WHAT TO EXPECT: LIVING WITH HEART FAILURE

UPMC Heart and Vascular Institute

Your Care. Our Commitment.
WHEN TO CALL THE DOCTOR
After you are discharged from the hospital, it is important to notice any worsening of heart failure symptoms and call your doctor. These symptoms may include:
• New or increased shortness of breath
• Light-headedness, dizziness, or fainting
• Weight gain of 2-3 pounds over two days, or 4-5 pounds over one week
• Abdominal bloating or swelling in legs or ankles
• Unexplained side effects after taking medicine
Make a list of your questions and concerns so that you will remember everything when you call your doctor.

WHAT TO BRING TO YOUR DOCTOR VISITS:
• Weight chart or calendar
• All your medicines in their original containers
• A list of your questions and concerns

REMEMBER TO:
• Take your medicine as prescribed
• Record your weight daily
• Eat less salt and foods with less than 140 mg of sodium per serving
• Limit fluid intake to eight, eight ounces glasses per day (2 quarts), or as recommended by your doctor
• Follow cardiac rehab’s (if seen by them) or your doctor’s instructions for activity
• Ask your doctor about a cardiac rehab program near you
• Make sure you have an appointment with your doctor within 1 week of leaving the hospital as possible
• If you smoke, contact UPMC Referral Services at 1-800-533-8762 or PA Quit Smoking Line at 1-800-QUIT-NOW (1-800-784-8669) for information on stop smoking classes

KEY POINTS

WHAT IS HEART FAILURE

SYMPTOMS OF HEART FAILURE

HEART FAILURE SELF-MANAGEMENT SKILLS

EXERCISING AND ACTIVITY

DAILY WEIGHT CHART

TABLE OF CONTENTS

Key Points.........................................................1
The Heart and How It Works ...................9
The Right Side..................................................9
The Left Side..................................................9
Symptoms of Heart Failure ..............4
Causes of Heart Failure .......................11
Common Congestive Heart Failure Medications ..................14
Notes.........................................................16
Exercising and Activity .....................8
Daily Weight Chart ...............................17

EXERCISING AND ACTIVITY
Ways to Save Energy.............................8
WHAT IS HEART FAILURE

Heart failure (HF) is sometimes called congestive heart failure (CHF). It affects 5 million Americans, with 550,000 new cases diagnosed each year. It is the most common cause of hospitalization in people over 65.

The heart is a pump. Heart failure occurs when the heart is not working as well as it should. This booklet is designed to help you understand heart failure, know the signs and symptoms, do what you can to prevent it, and when to seek treatment.

DOES THIS MEAN MY HEART IS STOPPING?

Many people hear the phrase “heart failure” and mistakenly believe that the heart has stopped or is about to stop. Heart failure simply means that the heart is not moving blood throughout the body as well as it should. This occurs either because the heart is weak and does not squeeze blood out as it should (systolic heart failure), or because it does not relax and fill with blood as it should (diastolic heart failure). In either case the result is not enough blood goes to where it needs to go in the body. As the heart weakens, its pumping action also weakens. Blood and body fluids back up in the lungs, abdomen and/or feet and ankles.

This excess fluid can make it difficult to breathe. You might also notice a feeling of fullness in the abdomen or swelling in the legs and ankles.

The causes of heart failure include:
- Heart attack
- Irregular heart beat or fast heart rhythm
- Infection of the heart muscle
- Severe lung disease
- Heart valve problems
- High blood pressure
- Alcohol abuse and other drugs

Heart failure is a serious illness. It can affect how long you live. With proper medicine in the right doses and careful management, you can live longer and feel better. Many people with heart failure live normal lives. They can do so because they have learned to take good care of themselves. You too can help control your heart failure by understanding and following your treatment plan.

DOES THIS MEAN MY HEART IS STOPPING?

Many people hear the phrase “heart failure” and mistakenly believe that the heart has stopped or is about to stop. Heart failure simply means that the heart is not moving blood throughout the body as well as it should. This occurs either because the heart is weak and does not squeeze blood out as it should (systolic heart failure), or because it does not relax and fill with blood as it should (diastolic heart failure). In either case the result is not enough blood goes to where it needs to go in the body. As the heart weakens, its pumping action also weakens. Blood and body fluids back up in the lungs, abdomen and/or feet and ankles.

This excess fluid can make it difficult to breathe. You might also notice a feeling of fullness in the abdomen or swelling in the legs and ankles.

The causes of heart failure include:
- Heart attack
- Irregular heart beat or fast heart rhythm
- Infection of the heart muscle
- Severe lung disease
- Heart valve problems
- High blood pressure
- Alcohol abuse and other drugs

Heart failure is a serious illness. It can affect how long you live. With proper medicine in the right doses and careful management, you can live longer and feel better. Many people with heart failure lead normal lives. They can do so because they have learned to take good care of themselves. You too can help control your heart failure by understanding and following your treatment plan.

SYMPTOMS OF HEART FAILURE (HF)

SYMPTOMS OF HEART FAILURE MAY INCLUDE:
- Fatigue
- Shortness of breath
- Sudden weight gain
- Dry, hacking cough, which may occur more often while lying down and might stop after sitting upright
- Swelling in the legs and ankles or lower belly (abdomen)
- Loss of appetite

If you experience these symptoms and notice a sudden increase in body weight you might be holding onto fluid. Notify your doctor if you gain 2 -3 pounds over two days or 4-5 pounds over one week.

WHAT CAN I DO ABOUT IT?

- Weigh yourself daily (first thing in the morning before you eat, and after you urinate)
- Eat less salt (sodium)
- Pace your activities (if you get tired - rest)
- Exercise (talk to your doctor about going to a cardiac rehab program near your home)
- Take your medications as prescribed and go to all follow-up appointments with your doctor

There is much to learn about how to manage your heart condition, and it’s hard to remember everything. This book is yours to keep at home. Take your time as you read through each section, and ask your doctor or care team about any questions.

HEART FAILURE SELF-MANAGEMENT SKILLS

The three most important things to focus on at first are weighing yourself daily at the same time and recording your weight, taking your medications as prescribed by your doctor, and eating food that is low in sodium. We call these “Self-Management Skills.”

Some parts of your treatment plan are medicine, dietary changes, weight monitoring, quitting smoking, and exercise. These all will be covered in the remainder of this book.

Many of the symptoms of HF are associated with the congestion that develops as fluid backs up into the lungs and leaks into the tissues. This is the form of heart failure called “congestive heart failure.” Other symptoms occur because not enough oxygen-rich blood gets to other parts of the body.
SELF-MANAGEMENT SKILL #1: DAILY WEIGHTS

• Weighing yourself daily is very important and can help you better manage your HF. Because HF can cause your body to hold onto fluid and salt, you may gain weight.
  > Find a scale which has large enough numbers to read easily.
  > If you weigh yourself every day at the same time, you will be able to notice slight gains in weight. This may be an early sign that your heart failure is getting worse.
  > If you gain you gain 2-3 pounds over two days or 4-5 pounds over one week, call your doctor. Tell your doctor’s office staff that you are a HF patient and are calling because you have gained weight. Your doctor then will be aware that your symptoms may be getting worse.
  > Your doctor will decide if you should change any medicines, or come in to his or her office.

A few tips:
• Weigh yourself once a day in the morning. The best time is right after you wake-up and urinate, and before you eat.
• Wear the same clothes, or nothing, each time you weigh yourself.
• Write down your weight each day on a weight chart (handed out separately, or back of this book), or an ordinary calendar.

SELF-MANAGEMENT SKILL #2: FOLLOWING A LOW SODIUM (SALT) DIET

• Have no more than 2,000 mg of sodium each day from food and drink or as prescribed by your doctor.
  > It is good to select foods with no more than 140 mg of sodium per serving. Foods with more than 300 mg of sodium per serving may not fit into a reduced-sodium meal plan.
  > Do not add salt to your food during cooking or at the table.
  > Season without salt – use fresh or dried herbs, spices, commercial spice blends (such as Mrs. Dash ® salt-free seasoning) or lemon juice to season foods.
  > Read food labels carefully. Ingredients to avoid include salt, sodium, sodium chloride, monosodium glutamate (MSG), brine, broth, corned, pickled, and smoked. Below you will find helpful definitions.
  > Sodium-free: Less than 5 mg per serving
  > Very low sodium: 35 mg per serving
  > Low sodium: 140 mg per serving
  > Reduced sodium: Sodium content is 25% less than the standard product
  > Unsalted: No salt added
  > Salt substitutes may be used if permitted by your doctor.
  > When dining out:
    > Ask that your order be prepared without added salt or MSG (mono-sodium glutamate).
    > Order baked, broiled, grilled, or steamed foods without sauces, butter, breading, and gravies.
    > Use salad dressings sparingly, as most are high in salt.
    > Avoid soups, broths, salted crackers or rolls, pickles, cheese, olives, seasoned croutons, and cured meats.
    > The heart symbol found on the menu at some restaurants may mean the item is low-fat and/or cholesterol. These items may often be higher in sodium. When choosing a low-fat, low-cholesterol meal in a restaurant, ask that it is served with as little salt content as possible.
    > When purchasing convenient foods, buy low sodium varieties. Choose frozen dinners with less than 300 mg per serving.
    > Many nonprescription medications contain sodium. Make sure you read the labels or ask your pharmacist about the sodium content.
    > You will get used to eating in a lower sodium way. It may take many weeks, so keep working hard at changing your eating habits.

READ FOOD LABELS

Food labels will tell you how much sodium is in the food you eat. These labels are found on all food products except fresh fruits and vegetables. The labels also tell about serving size, fat, cholesterol, carbohydrates, sugar, protein, and calories per serving.

“Serving Size” is the top information line on the label, right under “Nutrition Facts.” Always look at serving size first. All of the nutrient amounts on the label refer to that amount of food, not the total package. Right below “Serving Size,” the label shows how many servings are in the package. It is important to multiply the numbers on the label (sodium, fat, calories) by the number of servings you actually eat.

For instance, on this label for Macaroni and Cheese, the serving size is one cup, and there are two servings (or two cups) in the package. If you eat the whole package, that is two servings. So if you eat one cup, you are getting 470 mg of sodium. If you eat the whole package, that’s 940 mg (470 x 2 = 940). If you are limiting your sodium to only 2,000 mg per day, that 940 mg is almost half of what you are allowed for the whole day. There is a lot of sodium in this package.

• Read the serving size and number of servings in the container of food.
• If you are on a weight loss diet, notice the number of calories per serving of food.
• Read the amount of fat, cholesterol, and sodium in each serving of the food.
• Many labels will also tell you the amount of vitamins and other nutrients.

The “% Daily Value” shows you how much of the recommended amounts the food provides in one serving, if you eat 2,000 calories a day. For example one serving of this food gives you 20 percent of your total calcium recommendation.

REMEMBER:
• Have no more than 2,000 mg of sodium each day or as prescribed by your doctor.
• In general, avoid foods >300 mg of sodium per serving.

READING FOOD LABELS

Food labels will tell you how much sodium is in the food you eat. These labels are found on all food products except fresh fruits and vegetables. The labels also tell about serving size, fat, cholesterol, carbohydrates, sugar, protein, and calories per serving.

“Serving Size” is the top information line on the label, right under “Nutrition Facts.” Always look at serving size first. All of the nutrient amounts on the label refer to that amount of food, not the total package. Right below “Serving Size,” the label shows how many servings are in the package. It is important to multiply the numbers on the label (sodium, fat, calories) by the number of servings you actually eat.

For instance, on this label for Macaroni and Cheese, the serving size is one cup, and there are two servings (or two cups) in the package. If you eat the whole package, that is two servings. So if you eat one cup, you are getting 470 mg of sodium. If you eat the whole package, that’s 940 mg (470 x 2 = 940). If you are limiting your sodium to only 2,000 mg per day, that 940 mg is almost half of what you are allowed for the whole day. There is a lot of sodium in this package.

• Read the serving size and number of servings in the container of food.
• If you are on a weight loss diet, notice the number of calories per serving of food.
• Read the amount of fat, cholesterol, and sodium in each serving of the food.
• Many labels will also tell you the amount of vitamins and other nutrients.

The “% Daily Value” shows you how much of the recommended amounts the food provides in one serving, if you eat 2,000 calories a day. For example one serving of this food gives you 20 percent of your total calcium recommendation.

REMEMBER:
• Have no more than 2,000 mg of sodium each day or as prescribed by your doctor.
• In general, avoid foods >300 mg of sodium per serving.

RECOMMENDED FOODS

Bread/Cereal/Rice/Pasta
• Breads/rolls without salted tops; muffins
• Most ready-to-eat and cooked cereal
• Unsalted crackers and breadsticks
• Low-sodium or homemade breadcrumbs and stuffing

Vegetables
• Most fresh, frozen and low-sodium canned vegetables
• Low-sodium and salt-free vegetable juices

Fruits
• Most fresh, frozen and canned fruits
• All fruit juices

Milk/Yogurt/Cheese
• All milk, but limit to a total of two cups per day
• All yogurts
Most low-sodium cheeses including low-sodium ricotta, low-sodium cream cheese and low-sodium cottage cheese

Meats/Poultry/Fish/Dry Beans and Peas/Eggs/Nuts

- Any fresh or frozen beef, lamb, pork, poultry, fish and some shellfish
- Eggs and egg substitutes
- Low-sodium peanut butter
- Dry peas and beans

Fats/Snacks/Sweets/Condiments/Beverages

- Low-sodium or unsalted versions of butter, margarine, salad dressing; soups, soy sauce, condiments and snack foods
- Pepper, herbs and spices; vinegar, lemon or lime juice
- Low-sodium carbonated drinks

**FOODS TO AVOID**

Bread/Cereal/Rice/Pasta

- Breads, rolls, crackers with salted tops
- Quick breads, self-rising flour, biscuit mixes, regular bread crumbs
- Instant hot cereals
- Commercially made rice, pasta or stuffing mixes

Vegetables

- Regular canned vegetables/juices, including sauerkraut
- Frozen vegetables with sauces
- Commercially made potato and vegetable mixes

Fruits

- All fruits processed with salt or sodium

Milk/Yogurt/Cheese

- Buttermilk—limit to one cup per week
- Malted and chocolate milk
- Regular and processed cheese, cheese spreads and sauces and cottage cheese

Meats/Poultry/Fish/Dry Beans and Peas/Eggs/Nuts

- Any smoked, cured, salted or canned meat, fish or poultry including bacon, chipped beef, cold cuts, ham, frankfurters, sausage, sardines and anchovies; frozen breaded meats and frozen dinners
- Salted nuts

Fats/Snacks/Sweets/Condiments/Beverages

- Salad dressing/canned soups/gravies/sauces made from instant mixes or other high-sodium ingredients
- Salted snack foods; olives; bouillon
- Meat tenderizers/seasoning salt/most flavored vinegars/soy sauce/steak and barbeque sauce/condiments like mustard, ketchup, relish
- Commercially softened water

**SELF-MANAGEMENT SKILL #3:**

**TAKING YOUR MEDICATIONS**

Tips for Managing Your Medicines

- Always take your medication as prescribed by your doctor, even if you are feeling well.
- Check with your physician or pharmacist before taking any over-the-counter or dietary supplements. This includes: vitamins, minerals and herbal products.
- Do not increase or decrease the dosage of your medications, or stop taking them without first checking with your doctor.
- Report any unusual symptoms or concerns to your doctor.
- Call your doctor or pharmacist if you have any questions regarding your medications.
- Ask your doctor or pharmacist what to do if you miss a dose of a medication.
- Always carry a list of your medications.
- Ask questions about your medications.
- Your doctor, pharmacist, and nurse can help you learn about your medications and why they are important to helping you feel better.
- Keep medications in a safe place, and where children cannot reach them.
- Store medications properly, and keep them in their original containers.
- Try using a daily pill container with daily compartments to organize breakfast, lunch, dinner, and bedtime medications.

**EXERCISING AND ACTIVITY**

Regular physical activity helps you feel better. When you are active, it helps the heart and lungs use oxygen better.

Physical activity also helps:

- Lower your blood pressure
- Control your weight
- Decrease stress and tension
- Boost your energy level

**GET MOVING!**

Choose any activity you enjoy. If you like the activity, you are more likely to continue doing it. Walking is a great choice. It may be more enjoyable if you ask a friend or family member to join you.

Exercise should be guided by common sense:

- Rest before you feel tired
- Be able to carry on a conversation while you are exercising
- Rest if you feel short of breath
- Avoid activities that make you grunt, groan, or strain

**EXERCISE**

You’ll get the most benefit from a regular exercise routine. It is best if you exercise 5 to 7 days a week for 30–60 minutes (begin with 5–10 minutes several times per day and add about 5 minutes per week as tolerated).

**WARM UP AND COOL DOWN**

Each time you exercise, start with a 5 minute warm-up (begin slowly). At the end of each exercise session, finish with a 5 minute cooldown period (end slowly). This may include stretching exercises. Starting an exercise program can be the hardest part! Once you get started, it’s likely that you will continue your program. You’ll feel better and have more energy. Your daily activities will seem easier.

**STEP IT UP!**

Does your regular routine seem too easy? Are you ready to step it up? You should increase the amount of time you exercise little by little. Ask your doctor before you increase the speed or intensity of your exercise. Ask your doctor about getting involved in a cardiac rehabilitation program in your local area. Most insurance plans cover the cost of the rehabilitation program. These programs have trained staff who can help you:

- Increase your exercise tolerance
- Decrease HF symptoms
- Improve your quality of life

**WAYS TO SAVE ENERGY**

- Avoid becoming too tired. Plan ahead so that you are not doing all of your work in one day, or at one time during the day.
- Space your activities and work over the whole day. Do some work and then take a break. The trick is to quit while you’re ahead, before you feel tired. If you do small amounts of work at a time, you will be able to do more in the long run.
- Sit rather than stand when doing activities such as ironing, washing dishes, shaving, or brushing your teeth.
- At work, take advantage of breaks and lunchtime to sit and rest.
- When doing a task, gather all the supplies you will need. That way, you will avoid making unnecessary trips. Get a small laundry cart with wheels for an easy way to carry items throughout the house.
- When climbing up stairs, put two feet on each step. Stop and rest if you feel you need to.
- If you feel tired, dizzy, or short of breath, you need to stop and rest.
- Ask your family and friends for help!
- Even on your good days, it’s important to save your energy. When you are feeling good, you may be tempted to overdo things.
- You may have a certain time each day when you feel more energetic. Plan to do difficult tasks during this time. That way, you can take it easy during your low-energy periods.
THE HEART AND HOW IT WORKS

The heart has two independent pumping systems, one on the right side and one on the left side. Each of these systems has two chambers:
- Atrium (pronounced AY-tree-um)
- Ventricle (pronounced VEN-trick-ul)

The atria are located on the top of the ventricles. These are the hearts filling chambers.

The ventricles are the major pumps of the heart. The left ventricle is generally the strongest pumping part of the heart.

THE HEART'S VALVES

The valves are flaps that open and close to allow blood to flow to the atrium from the ventricle.

The correct direction for blood flow is from the atrium into the ventricle.

Occasionally blood flow does not follow the correct route. This will be discussed later.

To further understand the role that each side of the heart plays in pumping blood, let’s now look at each side individually.

THE RIGHT SIDE

The right side of the heart receives blood from the veins of the body. This is “non-oxygenated” or “used” blood. The blood is referred to as used because it already has done its work, delivering oxygen to the far sites of the body before returning to the heart.

The blood is returned to the right side into the first chamber in the top portion, the right atrium. This chamber is able to expand to hold the blood volume that will fill its cavity. When there is enough blood, the tricuspid heart valve allows the blood to flow into the right ventricle (the bottom part of the right side of the heart).

The main function of the right ventricle is to pump the blood to the lungs. The blood needs to return to the lungs to pick up oxygen. We sometimes say that the blood becomes “oxygenated” or “fresh” again. When the pumping action triggers the pulmonary valve, it opens. This allows the blood to flow into the lungs.

In the lungs, the blood picks up oxygen and leaves carbon dioxide behind (which you breathe out). The blood, now rich in oxygen, is sent to the left side of the heart.

THE LEFT SIDE

The left side of the heart receives blood from the lungs. This blood is now oxygen-rich. The blood enters the left heart from special veins coming directly from the lungs (pulmonary veins).

The first chamber to receive the blood is the left atrium. As with the right side, when the atrium fills, the valve connecting the atrium and ventricle opens. This allows the blood to pass into the left ventricle. The valve in this case is the mitral valve (pronounced MY-trul).

The left ventricle is the main pumping chamber of the heart. Once blood is collected in the left ventricle, the ventricle contracts and the aortic valve opens. This allows blood to pass into the ascending aorta, the major artery that supplies blood to the entire body. After the oxygen-rich blood is used by the body, it returns to the right side of the heart, and the whole process begins again.

IS MY HEART WEAK? DO I HAVE A “BAD” PUMP?

Often your doctor or others give you information about how “bad” or “good” your heart is. When they discuss the heart’s ability to pump, they are usually making reference to the main pumping chamber of the heart (left ventricle) and its ejection fraction (EF).

An EF is the percent of blood pumped out of the left ventricle each time the heart beats. The heart never pumps out all the blood when it beats. A normal EF is 50-70 percent. Any number in this range is considered a “good” pump. When the EF is less than 40 percent the risk of heart failure and other problems with the heart is greater. Your doctor will discuss some of these risks if needed.

The EF can be measured with several different tests. The tests include:
- Echocardiogram
- TEE
- Cardiac catheterization
- MUGA
- Cardiac CT or MRI of the heart
- Gated image from a nuclear stress test

Ask your doctor or nurse if you would like more information on these tests.
CAUSES OF HEART FAILURE

Heart Failure occurs because a problem with the heart is making it hard for the heart to push blood out or making it hard for the heart to relax and fill with blood.

Some of these problems are:

• Coronary artery disease
• Heart attack
• High blood pressure (hypertension)
• Heart valve disease
• Arrhythmias
• Alcohol abuse
• Infections

The following is a more detailed explanation of each of these.

CORONARY ARTERY DISEASE

This disease is caused by a process called atherosclerosis. It is a progressive build-up of plaques within the coronary artery walls limiting blood flow to the heart. It often leads to a heart attack (myocardial infarction) and is the most common cause of heart failure.

This build-up narrows the opening (lumen) of the vessel, so blood has a difficult time passing through to the heart muscle itself.

As a result, a part of the heart muscle will not get the proper amount of oxygen-rich blood. This part will become too weak to pump the blood effectively. The rest of the heart will have to pick up this work load. This strain and extra work load may lead to the heart getting weaker.

HEART ATTACK (MYOCARDIAL INFARCTION)

When a coronary artery is completely blocked and blood flow is stopped to part of the heart muscle near that artery, a heart attack occurs. This is referred to as a myocardial infarction (pronounced my-oh-CAR-dee-uhl in-FARKshun). Once this happens, the damage is not reversible. The damaged part of the heart loses its ability to pump. The rest of the heart tries to take on that work load. After some time of doing that extra work, the heart is tired and strained. Eventually, it pumps less blood to the body.

HYPERTENSION

Blood pressure is the force pushing blood through the vessels of the body. When your blood pressure is high, your body has to work harder to deliver the blood. Because of this extra hard work load, high blood pressure (also known as hypertension) may cause the heart muscle to thicken to compensate for the increased blood pressure. These changes put even more strain on the heart. The heart muscle eventually thickens and weakens. Once this occurs, the heart no longer has the ability to fill normally with blood.

HEART VALVE DISEASE

Sometimes the heart valves themselves are not working properly. This can lead to heart failure.

The valves between the chambers of the heart control the flow of blood leaving and entering the heart. Two main types of abnormalities can occur that lead to failure:

• The valves can become narrow (stenosis) and cause a back-up of blood.
• The valves can close improperly, causing blood to leak backward (insufficiency).

Either way, the heart has to work harder. Narrowing of the heart valves forces the heart to pump harder, so blood can flow through the narrow (stenotic) area into the next chamber. Extra work also is added when a valve does not close properly.

Over time, both of these extra work-load conditions can lead to heart failure. Sometimes valve problems resulting from rheumatic fever, or birth defects, can cause heart failure.
**ARRHYTHMIAS (IRREGULAR OR FAST HEART BEAT)**

Sometimes the heart beat goes fast, or is irregular (or both). This can put a strain on the heart, causing your body to retain fluid resulting in heart failure. This is usually treated with medication and resolves quickly. A person having heart failure from just an arrhythmia, once treated, may never have heart failure again.

**INFECTIONS**

Both viruses and bacteria can attack the heart muscle and make it weak. This type of problem affects people at any age, and often very unexpectedly.

**CARDIOMYOPATHIES**

Cardiomyopathies (pronounced KAR-dee-oh-my-AW-pathes) literally means heart muscle condition or disease. It is used by doctors to classify heart failures, and helps lead to more effective treatment.

Types of cardiomyopathies include:
- Ischemic (pronounced is-ke-mik) cardiomyopathy
- Dilated (pronounced DYE-lay-ted) cardiomyopathy
- Hypertrophic (pronounced hy-per-TROFik) cardiomyopathy
- Restrictive cardiomyopathy

**ISCHEMIC CARDIOMYOPATHY**

Coronary artery disease and heart attacks can lead to the most common type of cardiomyopathy called ischemic cardiomyopathy. This was discussed above.

**DILATED CARDIOMYOPATHY**

Dilated cardiomyopathy (DCM) is the most common non-ischemic cardiomyopathy. It occurs when the main pumping chamber of the heart is enlarged, dilated and weak. The heart dilates and the muscular wall becomes thin. The overall pumping action is reduced.

The causes of DCM include:
- Most cases of dilated cardiomyopathy are idiopathic (an exact cause is not known)
- Sometimes a viral illness may be responsible
- Occasionally it may be inherited (familial cardiomyopathy)
- Heart valve disease (valvular cardiomyopathy)
- Alcoholism (heavy drinking, alcoholic cardiomyopathy)
- Drug abuse or taking drugs that are toxic to the heart
- Thyroid disease
- Diabetes
- Women after childbirth (postpartum cardiomyopathy)

**HYPERTROPHIC CARDIOMYOPATHY**

Hypertrophic cardiomyopathy (HCM) is very complex. It causes thickening of the heart muscle (especially the ventricles or lower chambers), stiffness of the left ventricle, mitral valve changes and cellular changes. Because of these changes the heart becomes a less effective pump.

The causes of HCM include:
- Family history — abnormal gene passed on by parents
- High blood pressure
- Aging
- Idiopathic (an exact cause is not known)

**RESTRICTIVE CARDIOMYOPATHY**

Restrictive cardiomyopathy (RCM), the rarest form of cardiomyopathy, is a condition in which the walls of the lower chambers of the heart (the ventricles) are abnormally rigid and lack the flexibility to expand as the ventricles fill with blood.

The causes of RCM include:
- Build up of scar tissue for no known reason (idiopathic)
- Build up of abnormal proteins (amyloidosis) in the heart muscle
- Chemotherapy or chest exposure to radiation
- Excess iron (hemochromatosis) in the heart
- Other systemic diseases (sarcoidosis)

**COMMON CONGESTIVE HEART FAILURE MEDICATIONS**

There are numerous medications that your doctor might prescribe to help control your heart failure. Because each patient presents different circumstances, your physician will prescribe medications that are best for you.

In general, these medications can help you in several ways, including:
- Controlling the symptoms of heart failure by helping the heart pump better
- Keeping you out of the hospital
- Reducing your risk of death
- Continue to take the medications prescribed by your doctor, even if you are feeling better.

**BETA-BLOCKERS**

These medications work to decrease the workload of the heart by lowering blood pressure and slowing the heart rate. As a result, the pumping action of the heart improves, your chances of living longer and make you feel better.

Common beta-blockers: carvediolol (Coreg®), metoprolol (Lopressor®), atenolol (Tenormin®), bisoprolol (Zebeta®)

**ANGIOTENSIN-CONVERTING ENZYME (ACE) INHIBITORS**

ACE inhibitors block the effects of a blood protein called angiotensin-converting enzyme (ACE). ACE inhibitors are “vasodilators” because they relax or dilate the blood vessels and help lower blood pressure. These medications decrease the workload of the heart, slow the progression of heart failure, and improve symptoms. ACE inhibitors help to keep you out of the hospital, improve your chances of living longer, and make you feel better.

Common ACE inhibitors: captopril (Capoten®), enalapril (Vasotec®), lisinopril (Zestril®, Prinivil®), quinapril (Accupril®), ramipril (Altace®)

**ANGIOTENSIN RECEPTOR BLOCKERS (ARBs)**

Angiotensin receptor blockers (ARBs) have actions similar to those of ACE inhibitors and are often used for patients who cannot take ACE inhibitors. However, in some cases, they may be used together with ACE inhibitors. ARBs help to keep you out of the hospital, improve your chances of living longer, and make you feel better.

Common ARBs: valsartan (Diovan®) and candesartan (Atacand®)
HYDRALAZINE AND NITRATES

Hydralazine and nitrates work by decreasing how hard your heart has to pump blood through the body. These medications are considered a “vasodilator” because they relax or dilate the blood vessels and help lower blood pressure. Hydralazine and nitrates are often used in combination with each other for patients who cannot take an ACE inhibitor or ARB. Hydralazine and nitrates can help to keep you out of the hospital, improve your chances of living longer and make you feel better.

Common nitrates: isosorbide dinitrae (Isordil®), isosorbide mononitrate (Imdur®)

DIURETICS

Diuretics, often called water pills, increase the amount of urine the body produces, helping to get rid of extra fluid and salt. By removing extra fluid from the body, diuretics help lower the workload of the heart and decrease the amount of fluid that collects in the feet, lungs, and other areas in some people with heart failure. Your doctor may want you to take potassium supplement with this medication.

Common diuretics: furosemide (Lasix®), bumetanide (Bumex®), torsemide (Demadex®)

ALDOSTERONE ANTAGONISTS

Aldosterone antagonists work by blocking the effects of a stress hormone called aldosterone (a substance that can make heart failure worse). These medications are commonly used to treat heart failure when symptoms persist after other drug therapies are maximized.

Common aldosterone antagonists: spironolactone (Aldactone®), eplerenone (Inspra®)

DIGOXIN

Digoxin, also known as digitalis, helps the heart pump more strongly and helps to control the heart rhythm. This helps to improve blood circulation and reduce swelling of the feet and lower legs. Digoxin helps you feel better and function better on a daily basis.

This booklet tells you and your family about routine care for heart failure.

Please ask us any questions you may have.

Tell us of any problems you think you may have after you leave the hospital.

We will be very happy to assist you.

NOTES AND QUESTIONS

Please use this space to write a list of questions or concerns you may have. The list will help you remember issues you want to discuss. Take this list to your appointments and to the hospital.
## Daily Weight Chart

This chart allows you to track your weight for an entire year. Please record your weight each day by filling in the box that corresponds to the correct month and day.

<table>
<thead>
<tr>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>