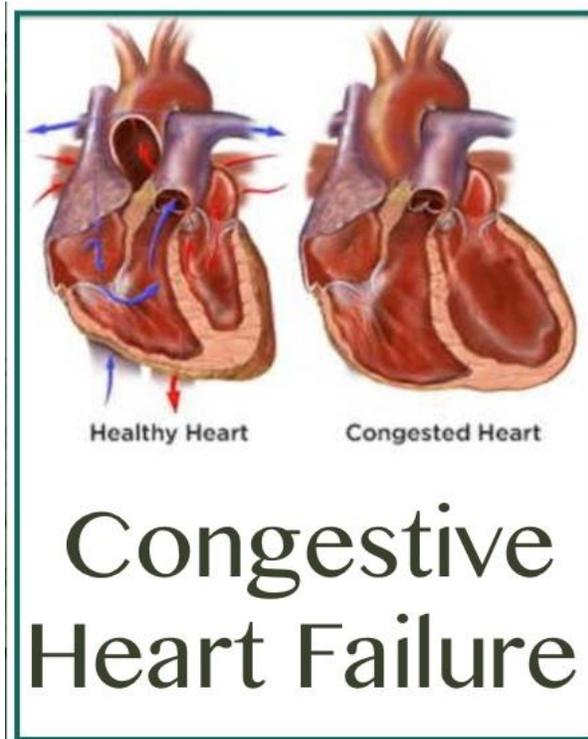


Congestive Heart Failure



Heart failure, also known as congestive heart failure (CHF), means your heart can't pump enough blood to meet your body's needs. Over time, conditions such as narrowed arteries in your heart (coronary artery disease) or high blood pressure gradually leave your heart too weak or stiff to fill and pump efficiently.

You can't reverse many conditions that lead to heart failure, but heart failure can often be treated with good results. Medications can improve the signs and symptoms of heart failure. Lifestyle changes, such as exercising, reducing the salt in your diet, managing stress, treating depression, and especially losing excess weight, can improve your quality of life.

The best way to prevent heart failure is to control risk factors and conditions that cause heart failure, such as coronary artery disease, high blood pressure, high cholesterol, diabetes or obesity.

Symptoms

- Cough
- Decreased alertness or concentration
- Decreased urine production
- Difficulty sleeping
- Fatigue, weakness, faintness
- Irregular or rapid pulse
- Loss of appetite, indigestion
- Nausea and vomiting
- Neck veins that stick out
- Need to urinate at night
- Sensation of feeling the heart beat (palpitations)
- Shortness of breath with activity, or after lying down for a while
- Swelling of the abdomen
- Swelling of feet and ankles
- Weight gain

Infants may sweat during feeding (or other activity).

Some patients with heart failure have no symptoms. In these people, the symptoms may develop only with these conditions:

- Abnormal heart rhythm (arrhythmias)
- Anemia
- Hyperthyroidism
- Infections with high fever
- Kidney disease

Causes & Diagnosis

Heart failure is almost always a chronic, long-term condition, although it can sometimes develop suddenly. This condition may affect the right side, the left side, or both sides of the heart.

As the heart's pumping action is lost, blood may back up into other areas of the body, including the:

- Gastrointestinal tract, arms, and legs (right-sided heart failure)
- Liver
- Lungs (left-sided heart failure)

Heart failure results in a lack of oxygen and nutrition to organs, which damages them and reduces their ability to function properly. Most areas of the body can be affected when both sides of the heart fail.

The most common causes of heart failure are:

- Coronary artery disease
- High blood pressure

Other structural or functional causes of heart failure include:

- Cardiomyopathy
- Dilated cardiomyopathy
- Hypertrophic cardiomyopathy
- Restrictive cardiomyopathy
- Congenital heart disease
- Heart valve disease
- Heart tumor
- Lung disease

Heart failure becomes more common with advancing age. You are also at increased risk if you have a personal or family history of heart related symptoms.

A physical examination may reveal the following:

- Fluid around the lungs (pleural effusion)
- Irregular heartbeat
- Leg swelling (edema)
- Neck veins that stick out (are distended)
- Swelling of the liver

Listening to the chest with a stethoscope may reveal lung crackles or abnormal heart sounds. Blood pressure may be normal, high, or low.

The following tests may reveal heart swelling or decreased heart function:

- Cardiac MRI
- Chest CT scan
- Chest x-ray
- ECG, which may also show arrhythmias
- Echocardiogram
- Heart catheterization
- Nuclear heart scans

This disease may also alter the following test results:

- Blood chemistry
- BUN
- Complete blood count
- Creatinine
- Creatinine clearance
- Liver function tests
- Serum uric acid
- Serum sodium
- Urinalysis
- Urinary sodium

Treatment

If you have heart failure, your doctor will monitor you closely. You will have follow up appointments at least every 3 to 6 months and tests every now and then to check your heart function. For example, an ultrasound of your heart (echocardiogram) will be done once in awhile to see how well your heart pumps blood with each beat.

You will need to carefully monitor yourself and help manage your condition. One important way to do this is to track your weight on a daily basis. Weight gain can be a sign that you are

retaining fluid and that the pump function of your heart is worsening. Make sure you weigh yourself at the same time each day and on the same scale, with little to no clothes on.

Other important measures include:

- Take your medications as directed. Carry a list of medications with you wherever you go.
- Limit salt intake.
- Don't smoke.
- Stay active. For example, walk or ride a stationary bicycle. Your doctor can provide a safe and effective exercise plan based on your degree of heart failure and how well you do on tests that check the strength and function of your heart. DO NOT exercise on days that your weight has gone up from fluid retention or you are not feeling well.
- Lose weight if you are overweight.
- Get enough rest, including after exercise, eating, or other activities. This allows your heart to rest as well. Keep your feet elevated to decrease swelling.

How to get on with your Life!

Making lifestyle changes can often help relieve signs and symptoms of heart failure and prevent the disease from worsening. These changes may be among the most important and beneficial you can make:

- **Stop smoking.** Smoking damages your blood vessels, reduces the amount of oxygen in your blood and makes your heart beat faster. If you smoke, ask your doctor to recommend a program to help you quit. You can't be considered for a heart transplant if you continue to smoke.
- **Weigh yourself daily.** Do this each morning after you've urinated, but before you've had breakfast. Notify your doctor if you have a weight gain of 3 pounds (1.4 kilograms) or more pounds in a day. It may mean that you're retaining fluids and need a change in your treatment plan. Record your weight every morning and bring the record with you to your doctor's visits.
- **Restrict sodium.** Sodium is a component of salt. Too much sodium contributes to water retention, which makes your heart work harder and causes shortness of breath and swollen legs, ankles and feet. For people with heart failure, the daily recommended

amount of dietary sodium is no more than 2,000 milligrams a day. Keep in mind that most of this salt is already added to prepared foods, and be careful when using salt substitutes.

- **Maintain a healthy weight.** If you're overweight, your dietitian will help you work toward your ideal weight.
- **Limit fats and cholesterol.** In addition to avoiding high-sodium foods, limit the amount of saturated fat, trans fat and cholesterol in your diet. A diet high in fat and cholesterol is a risk factor for coronary artery disease, which often underlies or contributes to heart failure.
- **Limit alcohol and fluids.** Your doctor likely will recommend that you don't drink alcohol if you have heart failure, since it can interact with your medication, weaken your heart muscle and increase your risk of abnormal heart rhythms. If you have severe heart failure, your doctor may also suggest you limit the amount of fluids you drink.
- **Exercise.** Moderate exercise helps keep the rest of your body healthy and conditioned, reducing the demands on your heart muscle. Before you start exercising though, talk to your doctor about an exercise program that's right for you. Your doctor may suggest a walking program. Check with your local hospital to see if it offers a cardiac rehabilitation program; if it does, talk to your doctor about enrolling in the program.
- **Reduce stress.** When you're anxious or upset, your heart beats faster and you breathe more heavily. This can make heart failure worse, since your heart is already having trouble meeting the body's demands. Find ways to reduce stress in your life. To give your heart a rest, try napping or putting your feet up when possible.
- **Sleep easy.** If you're having shortness of breath, especially at night, sleep with your head propped up at a 45-degree angle using a pillow or a wedge. If you snore or have had other sleep problems, make sure you get tested for sleep apnea.

To improve your sleep at night, prop up your head with pillows and avoid big meals right before bedtime. Also, discuss with your doctor changing the time for taking medications, especially diuretics. Taking diuretics earlier in the day may keep you from having to urinate as often during the night.