Congestive Heart Failure for VAD Patients
Welcome to the University of Wisconsin Hospital and Clinics.

This booklet was designed to help you:
- Learn about the heart and how it works
- Learn about heart failure and the tests and treatments used to manage it
- Learn how to work with your doctor or nurse so you can begin to live with heart failure and feel better

Many people with heart failure lead normal, active lives. They do so because they have learned to take good care of themselves. You can take control of heart failure by learning how to follow your treatment plan.

Right now, your symptoms may limit what you can do. You may feel discouraged about your treatment plan. The advice in this booklet can help you feel better, stay out of the hospital, and live longer. It can help you to live well with heart failure and its treatment.

The Heart and How It Works

Your heart is a muscle that pumps blood to the lungs and all parts of your body. A normal heart is a little larger than your fist and weighs less than a pound. The blood from the heart carries oxygen and nutrients throughout your body. With each pump of the heart, blood is kept moving through your arteries and veins.

About Heart Failure

Many people believe that heart failure means that the heart has stopped or is about to stop. That is not true. Heart failure simply means that the heart is not pumping blood through the body as well as it should. As the heart’s pumping action weakens, blood backs up into the blood vessels around the lungs. This causes seepage of fluid into the lungs. The fluid causes congestion and makes it hard to breathe. Many people with heart failure also have swollen legs and feet. That is why heart failure is sometimes called congestive heart failure (CHF).
Heart failure is a grave illness that can affect how long a person lives. The length of time a person with heart failure can live depends on many factors. These include the cause and type of heart failure, your body’s response to medicines, and the effect of lifestyle changes. In most cases, heart failure can’t be cured, but it can be brought under control with careful work on your part.

**This means that you should:**
- Take all of the medicines ordered by your doctor
- Follow a 2000 mg sodium diet
- Stop smoking
- Remain active
- Lose weight, if you are obese
- Stop drinking or limit the amount of alcohol you drink
- Fluid restrictions of 2000ml

You should also **check yourself daily** for signs that your heart failure is getting worse. You should:
- Weigh yourself
- Look for swelling in hands, feet, face, bloating, and waistband feels tight.

You can gain weight without seeing swelling. Many people can hold 8 to 15 extra pounds of fluid before swelling is noticed.

Weighing yourself and looking for swelling may seem hard to do. Your active input and following the treatment plan **is very important**. This booklet will provide you with many tips and ideas to help you take control of your health.

**What causes heart failure?**

There are many causes of heart failure. Some of the most common causes include:
- Blockage of blood vessels to the heart (coronary artery disease)
- A pre-existing heart condition
- Heart attack (myocardial infarction), a part of the heart that has died and does not function as it should
- High blood pressure (hypertension)
- Heart valve and rhythm problems
- Infections and diseases of the heart muscle (cardiomyopathy, viral myocarditis, and endocarditis)
- Alcohol and drug abuse
- Tobacco abuse
- Lung disease
- Thyroid disease
- Genetic or family history
- Drugs that are toxic (poisonous) to heart muscle
What are the symptoms?

Some of the classic symptoms of heart failure include:
- Shortness of breath when at rest, lying flat, or with little activity
- Feeling tired or with low energy with normal activity
- Wheezing, coughing, or chest congestion that does not go away
- Need to sit up to sleep or breathe comfortably
- Swollen legs, feet, belly, arms, and/or face
- Weight gain with a loss of hunger for food
- Feeling bloated when eating, or feeling full after taking just a few bites
- Feeling anxious or restless

How is heart failure diagnosed?

During an exam, your doctor can detect heart failure. The doctor listens to your heart and lungs and looks for extra fluid. Your doctor will ask you about any symptoms you are having. You may also have a chest x-ray, an EKG (electrocardiogram), or an ultrasound of the heart (echocardiogram).

How is heart failure treated?

Treatments for heart failure include:
- Take drugs
- Cut back on fluid and salt in the diet
- Check your weight daily
- Add exercise to your daily life
- Stop smoking
- Eat a healthy low fat, low calorie diet
- Fluid restriction

Medicines used to treat heart failure

Check the medicines that apply to you.

- **Beta-blockers**: Carvedilol (Coreg®), Metoprolol succinate ERT (Toprol XL®)
  How these drugs work:
  - Block the receptor sites of hormones that make the heart beat hard and fast. This allows the heart to beat slower and pump blood better. This lowers the amount of work and energy the heart needs.
  - Help patients live longer and feel better.

Some common side effects
- Slow heart rate and lower blood pressure
- Feeling faint or dizzy
- Fatigue or weakness
- Depression
- Impotence or problems with sexual function
- Fluid may be retained when starting the drug

Please talk to your doctor or nurse if you notice any of these effects.
**ACE Inhibitors** (Angiotensin Converting-Enzyme Inhibitors): Benazepril (Lotensin®), Captopril (Capoten®), Enalapril (Vasotec®), Fosinopril (Monopril®), Lisinopril (Zestril®, Prinivil®), Moexepiril (Univasc®), Quinapril (Accupril®), Ramipril (Altace®), Trandolapril (Mavik®)

How these drugs work:
- Enlarge blood vessels and decrease the workload of the heart.
- Make the heart work better with less effort.
- Slow the progression of heart failure, and in some cases, improve heart function.
- Have been shown to help patients live longer and have a better quality of life.

Some common side effects
- Low blood pressure that can lead to feeling dizzy or faint
- Kidney problems
- High potassium in the blood
- Cough in 5-10% of patients, often dry and hacky
- Swelling of the tongue or throat (very rare, <1%)
- Rash

Keep in mind
- Take the ACE Inhibitor at night if feeling dizzy is a problem.
- Report a cough to your doctor or nurse.
- Blood tests may be needed to check kidney function and potassium levels.
- Report faintness or feeling dizzy to your doctor or nurse.
- Go to an emergency room or call 911 if your tongue swells or if you have worse shortness of breath.
- Do not take if you are pregnant or planning to become pregnant; as it can cause birth defects.

**Antiarrhythmic Drugs:** Cordarone (Amiodarone®)

How these drugs work:
- Prolong part of the heart’s electric cycle to decrease arrhythmias.

Some common side-effects
- Slow heart rate and lower blood pressure
- Fatigue or weakness
- Nausea, vomiting, constipation, loss of feeling hungry
- Sensitivity to light and vision changes
- Tremors and poor balance
- Damage to peripheral blood vessels
- Shortness of breath, bronchospasm: **Call 911 immediately**
Anticoagulation Drugs: Warfarin (Coumadin®); (Please refer to the Health Facts for You on Coumadin®.)

How these drugs work:
- Prevent blood clots from forming
- Keep current blood clots from getting worse

Some common side-effects
- Bleeding or bruising
- Blood in urine or stools
- Heavy menstrual bleeding or bleeding from wounds or cuts that does not stop
- Purple color of toes or the soles of your feet
- Hand, ankle, or feet swelling
- Yellow color in skin or eyes

Antiplatelet Drugs: Aspirin,

How these drugs work:
- Prevent platelets in the blood from clotting

Some common side-effects
- Bleeding and bruising
- Abdominal pain, constipation, diarrhea, gastritis
- Headache, dizziness
- Skin rash

Diuretics: Furosemide (Lasix®), Torsemide (Demadex®), Bumetanide (Bumex®), Metolazone (Zaroxolyn®),

How the “water pills” work:
- Help the kidney get rid of extra fluid and sodium
- Ease the heart’s workload (saving energy)

Some common side effects
- Electrolyte imbalance, common with potassium & magnesium
- Muscle cramps
- Feeling dizzy and/or low blood pressure
- Rash
- Trouble hearing or ringing in the ears
- Frequent urination
- Gout

Aldosterone Blocking Drugs: Spironolactone (Aldactone®), Epleronone (Inspra®)

How these drugs work:
- Act on hormone systems in the body to help the heart
- Mild diuretic effect

Some common side effects
- Electrolytes out of balance: may cause high potassium levels
- Enlarged breasts (most likely in men taking with spironolactone)
- Tender breast (most likely in men and women taking spironolactone)
Other factors to think about:
- Take once-daily pills in the morning; take twice-daily pills in the morning and early afternoon to prevent frequent night time trips to the bathroom.
- Report muscle cramps to your nurse or doctor.
- Report other side effects that bother you.

☐ **Hydralazine** (Apresoline®)

*How this drug works:*
- Lessens the heart’s workload; widens blood vessels so your blood flows better

**Common side effects**
- Headache
- Burning or tingling in arms, hands, legs, and feet
- Rash
- Flu-like symptoms, joint pain
- Fast heart beat if not on beta-blockers

**Medicines to avoid**

Discuss with your doctor:
- Drugs that contain ibuprofen (Advil®, Motrin®), naproxen (Aleve®)
- Drugs that contain pseudoephedrine (Sudafed®); found in many cough and cold drugs

**Herbal supplements to avoid**

- Coenzyme Q10—has **not** been shown to help patients with heart failure; it may worsen or cause harm.
- Drugs that contain Ephedra (ma-huang), ephedrine metabolites, Chinese herbs, Hawthorne (cratageus) products.
- Garlic, Ginseng, Gingko, and Coenzyme Q-10 may interact with blood thinners.

If you are taking any herbal items, please discuss them with your doctor or your pharmacist. You may be taking a drug that could interact with some herbal supplements. Beware of ads stating false benefits of herbal items. Never take them in place of your prescribed drugs.
Risk Factors for Heart Failure

- Tobacco use or abuse
- Alcohol abuse
- Recreational drug use, such as cocaine
- High blood pressure
- Obesity
- Sedentary lifestyle
- Heart valve disease
- High cholesterol
- Anemia
- Thyroid Disease
- Age (there is a huge increase in heart failure after age 65-70 years)
- Diabetes
- Family history
- Congenital heart disease (present at birth)
- Familial/genetic trait
- Other unknown causes

Diet

A vital part of the treatment for heart failure is to limit salt (sodium) intake. You will need to limit the salt in your diet to 2000 mg (milligrams) per day. One teaspoon of table salt is 2300 mg. Too much salt causes the body to build up fluid. Excess fluid makes your heart work harder. Fluid can back up into your lungs, making you short of breath. Extra fluid causes swelling in the feet, ankles, legs, and abdomen.

You will need to discuss with your doctor the amount of fluid you may drink each day. The amount you are allowed to drink depends on your health status. You will talk about this at clinic visits.

- You should drink 8 glasses of water each day.

You should talk to a dietitian. You will discuss how you can choose foods that you enjoy eating that are low in salt. To avoid extra salt:

- Read food labels. Any phrases with the word “sodium” count as salt (i.e., monosodium gluconate).
- Do not use salt at the table and limit in cooking.
- Avoid drugs that contain sodium such as antacids and some laxatives.
High Salt Foods to Avoid

- Processed meats and cheeses such as bacon, luncheon meats, hot dogs, bratwurst, and cottage cheese
- Convenience foods (boxed dinners)
- Gravy mixes, instant rice, and noodle products
- Canned soups, canned vegetables, canned tomato products
- Salty snacks (potato chips, nachos)
- Tomato soups
- Soup in packages
- Frozen foods- lean cuisine, smart ones

If you have any questions, please contact the UW Health Nutrition Clinic at (608) 263-5012. Or, ask for Health Facts for You #5528: Sodium Content of Common Foods

Questions about Eating Heart Healthy

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Healthy Lifestyle Changes

Manage Stress
Studies have shown that stress leads to many health problems. This includes high blood pressure and heart disease. You should learn how to manage stress to prevent further strain on your heart, and in your daily life. There are many ways to lessen the stress in your life. Here are a few to explore.

- Allow yourself to get enough rest.
- Make time for fun.
- Exercise (know your limits).
- Get involved in a hobby.
- Join a support group.
- Try relaxation techniques.

Guided Imagery uses planned, guided daydreaming. (Imagine yourself on an empty beach. Feel the warmth of the sun and sand between your toes. Listen to the crash of the waves and smell the salty sea air.)
For more details, read Staying Well with Guided Imagery by Belleruth Naparstek, or visit her web-site at www.healthjourneys.com.

Mindfulness Meditation involves living in the moment, paying full attention to what is going on “in the now.” (i.e., When washing dishes, allow your mind to focus only on that action. What does the water feel like? Sound like? What muscles are you using to scrub the dish?)
For more details, read Full Catastrophe Living by Jon Kabat-Zinn, or visit his web-site at www.mindfulnessstapes.com.
Stop Smoking

If you smoke, now is the time to stop. Smoking makes your blood vessels smaller, which causes your heart to work harder. This can make a weak heart become weaker. Ask your doctor or nurse about ways to help you quit smoking. Be aware that on average, it takes about 6 trys to quit smoking before a person can truly kick the smoking habit. See Health Facts for You packet #3096 or call the Quit Line at 1-877-270-STOP (7867) for help.

Support

This section offers you and your family support through this time in your life. Your health care team can give you information and answer your question. There are also other services to help you. Below is a list of groups you may want to contact. There are also books and websites to explore.

American Heart Association
South Central Wisconsin Local Chapter
2850 Dairy Drive Suite 300
Madison, WI 53718
Phone: 608-221-8866

American Heart Association
Southeast Wisconsin Chapter
660 E. Mason Street Suite 200
Milwaukee, WI 53202
Phone: 414-271-9999

Mended Hearts is linked with the American Heart Association and has offered the gift of hope to heart disease patients for more than 50 years. Mended Hearts partners with hospitals and clinics to offer visiting programs, support group meetings, and educational forums. Their mission is to “inspire hope in heart disease patients and their families.” www.mendedhearts.org

Information Sources

American Heart Association
www.heart.org/HEARTORG/
Go to: Healthy Lifestyles and Diseases and Conditions.

Heart Failure Society of America
www.hfsa.org
Check education tab for patient information.

National Heart, Lung and Blood Institute
www.nhlbi.nih.gov
Go to “Patients and the Public”.

Medline Plus
www.medlineplus.gov


Silver, Marc M.D. *Success with Heart Failure*. Perseus Books Group; 2006.


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