



Heart Failure Patient Education

Contact Information

Please write down important contact information in the spaces below. You may want to share this information with family members and friends.

This book belongs to: _____

Doctor Treating Me for Heart Failure

Name: _____

Address: _____

City: _____ State: _____

ZIP code: _____ Phone number: _____

Primary Doctor or Nurse Practitioner

Pharmacy: _____

Pharmacy: _____

Other doctors or nurses:

My current weight is _____ lbs _____ kg

My goal weight is _____ lbs _____ kg

Allergies/Reactions:

My Diagnoses:

My Surgeries:

Table of Contents

Introduction.....	3
Living Successfully With Heart Failure	4
What is Heart Failure?	5
What Can Cause Heart Failure?	6
Signs & Symptoms	7
What is Ejection Fraction?	8
Taking Care of Yourself.....	9
Follow-Up Appointments.....	10
Weigh Yourself Daily.....	11
Common Medications For Heart Failure Patients.....	12
Medications To Avoid.....	17
Choose These Foods	18
Foods To Avoid	19
High Potassium/Low Salt Foods.....	20
Following a Low Sodium Diet	21
Herbal Seasoning Suggestions	22
Dining Out.....	23
Reading Food Labels	25
Avoid Too Much Fluid	28
Avoid Alcohol.....	29
Stop Smoking Now.....	30
Patient-Led Heart Failure Support Group.....	31
Regular Exercise	32
Cardiac Rehab & You	33
How to Check your Pulse	34
Determining Your Heart Rate (Pulse	35
Rate of Perceived Exertion Scale (RPE	36
Best Type of Exercise For You	37
Warning Signs of Heart Problems	38
General Advice for Heart Problems.....	39
Warm-ups & Cool-downs.....	40
Examples of Exercise.....	41
Thank You.....	49
Notes	50
Calendar	53

Introduction

Welcome to University Heart.

The mission of University Heart is to reduce the incidence of cardiac and vascular disease in Indiana through exceptional teaching, innovative research, prevention, and delivery of quality care. Our vision is to become the premier cardiac health system of choice for patients, families, and employees and be recognized nationally for the highest quality of clinical cardiac care and access to comprehensive services. Our goal is to provide you with state of the art healthcare.

The packet you are receiving has some general information you may find helpful in dealing with your condition, or your loved one's condition. It is customized to include information on risk factors that may be present and medications you or your family member may be taking or will take at home. Your nurse or your primary healthcare provider can answer any questions you may have. Please ask one of the Cardiac Rehabilitation team members if you wish to receive additional information which may not have been addressed in this manual.

We encourage you to write down any questions or comments you may have during your stay on the “**Notes**” pages provided at the back of this booklet. Please use these pages to ask your nurse or primary healthcare provider for any clarification of information. We want your stay to be as pleasant as possible. If we can assist you with anything, please do not hesitate to ask. For any questions, comments, or concerns, please call the nurses' station directly for immediate assistance.

Premier Home Care of Indiana
9320 Priority Way West Drive
Indianapolis, Indiana 46240
(317) 536.1731

Living Successfully with Heart Failure

Many people with heart failure lead normal, active lives because they take care of themselves by improving their lifestyle and putting into practice some new guidelines.

This book is designed to help you learn to live well with heart failure. We want you to learn about your body, the disease, and how to take care of your body. You can take control over heart failure by eating healthy, exercising, showing up for your appointments, and taking your medicines correctly. If you do so, you should be able to lead an active and satisfying life!

This booklet provides basic information on heart failure. It will help you:

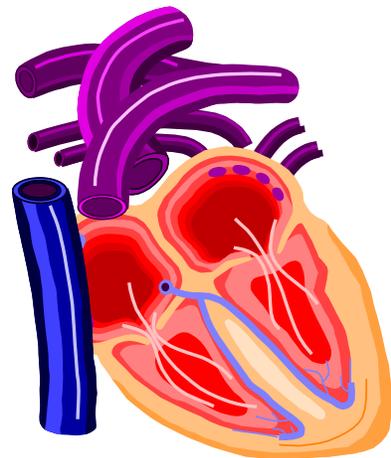
- ◆ Understand how to care for yourself
- ◆ Learn how to actively work with your doctor and nurse to feel better
- ◆ Learn how to follow your treatment plan



What Is Heart Failure?

Heart failure, also called **Congestive Heart Failure** (CHF), means your heart does not pump blood as well as it should. This does not mean your heart has stopped working, but that it is not as strong as it used to be and fluid builds up in the lungs and other parts of your body. This can cause shortness of breath, swelling in the legs, feet, and stomach.

Heart failure starts slowly and can get worse over time.



What Can Cause Heart Failure?

- Heart Attack
- High Blood Pressure
- Smoking
- Excessive Alcohol Consumption
- Heart Muscle Disease
- Pregnancy
- Diabetes
- Cocaine
- Viral illness
- Alcohol abuse
- Chemotherapy
- Overweight
- Enlarged heart
- Leaking heart valves
- Unknown cause

Signs & Symptoms

- Trouble breathing that is worse during exercise or when lying down
- Swelling in your ankles, legs, and stomach
- Feeling restless, tired, or weak
- Gaining weight
- Feeling hungry, feeling full quickly when you eat, or having a loss of appetite
- Having a dry cough that does not go away
- Coughing up white frothy phlegm (spit)
- Needing 2 or more pillows at night or having to sleep in the chair

What Is Ejection Fraction?

EF means “ejection fraction.” Your EF is the percentage of blood that pumps out of the heart during each beat. It’s also a measurement used to see how well your heart is functioning. A low EF is not always associated with symptoms.

Your EF is an important health-related number. This number is equally important as your blood pressure and cholesterol.

A low EF number can occur if your heart muscle has been damaged as a result of:

- Heart attack
 - Long-term, uncontrolled blood pressure
 - Heart valve problems
 - Heart failure
- What does your EF number mean?
 - 50-75% Heart’s pumping ability is **Normal**
 - 36-49% Heart’s pumping ability is **Below Normal**
 - 35% and Below Heart’s pumping ability is **Low**

What should you do?

- Ask your doctor if your EF should be measured.
- If your EF has been measured, ask for your EF number.
- If you have a low EF number (35% and below) ask your doctor if you should see a heart failure or heart rhythm specialist.
- You may learn more about EF at www.EFnumber.com

Taking Care of Yourself

The treatment of heart failure typically involves several steps. The steps are listed here and explained later in this booklet.

- Weigh yourself daily
- Take your medications exactly as directed
- Follow a low sodium diet
- Avoid drinking excess fluids
- Avoid alcohol consumption
- Maintain a normal body weight
- Get regular exercise
- Know the warning signs of heart failure
- Stop Smoking
- Keep follow-up appointments.
- Make this plan a permanent part of your life



Follow-Up Appointments

Patients with heart failure must be closely monitored so it is important you schedule and keep follow-up appointments with your physician or nurse practitioner.

It is also important you attend follow-up appointments with your health professional. These appointments are important so your physician or nurse practitioner can closely monitor your condition and the effects of the prescribed medications on you. By seeing your health professional, you may be able to prevent going back into the hospital. If you have problems, you should call your health professional immediately or call 911 for emergencies.

If you are not able to attend an appointment, please reschedule by calling 888.215.2005.

Weigh Yourself Daily

A sudden weight gain is one sign that you are retaining fluid.

Weigh Yourself:

- At the same time every day (preferably first thing in the morning)
- Without clothes or in lightweight clothing
- After you urinate
- Before you eat breakfast

Also, Please Remember:

- Write your weight down every day for your records.
- Bring your record with you when you visit your doctor
- If you have a weight gain or loss of
 - 2 pounds in 1 day OR
 - 5 pounds in 7 days, call your primary doctor.



Note: “Daily Weights” sheets are provided in this booklet for your convenience.

Common Medications for Heart Failure Patients

- Diuretics—help keep off fluid. Also known as water pills.
- ACE Inhibitors—reduce workload and help reduce heart remodeling. Remodeling is when your heart tries to get stronger by becoming bigger.
- Beta Blockers—reduce the work on your heart.
- Aldosterone Antagonists—help keep off fluid and reduce heart remodeling
- Digoxin—helps strengthen your heart
- Bidil (hydralazine/isosorbide)—helps your blood vessels relax. This makes it easier for your heart to pump blood.



Take Your Medicines Exactly as Directed

Common Medications for Heart Failure Patients

Diuretics

Common Diuretics include:

- Furosemide (Lasix)
 - Torsemide (Demadex)
 - Bumetanide (Bumex)
 - Metolazone (Zaroxolyn)—may be added to one of the above
-
- Help you keep fluid off and make you make more urine.
 - Help keep you out of the hospital if taken correctly.
 - May make you feel thirsty. Limit yourself to the fluid intake recommended by your doctor.
 - Your doctor will need to check labs on your kidneys (BUN and creatinine) and potassium levels from time to time.
 - Let your doctor know if you have severe weakness, dizziness, or leg cramps.
 - You need to weigh yourself daily. Call your doctor if you gain more than 2 pounds in a day or 5 pounds in a week.
 - During warm weather, do not stay in the sun for prolonged periods of times. Being in the sun for long periods can increase the chance of fainting.

Common Medications for Heart Failure Patients

Ace Inhibitors

Ace Inhibitors help reduce heart remodeling. Remodeling is when your heart tries to get stronger by becoming bigger. While this sounds like a good idea, a bigger heart becomes weaker over time.

- Common ACE Inhibitors include:

Lisinopril (Zestril or Prinivil)	Trandolapril (Mavik)
Enalapril (Vasotec)	Fosinopril (Monopril)
Ramipril (Altace)	Benazepril (Lotensin)
Captopril (Capoten)	Quinapril (Accupril)
Moexpril (Univasc)	Perindopril (Aceon)

- Help you live longer! ACE Inhibitors have been proven to help heart failure patients reduce death risk by 20-40%.
- Lower blood pressure by relaxing your blood vessels.
- Let your doctor know if you develop a chronic cough as it might be caused by this medication.
- Get immediate medical attention if your tongue, lips, or face swell. This is a rare event called angioedema. If this does occur, it is usually within the first few doses.
- Your doctor will need to check labs on your kidneys (BUN and creatinine) and potassium level from time to time.

ARBs

ARB's are like ACE inhibitors. They are given when a patient cannot take an ACE inhibitor. ARB's include:

Candesartan (Atacand)	Irbesartan (Avapro)
Losartan (Cozaar)	Valsartan (Diovan)
Olmesartan (Benicar)	Telmisartan (Micardis)
Eprosartan (Tevetan)	

Common Medications for Heart Failure Patients

Beta-Blockers

Beta-blockers used in heart failure include:

- Carvedilol (Coreg)
 - Metoprolol Succinate (Toprol XL)
 - Bisoprolol (Zybetta)
- Help reduce the workload of your heart and slow your heart rate.
 - Have been proven to increase the lifespan of heart failure patients!
 - May make you feel tired, weak, or dizzy when first started. Your body usually adjusts to this over the first couple of weeks. Continue to take them as they will help you live longer.
 - For men: may make it more difficult to obtain an erection. Talk to your doctor if this occurs.
 - Talk to your doctor if you have asthma or diabetes.
 - Always take Coreg with food.

Aldosterone Antagonists

Two drugs are available: Spironolactone (Aladactone) or Eplerenone (Inspra).

- Work like a diuretic and an ACE inhibitor.
- Have been proven to help heart failure patients live longer.
- Your doctor will need to check labs on your kidneys (BUN and creatinine) and potassium levels especially during the first few weeks.
- Contact your doctor if: (Not a problem with eplerenone)
 - Men: you have breast tenderness or trouble getting an erection
 - Women: your menstrual cycle becomes irregular

Common Medications for Heart Failure Patients

Bidil (hydralazine/isosorbide)

Helps relax the blood vessels and reduces the workload of your heart.

- Works very well in African Americans and increases lifespan in these patients.
- Headache often occurs during the first few doses but it is usually not a problem after that.

Digoxin

Digoxin has several different names: Digitek, Lanoxicaps, Lanoxin, Digitalis. Be sure you are only taking one.

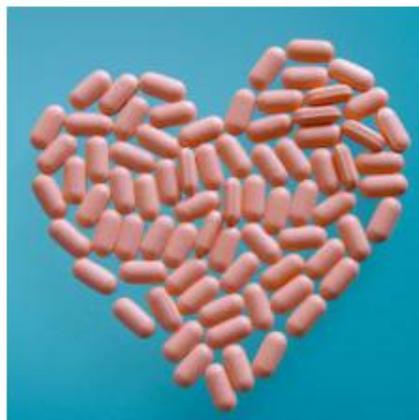
- Helps strengthen the heart and allows it to beat stronger.
- Can make you feel better and keep you out of the hospital.
- Do not take if your pulse is less than 60 beats per minutes. Ask your doctor or nurse how to take your pulse.
- Let your doctor know if you experience any of the following:
 - Loss of appetite or unexpected weight loss
 - Nausea or vomiting
 - Changes in vision, especially bluish/yellowish halos
 - Dizziness or rapid heart beats

Medications to Avoid

- Do not take any pills for pain except Tylenol (acetaminophen). Do not take more than a total of 4,000 mg daily.
- Avoid all other over-the-counter pills for pain as they can cause you to gain fluid.
- Medications to **AVOID**:

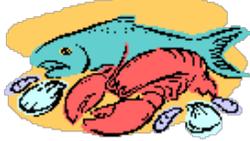
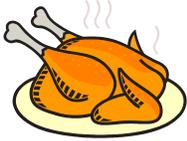
Brand Name	Generic
Advil, Motrin	Ibuprofen
Aleve	naproxen
Orudis	ketoprofen
BC Powder	Contains aspirin
Excedrin	Contains aspirin

- Do not take any herbal medications without the approval of your doctor or pharmacist.
- Do not take any aspirin in addition to what is prescribed by your doctor.



Choose These Foods

Meat, Chicken, Turkey, Fish and Eggs



All fresh or frozen meat, poultry, fish, and shellfish

Eggs
Low-sodium canned tuna

Fruits and Vegetables



All fresh, frozen or canned fruit
Fruit Juices

Fresh or plain frozen vegetables
Dried beans and peas made without salt

Breads and Starches



Bread, rolls, bagels
Cereals (hot and cold- check label)

Pasta (cooked without salt)
Unsalted crackers, unsalted popcorn

Dairy



Milk (Nonfat or 1% fat), Nonfat milk powder, Yogurt (Nonfat or lowfat)

Condiments



Fresh or dried herbs and spices
Salt-free seasoning mixes
Vinegar, Pepper sauce, lemon or lime juice

Foods to Avoid

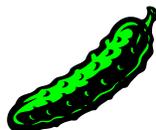
Meat, Chicken, Turkey, Fish



Anchovies, sardines
Canadian bacon
Chili, canned or frozen
Corned beef
Ham
Hot dogs, hot links
Jerky

Lunch meats such as bologna, ham
pepperoni, pastrami
Pork & beans, ranch-style beans
Prepared meats such as canned or frozen
in sauce, cured, smoked or Kosher, Spam,
potted meat
Salt-pork, salt-jowls, Sausage, Vienna sausage

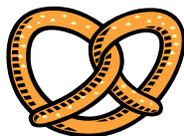
Vegetables



Canned beans
Canned vegetables
Frozen vegetables with sauce

Pickled vegetables with sauce such as olives,
pickles, peppers, beets, sauerkraut
Tomato or V-8 juice

Breads and Starches



Biscuits (check label)
Salted crackers and pretzels
Flavored rice, noodle or
potato mixes

Salted popcorn
Corn, potato, tortilla and snack chips
Pancake and waffle mixes

Other Foods



Chinese foods
Fast foods and pizza
Frozen entrees/dinners
Hot pockets and potpies
Soup (canned or dried)

Ramen noodles
Gatorade and other sports drinks
Pork rinds/skins
Processed cheese such as American,
Velveeta, cottage, pimento

High Potassium/Low Salt Foods

- Dried fruits such as raisins, prunes, apricots, figs, and dates
- Fresh fruits such as bananas, cantaloupe, grapes, oranges, honeydew melon, and fruit juices
- Fresh vegetables such as avocados, potatoes, beets, greens, spinach, peas, tomatoes, and mushrooms
- Dried vegetables such as beans and peas
- Fish (not fried)
- Fresh meats such as turkey and beef
- Decaffeinated coffee

Following a Low Sodium Diet

Getting Started:

- Salt (sodium) can make your body hold on to too much water and make your heart work harder.
- A moderate 2 gram (2000 mg) per day diet restriction is essential
- **One teaspoon of table salt contains about 2300 mg of sodium!**
- High amounts of sodium are found in many canned, pickled, convenience, packaged, processed and “fast” foods.
- Remember, salt is an acquired taste and it can be unlearned.
- Be patient and learn to enjoy new flavors in foods.

Salt Substitutes:

Before using salt substitutes (NuSalt or No Salt), you should consult with your primary doctor

You should discuss use of potassium chloride (or KCl) as a salt substitute with your primary healthcare provider before using it. This compound may act as a strong drug for some people. On the other hand, herb seasonings can be enjoyed by almost everyone.

Herbal Seasoning Suggestions

Basil	Sage	Cloves
Bay Leaf	Thyme	Lemon Rind & Juice
Onion or Garlic	Nutmeg	Oregano
Mushrooms	Parsley	Pepper
Applesauce	Ground Pepper	Oregano
Chives	Pineapple	Tomato
Cranberry	Paprika	Vinegar
Allspice	Extracts of other flavorings	
Cinnamon	Ginger	
Cilantro	Vanilla	

Spice Blend Recipe

1 tsp chili powder	2 tsp ground Italian season mix
2 tsp black pepper	1 Tbs garlic powder
3 Tbs paprika	6 Tbs onion powder

Combine all ingredients and store in an air tight container.

Dining Out

Here are some suggestions for reducing sodium when eating in restaurants:

- Choose foods without sauces or ask for the sauce on the side so you can control the amount you eat.
- Visit restaurants where food is cooked to order.
- Ask your server for chopped onions, chives, lemon, or other fresh herbs to use as flavorings.
- Ask the server to suggest some low salt menu items.
- Carry your own herb seasoning blend with you.

Tips For Reducing Sodium In Your Diet:

- Avoid foods like canned soup, frozen or canned prepared main dishes such as “TV” dinners, ravioli, pot pies, and pizza.
- Avoid sausages, luncheon meats, hot dogs, ham, bacon, and other cured or smoked meats, poultry and fish.
- Season with lemon, onions, spices and herbs such as pepper, paprika, curry, or dill.
- Avoid seasoned salts like garlic salt and onion salt.
- Use “Low Sodium” or water-packed canned vegetables, or rinse and drain regular canned vegetables before cooking.
- Avoid hidden sources of sodium such as soy sauce, steak sauce, teriyaki sauce, barbecue sauce, monosodium glutamate (MSG), and meat tenderizers.

Dining Out

- Avoid pickled foods or foods packed in brine such as relish, pickles, and sauerkraut.
- Avoid salty snacks such as corn or potato chips, salted nuts, and salted crackers.
- Limit intake of coffee, black tea, or soda with caffeine.
- Avoid drinks high in sodium such as tomato or vegetable juice.

Reading Food Labels

It is important to read food labels to determine the sodium content of foods.

Sodium content is expressed in milligrams (mg) per serving.

It may also be helpful to know that certain words used on labels must mean what they say as defined by the government:

<u>Key Words</u>	<u>Meaning</u>
“Sodium Free”	Negligible sodium (less than 5 mg per serving)
“Very Low Sodium”	35 mg sodium or less per serving
“Low Sodium”	140 mg sodium or less per serving
“Less Sodium”	20% sodium reduction from the original product
“Reduced Sodium”	At least 25% reduction from the original product
“Light in Sodium”	50% sodium reduction from the original product
“Unsalted”	
“Without Added Salt”	No salt used during processing
“No Salt Added”	

Reading Food Labels

The Nutrition Facts on a food label lists the amount of sodium in one serving of the food in the package:

- It is good to select foods with no more than 140 mg of sodium per serving.
- A low sodium food item should contain less than 300 mg of sodium per serving.
- Remember to check serving sizes on the label. If you eat more than one serving, you will get more sodium than the amount listed.

Regular Soup

Nutrition Facts	
Serving Size 1 cup	
Servings Per Container 2	
Amount Per Serving	
Calories 352	Calories from Fat 112
% Daily Value	
Total Fat 13g	19%
Saturated Fat	23%
Trans Fat 1g	
Cholesterol 51mg	17%
Sodium 795mg	33%
Total Carbohydrate 37g	12%
Dietary Fiber 10g	41%
Sugars 9g	
Protein 24g	
Vitamin A 19%	Vitamin C 42%
Calcium 12%	Iron 32%

Reduced Sodium Soup

Nutrition Facts	
Serving Size 1 cup	
Servings Per Container 2	
Amount Per Serving	
Calories 352	Calories from Fat 112
% Daily Value	
Total Fat 13g	19%
Saturated Fat	23%
Trans Fat 1g	
Cholesterol 51mg	17%
Sodium 220mg	10%
Total Carbohydrate 37g	12%
Dietary Fiber 10g	41%
Sugars 9g	
Protein 24g	
Vitamin A 19%	Vitamin C 42%
Calcium 12%	Iron 32%

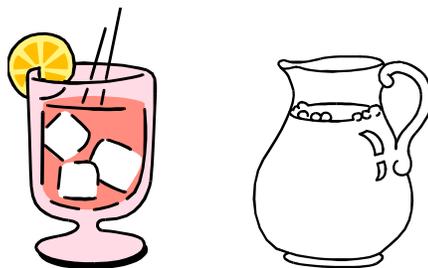
Avoid Too Much Fluid

Limit fluid intake to 64 ounces or 2 liters each day. This includes

- water
- juice
- milk
- ice
- popsicles
- watermelon
- coffee
- ice cream or
- any other liquid.

Use an empty 2 liter bottle to measure your liquid each day. Using the cup or glass you drank from, fill it with water to the same amount you drank, then pour into the 2 liter bottle. This is the amount of liquid you can drink per day.

Chew sugarless gum and suck on hard candy (sodium free) to keep your mouth moist.



Avoid Alcohol

You should not drink alcohol at all. It damages heart cells and can further weaken your already-weak heart muscles.

Alcohol is not for people with heart failure. This includes beer or wine as well as hard liquor.

It is very important that you honestly discuss how much you have been drinking with your doctor or your clinic nurse. They can help you with tips and services to stop drinking.

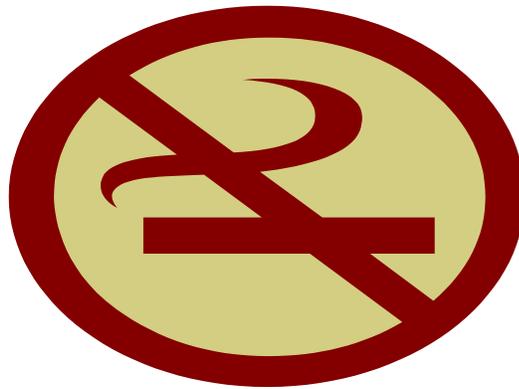


Stop Smoking Now

The most important thing for you to do is to stop smoking or using any other tobacco.

Using tobacco can make heart failure worse, so you should stop NOW!

Quitting is hard, but it is a part of staying alive!



For Help call the Tobacco Quit-Line: 1-800-784-8669 (1-800-QuitNow)

Also, the ACT Center: 601-815-1180



University Heart

Peace of mind
begins here.

Heart Failure Support Group

A patient-led group established in May 2008

- We share common experiences, listen, encourage and learn in this confidential group.
- We realize we have Heart Failure, a chronic illness, and we need to learn about and understand the changes in our body.
- We discuss medicines, salt in our diets and exercise.
- We understand and manage exhaustion and fatigue.
- We discuss all new procedures and advancements in Heart Failure treatment.
- We make plans to stay healthy and strong with Heart Failure.

We laugh, have fun and celebrate being alive!

When: 1st & 3rd Wednesday of every month
10:00 – 11:30 a.m.

Where: University Physicians Pavilion Classroom

For more information or to sign up,
please call 601.984.5632.

umhc.com/heart

Get Regular Exercise

We used to believe that people with heart failure should rest, rest, rest. Now we know that regular exercise is essential! Even short periods of bed rest can cause weakness. Research shows that you can exercise safely. Remember to talk to your primary healthcare provider before starting an exercise program.

Along with prescribed medication, exercise will:

- Help you feel better – stronger and with less breathing trouble.
- Help you to walk farther, work or shop with less fatigue and enjoy fun activities longer.
- Help you sleep better at night.
- Help maintain and/or improve your balance and help prevent falls.
- Help you lose weight if needed.
- Help you feel more positive and confident.
- Help you relieve some stress.

Which exercise is the best? The best exercise for your heart is “aerobic” exercise. Pick activities that are continuous and have a smooth flow:

- ✓ Walking
- ✓ Riding a bicycle (stationary or regular)
- ✓ Swimming
- ✓ Water exercise or walking in a pool

Plan to do different things in different settings so you can have fun and stay interested.

Cardiac Rehab & You

Cardiac rehabilitation can do a lot to speed your recovery and reduce your chances of future heart problems. Whether you exercise at home or in a formal program, cardiac rehabilitation exercises are designed to improve your quality of life after you've had a heart attack or another heart problem.

This booklet provides ways to improve your health and gives information on lifestyle changes that are necessary to increase your ability to perform activities of daily life. UMMC's Cardiac Education Committee and healthcare personnel would like to take this time to say that we have enjoyed working with you and putting this booklet together so that you will continue to enjoy life in its fullest.

As you have read, it is important that you take your medication as prescribed at all times. It is just as important that you understand the purpose and benefits of your medication. Your medications work better when you follow the directions of the doctor, watch your diet and exercise on a daily basis.

Now let's get started...What are the benefits of exercise?

- Exercise helps you to lose weight
- Exercise helps you to decrease stress
- Exercise increases your energy level
- Exercise strengthens your muscle
- Exercise decreases your blood pressure
- Exercise decreases your cholesterol level
- Exercise decreases your blood sugar

Because exercising helps in so many ways, it is worth 30 minutes of your time to perform exercise activities 3-5 days per week. In this booklet you will see pictures (or illustrations) of exercises that may be beneficial to you. Before exercise activity, you need to know the warning signs of heart problems and/or warning signs of problems due to congestive heart failure (CHF). In addition, it is equally important for you to know how to take your pulse (or heart rate) or use the rate of perceived exertion scale to determine if you are exercising with enough intensity.

Your pulse should be taken before, during, and after exercise. If you choose to use the rate of perceived exertion scale, you will need to ask yourself, "How hard am I working?"

How to Check Your Pulse

1. Sit down and relax for five minutes before taking a resting pulse.
2. Gently place your second, third and fourth fingers over the radial artery (**located on the inside of your wrist just below the base of your thumb**) to feel a pulsation in your wrist. Never use your thumb to feel a pulse.
3. Count your pulse for 15 seconds and multiply by 4, or you may count your pulse for 60 seconds to get your heart rate. You may record this in your Exercise Log Book.
4. If your pulse is above your maximum allowed heart rate (target zone), exercise a little easier, to slow down pulse. If your pulse is within the maximum allowed heart rate, you are doing fine.
5. Once you are exercising within your maximum allowed heart rate, you should check your pulse at least once each week during the 1st three months and periodically thereafter.
6. When you begin your exercise program, aim for 45-50% of your target heart rate of _____ during the 1st few months. As you get into better shape, gradually build up to 80% of target heart rate of _____. **[The nurse educator and/or cardiac rehab personnel will calculate your target heart rate before discharge from the hospital.]**



The best thing any person exercising can do is monitor their pulse. Your pulse is a great source of information, often warning you when your body needs to take things easy.

Cardiac Rehabilitation & You

Determining Your Heart Rate (Pulse)

Number of Beats Counted In 15 Seconds	Heart Rate (Beat Per Minute)	Your Limit While Walking
13	52	72
14	56	76
15	60	80
16	64	84
17	68	88
18	72	92
19	76	96
20	80	100
21	84	104
22	88	108
23	92	112
24	96	116
25	100	120
26	104	124 - > HR TOO HIGH SLOW DOWN
27	108	128 - > HR TOO HIGH SLOW DOWN
28	112	132 - > HR TOO HIGH SLOW DOWN
29	116	136 - > HR TOO HIGH SLOW DOWN
30	120	140 - > HR TOO HIGH SLOW DOWN

Cardiac Rehabilitation & You

Rate of Perceived Exertion Scale (RPE)

0 – Nothing	
½ - Very, Very Light	How you feel when lying in bed or sitting in a chair relaxed.
1 – Very Light	
2 – Light	
3 – Moderate	Little or no effort
4 – Somewhat Hard	
5 – Heavy	
6	Target range: How you should feel with exercise or activity.
7	
8 – Very Heavy	
9 –	
10 – Very, Very Heavy	How you felt with the hardest work you have ever done.

RPE is a method used to determine the heart rate intensity by selecting a number that reflects how you are feeling.

*****Do not begin any exercise activities before talking with your doctor**

Best Type of Exercise for You

Aerobic exercise is the best type of exercise for you. This includes: Walking, Biking, Swimming, & Dancing.

Exercise helps condition heart muscles and gives you more energy to perform activities throughout the day. Check with your doctor before beginning an exercise program. Notify your doctor or nurse of dizziness, difficulty breathing, heart palpitations or extreme fatigue that occurs with exercise. **Do not exercise immediately after a heavy meal.** Avoid extreme temperatures. Do not exercise if you are already excessively fatigued or feeling poorly.

Exercise Tips

Do's:

- Wear comfortable clothes and soft sole shoes with laces or sneakers.
- Start slowly. Gradually build up to 30 minutes of activity, 3-5 days per week. If you are unable to exercise for 30 minutes straight, try three 10-minute sessions.
- Exercise at the same time of day so it becomes a regular part of your life style. For example, you might walk every Monday, Wednesday and Friday from 8:30 a.m. to 9:00 a.m.
- Exercise with a friend

Don'ts:

- Don't get discouraged if you have to stop due to problems. Once your doctor has given you permission to continue to exercise, gradually start again and work up to your old pace.
- Don't do exercises that require holding your breath, bearing down or sudden bursts of energy.
- Don't exercise right after meals or extreme temperatures.
- Don't do exercises that cause chest pain, severe shortness of breath, dizziness or lightheadedness. If these symptoms occur, stop what you are doing right away.

Warning Signs of Heart Problems

STOP YOUR ACTIVITY, REST, AND REPORT to your doctor if any of these symptoms occur:

1. Pain, pressure, or tightness in chest: pain in neck, arm jaw, or ear.
2. Dizziness or fainting.
3. Severe shortness of breath.
4. Pulse rate below 50 or above 120 beats per minute.
5. Nausea.
6. Pain in calf of leg or legs.
7. Ankle swelling, rapid weight increase or severe shortness of breath.
8. Temperature above 101 degrees.

For chest pain in neck, arm, jaw, or ear, take one nitroglycerin tablet and wait five minutes. If pain is not relieved, take a second tablet and wait five minutes. Take a third tablet if pain is still present and wait five minutes. If your pain has not stopped after this, call 911 or have someone take you to the nearest hospital.

General Advice for Exercise

1. Walk on a level surface.
2. Rest one hour after a meal before exercising.
3. Walk indoors during very hot, cold, or rainy weather. A shopping mall is a good place to walk if one is nearby. During summer months, walk in early morning or late evening when it is cooler. In winter, dress warmly when outdoors.
4. Space your activities at different times during the day so that you do not get too tired.
5. Get seven to eight hours of sleep every night.
6. Avoid sudden bursts of activity (for example, use an elevator instead of walking up stairs).
7. Avoid activities that cause you to strain or to hold your breath. For example: picking up heavy objects, pushing a window open, and straining during a bowel movement. Learn to do these things without holding your breath, grunting or straining.
8. Avoid lifting more than 5 pounds for the first month. Avoid lifting more than 10 pounds during the second month. Avoid lifting more than 25 pounds during the third month. After the third month you may begin unlimited activity. If at any time you feel a strain in your chest incision-**STOP** the activity you are doing.
9. You can usually begin driving a car again four weeks after discharge from the hospital. Your doctor will let you know exactly when you can start back driving. Start by driving when there are fewer cars on the road (choose the time of day when there are fewer cars on the road).

Warm-ups & Cool-downs

Warm-up: 5-10 minutes

Warm-up is exercising at a slower rate. Warm-ups will warm the muscles and increase the blood flow. Doing exercises at a slower rate is very important in helping to prevent injury. Walk slowly for 5 minutes before beginning to jog, ride a bike, sprint walk, or use a treadmill, etc.

Cool-down: 5 minutes

After exercising, it is important to reduce heart rate and blood pressure slowly by exercising at a slower rate. Exercise slowly for about 5 minutes to help assist blood flow back to the heart and stretch the muscles you used during your workout.

Examples of Exercise



Warm Up: Deep Breathing

Directions: Sitting with arms to side. Take slow deep breath.

Number of times to perform exercise:

Repeat: Take 10 deep breaths

Examples of Exercise



Shoulder Shrugs

Directions: Sitting, move shoulders up toward ear lobes.

Hold 5 seconds and return to starting position;
relax for 3 seconds.

Number of times to perform exercise

Starting number – 5; increase per week – 5;

Maximum number - 30

Examples of Exercise



Do Not Perform This Exercise For The 1st 6 weeks Following Chest Surgery Because It May Place A Strain On Your Incision!

Arm Circles

Directions: Standing or sitting, circle arms,
Reverse directions.

Number of times to perform exercise:

Starting number – 5; increase per week- 5;

Maximum number – 30

Examples of Exercise



Raising Bent Arms

Directions: Sitting with hands in lap,

Raise arms to head and return to lap.

Repeat – do not extend arms behind head.

Number of times to perform exercise:

Starting number – 5; increase by 5 per week

Maximum number – 30

Examples of Exercise



Knee Bends

Directions: Raise your knee toward your Chest and then lower it to the floor. Do not hold leg up.

Number of times to perform exercise:

Starting number – 3; increase by 3 knee bends per Week; maximum number – 18

Examples of Exercise



Leg Lifts

Directions: Straighten your knee and then return the foot to the floor.

Number of times to perform exercise:

Starting number - 3;

increase by 3 leg lifts per week;

maximum number - 18

Examples of Exercise



Do Not Perform This Exercise For The 1st 6 weeks Following Chest Surgery Because It May Place A Strain On Your Incision!

Imaginary Rope Climb

Directions: Place hand over hand as if you are climbing a rope

Number of times to perform

Exercise: Starting number – 5; increase
per week – 5; maximum number – 30

Examples of Exercise



Cool Down: Walking

Directions: Walk at slower pace, while swinging arms until your heart rate reaches what it was before you began walking.

Notes

Notes

Notes

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Month _____							
20__							

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Month _____							
20__							

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Month _____							
20__							

