for Fluid Intake

Some fruits have high fluid content so limit how much of them you eat: Watermelon, citrus fruits, and pineapple.

Take your medication with applesauce instead of water

For dry mouth or to quench your thirst

- Limit sweetened or salty beverages
- Add lemon to your water
- Freeze grapes and suck on them
- Brush your teeth after eating
- Use a product that helps with dry mouth such as Biotene, Act, or Oasis



You can use many methods to track your daily fluid intake, including a journal, notepad or smartphone app, or by filling a pitcher in the sink.

Staying Physically Active

In general, exercising, having sex and driving are OK.

Regular physical activity can help your heart get stronger.

It can also benefit you in other ways:

- Improved weight, blood pressure, blood sugar, circulation, and blood cholesterol levels.
- Improved mood and energy levels

For some types of heart failure, cardiac rehabilitation may be recommended for you. Speak with your provider.



Tips for Success

- Choose an activity that you like to do and are able to perform. For example, walking, biking, or swimming
- Start SLOW and gradually build up to at least 2.5 hours of activity per week
- Pace yourself – some patients get tired with even basic home activities
- Plan to space activity with periods of rest
- You should be able to speak comfortably while exercising



It is normal to feel tired after exercising, however if you develop any pain, dizziness or extreme shortness of breath, sit down. Call your provider if symptoms are not relieved with rest.

Managing Stress

Stress and anxiety can have a negative impact on your heart failure symptoms and your quality of life. Here are some ways to help cope:

- Enjoyable gentle physical activity
- Meditation or deep breathing exercises
- Talk with family, friends, or clergy
- Join a support group or speak to a mental health professional
- If you feel that your emotions are out of control, speak to your provider about treatment options

Do NOT use Tobacco or Recreational Drugs

Tobacco products (chew, snuff, cigars, cigarettes, vaping and pipes) and recreational drugs can worsen your heart failure.

- All tobacco products tighten arteries and make the heart work harder and can lead to heart attacks.
- Second-hand smoke is just as harmful.

**For help with quitting smoking, call the quitting hotline
1-800-QUITNOW (1-800-784-8669)**



Staying Healthy and Preventing Illness

Infections pose greater risks to people with heart failure. It is important to get vaccinations for flu, pneumonia and COVID-19 as recommended by your provider.

In addition:

- Avoid anyone who is sick
- Wash your hands frequently
- Avoid heavily crowded areas



Talking About Your Goals of Care

Heart failure is a serious condition. Part of living with heart failure is planning for your future health needs.

Planning begins with thinking about what's important to you:

- Your health
- Your life and how you want to live
- Your goals for treatment
- Who will help you with these decisions
(also called a Healthcare Representative or Power of Attorney)

How Palliative Care Can Help

Palliative care is specialized medical care for people with chronic, serious illnesses or life-limiting diseases. Most people receiving palliative care can continue their curative treatments.

Palliative care can help you with:

- Identifying goals of care
- Easing symptoms to provide comfort and improve quality of life
- Communicating your wishes with your family

To speak to a palliative care specialist, ask your provider



Testing

In addition to a physical exam, your provider will likely do some additional tests to help figure out how to best treat you. The most common include:

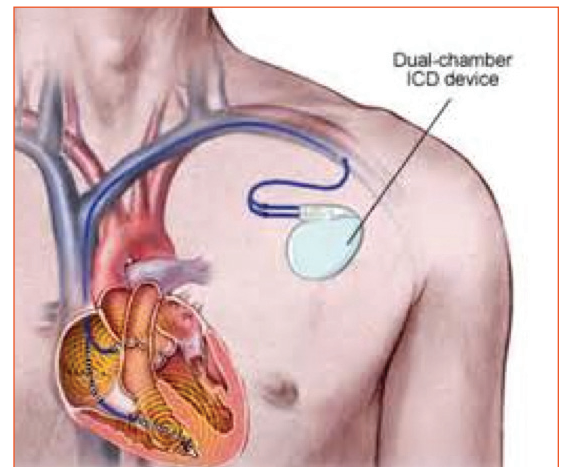
- **Blood tests** – Some medications used to treat heart failure may affect the kidneys, sodium or potassium levels.
- **Electrocardiogram (EKG)** – A picture of the electrical activity of the heart.
- **Echocardiogram (Echo)** – An ultrasound (videos) that show the size, shape and function of the heart. The echo also measures your heart's ejection fraction (EF), which is an estimate of your heart's pumping strength. A normal EF is 55% or more.
- **Cardiac catheterization (Angiogram)** – A procedure that can look at your blood vessels and measure pressures in your heart and lungs.



Procedures

You may require additional therapies to keep you safe and help you feel better.

- **Biventricular Pacemaker (also called Cardiac Resynchronization Therapy)** – A pacemaker that helps the right and left sides of the heart beat together, which helps the heart pump more effectively.
- **Implantable Cardioverter Defibrillator (ICD)** – A small device that is placed under the skin of your chest that delivers a shock when you are having a life-threatening, abnormal heart rhythm.
- **Implantable Pulmonary Artery pressure sensor** – A small device that monitors the pressure to determine if there is too much fluid in the heart. This device is inserted into the pulmonary artery, which carries blood to your lungs.



Advanced Heart Failure Treatments

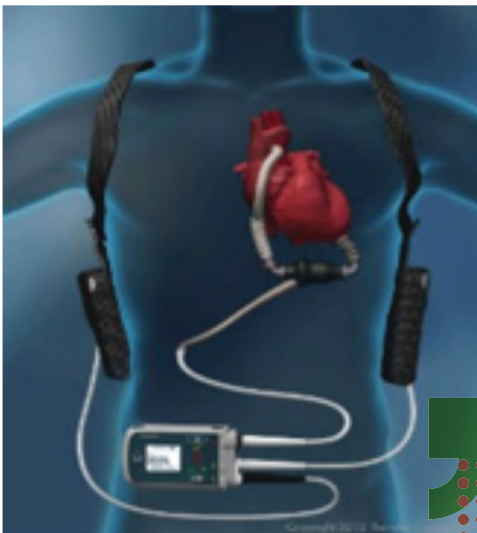
For some patients, close monitoring and taking medications at home are not enough to keep them feeling well and out of the hospital.

Your Provider may recommend these treatments:

- **Infusion Treatments:** This medicine goes directly into your veins to take water off your body and help you feel better. It can be given in the hospital, outpatient clinic or at home.
- **Inotropic Intravenous Therapy**

Milrinone and Dobutamine are Inotropic therapies that help a weakened heart to pump harder.

 - They are used to improve symptoms of heart failure as a Palliative treatment or to improve symptoms while waiting for other Advanced Heart Therapies.
 - They are given through a special IV line (PICC or Proline) continuously using a small infusion pump (approximately 5 lbs.) that you carry at all times.
 - An Infusion company will assess you for this medication, instruct you and your caregiver on the pump and will continue to provide support.
- **Left Ventricular Assist Device (LVAD):** A pump that is placed inside a person's chest to help a weak heart move blood throughout the body.



HeartMate II



Ambulatory Infusion Pump





Hartford 
HealthCare