# **Heart Failure**

Permafold®: What You Need To Know



Causes

Signs & Symptoms

Diagnosis

Prevention

Treatment

Call Health Care Provider For

8. Get Immediate Care For



Reviewed and Approved by the Senior Medical Advisory Board

This **Perma**fold® is not meant to take the place of expert medical care or treatment. Follow your doctor's or health care provider's advice.

## 1. What is Heart Failure?

The heart is the body's pump. When it can't pump well enough to meet the body's needs, it is called heart failure (HF). The heart itself doesn't fail, but "fails" to supply the body with enough blood and



oxygen. The pumping action of the heart decreases. Blood flow slows down. This causes excess fluid (edema) in tissues throughout the body. The term congestive heart failure, used in the past, is due to the excess fluid or congestion. Heart failure needs a doctor's diagnosis and care!



Anything that damages the heart muscle or makes it work too hard can cause heart failure. This includes:

- One or more heart attacks. This is the number 1 cause.
- Advanced coronary artery disease.
- High blood pressure that is not controlled.
- High blood pressure in the lungs (pulmonary hypertension).
- Alcohol and/or drug abuse.
- Severe or chronic lung disease (e.g., emphysema).
- Diabetes, especially if it is poorly controlled.
- Pericarditis. This is a swelling or thickening of the lining that surrounds the heart. This can restrict the heart's pumping action.
- Abnormal heart valves. Causes include rheumatic heart disease and heart defects present at birth.
- Abnormal heart rhythm.
- A viral infection. This is rare and happens only if the infection affects the heart and causes cardiomyopathy, a muscle disease of the heart.

## 3. Signs & Symptoms

- Shortness of breath.
- Feeling very tired or weak.
- Dry cough or a cough with pink, frothy mucus.
- Swelling of the lower legs, ankles, and feet. Your shoes can suddenly feel too tight.
- Decreased appetite and nausea.
- Rapid weight gain over several days or weeks without an increase in food intake. You could gain up to 1 pound a day.
- A fast heartbeat.
   Sometimes the heartbeat is irregular.



- Feeling anxious or restless.
- A feeling of suffocation. This is caused by fluid that collects in the lungs. It can be difficult to lie flat. You may need to sleep on 2 or more pillows. You may wake up suddenly from sleep feeling short of breath.

## 4. Diagnosis

## Ways to Diagnose Heart Failure:

- A medical history and physical exam. Blood and urine tests.
- A chest X-ray to see if the heart is enlarged and if the lungs are congested.
- An ECG (also called EKG) to look for an enlarged heart, heart muscle damage, and abnormal heart rhythms.
- An echocardiogram. This test uses sound waves to show the heart's size, shape, and movement.
- An exercise stress test.
- A cardiac catheterization. This test diagnoses coronary artery disease and checks for past heart attacks.

## 5. Prevention

Some causes of heart failure can be prevented. These include heart attacks, coronary artery disease, high blood pressure, rheumatic fever, and substance abuse.

## To Prevent Heart Attacks and Coronary Artery Disease:

- Don't smoke. If you smoke, quit!
- Have regular medical checkups. Get your blood pressure checked at each office visit or at least every 2 years. Get your blood cholesterol tested as advised by your doctor.
- Take all medicines as prescribed. These include ones for high blood pressure, etc.
- Ask your provider about taking a low dose of aspirin (e.g., 1 baby aspirin) daily.
- Get to or stay at a healthy body weight.
- Strictly limit or avoid alcohol.
- physical activity. {Note: Talk to your health care provider before you start an exercise program. This is important if you have been inactive for a long period of time, are overweight,



are over age 35, or have any medical problems.}

Get a test to screen for diabetes as advised by your doctor. Having diabetes and high blood cholesterol increase the risk for heart disease. See "Signs & Symptoms of Diabetes" on the next panel.

## Signs & Symptoms of Diabetes

According to the American Diabetes Association, some signs and symptoms of diabetes are:

- Frequent urination.
- Excessive thirst.
- Extreme hunger.
- Unusual weight loss.
- Irritability.
- Blurry vision.

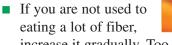
If you have one or more of these signs and symptoms, see your health care provider.

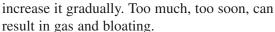
In type 1 diabetes, symptoms tend to come on quickly. In type 2, symptoms tend to come on more slowly. You can even have diabetes without any symptoms. This is why screening for it is important.

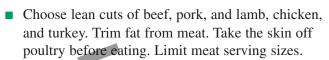
#### Follow a heart healthy diet.

- Eat less total fat, especially saturated and *trans* fats, which raise LDL ("bad") cholesterol in the blood. Saturated fats are in animal fats, dairy foods with fat, and coconut and palm oils. *Trans* fats are in foods with hydrogenated vegetable oils, such as stick margarine and shortening, foods fried in these, and in some processed foods.
- Eat at least 5 servings of fruits and vegetables a day.
- Choose bran and whole-grain cereals and breads over enriched products.
- Eat fish (e.g., salmon, tuna, etc.) 2 or more times a week. Fish contain omega-3 fatty acids which may help protect against some health problems.
- Read food labels for total fat, *trans* fat, saturated fat, dietary fiber content, etc. Also, foods with the American Heart Association heart-check mark are good choices.

- Use nonfat and low-fat dairy products.
- Get 20 to 35 grams of dietary fiber a day. The water-soluble kind of dietary fiber can help lower blood cholesterol. The fiber binds to cholesterol and helps to remove it from the body.







- Use fat-free salad dressings, vinegar, lemon juice, or no dressing at all instead of regular and high-fat dressings and sauces.
- Drink at least 8 to 10 glasses of water a day. Water is needed for fiber to do its job. {*Note:* If you already have heart failure, discuss your daily fluid intake with your doctor.}
- Limit dietary cholesterol to 300 milligrams per day. Cholesterol is found only in animal sources of food (e.g., liver and other organ meats; beef, pork, chicken, and fish; and dairy foods that have fat). Plant foods have no cholesterol.
- Limit your salt intake. Why? Some persons are salt-sensitive. For them, too much salt can raise their blood pressure. Health groups recommend no more than 2,000 to 2,400 milligrams of sodium (part of salt) per day. (See "Ways to Limit Sodium" under "Self-Care" in topic 6.)
- Follow your health care provider's advice about taking vitamin supplements. These include vitamins E and C, and folic acid, a B vitamin.
- Learn to deal with stress. Do relaxation and deepbreathing exercises.



#### To Prevent Rheumatic Fever:

- Consult your health care provider for diagnosis and treatment of sore throats. Rheumatic fever can result if strep throat is left untreated.
- If antibiotics are prescribed for strep throat, take all of the medicine.

#### To Prevent Alcohol and Drug Abuse:

- Know your limit and stick to it or don't drink any alcohol.
- When you drink, do so responsibly. When it comes to drugs, JUST SAY NO!
- Find ways to calm yourself other than with alcohol or drugs.
- Listen to calm music.
- Do deep-breathing exercises.
- Do regular exercise.
- Do things that you know and do well in order to feel confident. For example, learn and practice martial arts, sew, paint, or do volunteer work.
- Talk to persons who will listen to your feelings without putting you down. You will be less likely to turn to drugs or alcohol to "drown your sorrows."
- Stay out of situations where drugs are available.
- Seek help for mental health problems, such as depression or chronic anxiety before they lead to alcohol or drug problems.
- After surgery, an illness, or an injury, stop the use of prescribed pain pills as soon as you can. Don't use more than you need.
- Contact your Employee Assistance Program (EAP) at work for information on alcohol and drugs before you get hooked.

## 6. Treatment

Most cases of heart failure can be treated with success. Treatment depends on the cause. The goals of treatment are to:

- Strengthen the heart's pumping action.
- Get rid of excess fluids.
- Create an activity level within your limits.

#### **Medical Care**

- Medications. Take medicines as advised.
- Common heart failure medications are:



Diuretics.

These help your body retain less salt and water by increasing urine output.

- Vasodilators. These open blood vessels to reduce the force the heart must pump against.
   Ones called ACE inhibitors can help persons with CHF live longer and feel better.
- Digitalis. This strengthens the pumping action of the heart muscle.
- Hydralazine. This drug widens blood vessels to help ease blood flow.
- Nitrates. These relax smooth muscles and widen blood vessels.
- Beta-blockers. These help stop over-stimulation of the heart and improve heart muscle cell function.
- Implanted devices that help regulate heartbeats or heart pumping action. These are only used when medicines and lifestyle changes don't work.
- Surgery. Surgery to replace a damaged hart valve may be needed. A heart transplant is reserved for the most severe cases of heart failure. The person needs to be a good candidate for surgery, too.

#### Self-Care

• Weigh
yourself
daily to
check for
excess fluid
weight gain.
Keep a
record of
what you
weigh. Take



it with you when you visit your health care provider. Call your provider, though, if your weight increases suddenly (3 or more pounds in 1 day).

- Limit sodium (part of salt) to about 2,000 milligrams per day. Ways to limit sodium:
  - Take the salt shaker off the table. Use a salt substitute if it is okay with your health care provider.
  - Cut back on or don't use any salt when you cook pasta, rice, noodles, and hot cereals.
  - Choose fresh foods over processed ones with added salt. Use fresh herbs and spices that do not have salt or sodium.
  - Read food labels for sodium content. Limit high sodium foods (e.g., canned soups, packaged dinners, dehydrated mixes for soups, sauces, etc.) Choose frozen dinners with less than 1,000 milligrams of sodium per serving.
  - Use low and reduced sodium products (e.g., canned soup with 1/3 less salt).
  - Limit ketchup, mustard, soy sauce, steak sauce, and prepared salad dressings or use ones low in sodium. Put tomato slices and lettuce on a sandwich instead of condiments and pickles.
  - Reduce salt and sodium-containing ingredients in recipes. Don't be fooled by recipes that have little or no salt, but call for soups, bouillon cubes, or condiments that do.

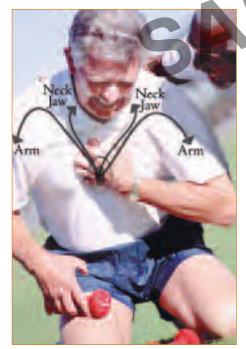
- When you eat out, ask that items be prepared without salt. Ask for sauces "on the side" so you can use just a small amount.
- Do not use softened water.
- Before you take a medicine, find out from your doctor or pharmacist if it has too much sodium.
- If you take "water pills," follow your doctor's advice to keep your potassium level up. You may be told to have good food sources of potassium every day (e.g., orange juice, oranges, bananas, etc.). You may need to take a prescribed potassium supplement.
- Limit fluids as advised by your health care provider.
- Have 5 to 6 small (instead of 3 large) meals a day.
- Stay as active as you can.
- Do not have more than one alcoholic drink a day, if at all. One drink equals 4 to 5 oz. of wine; 12 oz. of beer; or 1½ oz. of 80 proof liquor.
- Eat healthy. (See "Prevention" in topic 5.)
- Exercise on a regular basis as advised by your health care provider.
- Modify your daily activities as
- needed so you don't place too heavy a demand on your heart. Alternate activity with periods of rest.
- Sit up when you rest, if this makes breathing easier. Sleep on 2 or more pillows and/or raise the head of your bed 6 inches when you sleep.
- Don't smoke. If you do, quit!
- Lose weight if you are overweight.
- Follow your health care provider's treatment program. Take your medication(s) as prescribed.

## 7. Call Health Care Provider For:

- A new onset of shortness of breath or fatigue when you do your normal activities or lie down.
- A new onset of swelling in the ankles and feet and it is harder to breathe when you lie down flat.
- Coughing up pink or frothy mucus with mild shortness of breath.
- An unexplained weight gain of 3 to 5 pounds.
- Having heart failure and you have symptoms of a cold or flu. These may add stress to your heart.
- Having heart failure and your symptoms worsen.

## 8. Get Immediate Care For:

- Severe shortness of breath (you are too short of breath to say a few words) with or without wheezing (a high pitched whistling sound).
- Heart Attack Warning Signs (see below and next panel).



### **Heart Attack Warning Signs**

- Chest discomfort. Most heart attacks involve discomfort in the center of the chest that lasts for more than a few minutes or goes away and comes back. The discomfort feels like pressure, fullness, squeezing or pain.
- Discomfort in other areas of the upper body.

  This can include pain or discomfort in one or both arms or in the back, neck, jaw, or stomach.
- *Shortness of breath.* Often, this comes with chest discomfort. But it can also come before the chest discomfort.
- *Other symptoms*. These can include breaking out in a cold sweat, nausea, or being lightheaded.

The most common heart attack symptom for both men and women is chest pain or discomfort. But women are more likely than men to have some of the other common signs, especially shortness of breath, nausea, or vomiting, and back or jaw pain.

### For More Information, Contact:

American Heart Association 800.242.8721

www.americanheart.org

National Heart, Lung, and Blood Institute 301.251.1222 www.nhlbi.nih.gov

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