Tools List

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All the tools used in the model clinical process are listed below. The purpose or content of each tool is indicated briefly in italics.

H&P: Heart Failure

Name _____

Date _____

Age _____

Self Reported Health __
(1 = excellent, 5 = poor)

To last year ___
(1 = much better)

Activity Limitations

(0 = not, 3 = very limited)

Vigorous act ____
Moderate act ____
Carry groceries ____
Stairs ___
Kneeling ____
Walk blocks ____
Walk block ____
Bathe/dress ____

Interferes ____
(0 = not, 4 = extreme)

PMHX *(circle positives)*

Hypertension
Hypotension
Heart attack
Angina
Heart failure
Diabetes
Renal disease
Thyroid
Arrhythmia
Pacemaker
Murmur
Anemia
Falls
Syncope
PVD
Hi cholesterol
Depression
Arthritis
Asthma/COPD
Obesity

Family History

(circle positives)

Heart attack/failure
Sudden death
Stroke
PVD
Hi cholesterol
Diabetes
Obesity

Present Illness

PMHX.

Prior Cardiac Testing/Tx.

Medications

Positives (PMHx, ROS, others)

ROS *(circle positives)*

Low energy
Sleepy
Dizzy
Syncope
Chest pain
Dyspnea
Cough
Edema
Palpitations
Night sweats
Insomnia
Depression
Urine freq.
Nocturia
Confusion
Weight change
Appetite
Arthritis
Sex dysfunction
Heat intol.
Orthopnea

Health Habits

Tobacco
_____/pk-yrs.
Street drugs? Y N
Alcohol _____/day
Ever heavy? Y N

Exercise History

Min/wk _____
What kind? _____

Salt

Salt before taste? Y N
Salt at table? Y N
Salty foods? Y N

Vital Signs BP sit _____ BP stand _____ P___ P standing ___ T_____ Wt._____lb Ht.__in

Eyes	☐ nl conjunctiva & lids	**Abdomen**	☐ no masses or tenderness
Pupils	☐ pupils symmetrical, reactive	L/S	☐ no liver/spleen enlargement
Fundus	☐ nl discs & pos elements	Anus/rectal	☐ no abnormality or masses
Vision	☐ acuity and gross fields intact	Breasts	☐ nl inspection & palpation
ENT-External	☐ no scars, lesions, masses	**Extrem**	Pulses (0 – 4)
Otoscopic	☐ nl canals & tympanic membranes	Edema (0 – 4)	R_____ L_____
Hearing	☐ nl to _____	Nails	☐ no clubbing, cyanosis
Ant. Oral	☐ nl teeth	Skin	☐
Oropharynx	☐ nl tongue, palate, pharynx		
Neck palp.	☐ symmetrical without masses	**Neurologic**	
Thyroid	☐ no enlargement or tenderness	Cognition	☐ nl cognitive screen
JVD	☐ None v-srodiac	Affect	☐ nl depression screen
Resp. effort	☐ nl without retractions	Crn. n	☐ w/o gross deficit
Chest percuss.	☐ no dullness or hyperresonance		
Chest palp.	☐ no fremitus		
Auscultation	☐ nl bilateral breath sounds w/o rales		
Heart palp.	☐ nl location, size		
Heart PMI_____			
Auscultation			
Cardiac ausc.	☐ no murmur, gallop, or rub		
Carotids	☐ nl intensity w/o bruit		
Pedal pulses	☐ nl posterior tibial & dorsalis pedis		

Check nl, circ abn	**ROM**	**Strength**	**Tone**	**Sensory**
Upper extrem	☐	☐	☐	☐
Lower extrem	☐	☐	☐	☐

Gait ☐ nl Get Up and Go Test

Reflexes ☐ symetrical throughout

Comments/Abnormals

Assessment and Plan

Educational Materials

- ☐ Following a Low-Salt Diet
- ☐ Leg Swelling and Fluid Retention
- ☐ Heart Failure and Being Overweight
- ☐ Exercising with Heart Failure
- ☐ High Cholesterol
- ☐ ACE Inhibitors
- ☐ Beta-Blockers
- ☐ Stress Testing
- ☐ Heart Failure Evaluation
- ☐ Heart Failure and Atrial Fibrillation
- ☐ Information about Heart Failure
- ☐ Blood Pressure and Heart Failure
- ☐ Echocardiography
- ☐ Advice for Smokers

Heart Failure Flow Sheet

Name _____

HF Flow Sheet

	Date	Date	Date	Date	Date	Date	Date	Date
Blood Pressure								
Pulse								
Weight								
1. Interference *0 = None, 4 = Extreme*								
2. Compared to last *0 = Much better, 4 = Much worse*								
3. Max activity								
4. Exercise (min/wk)								
Diuretic dose Diuretic:_____								
ACE dose ACE:_____								
B Blocker dose B blocker:_____								
Labs								

Instructions: Write the descriptions of burden and compare questions from the Follow-Up Questionnaire in the blocks. Write the highest numbered activity circled (they are in the rough order of intensity). Check that the patient is currently taking the doses of the listed drugs prescribed and enter in the block for the last visit – if not, record the changes made in the progress note. Use the blocks for today's date to list the new doses (if changes are made) of the listed drugs.

Medical History

Instructions To do the best possible job with your heart failure, the doctor needs details about your history, including current and past medical problems, medications, health habits, and family history. For questions that ask about how you feel, please give your best answer yourself. The information about your past conditions may be gathered from both you and your family members.

My name is: _____ ***Date:*** _____

My telephone number is: _____

First, describe the general problems you have with your health that bother you the most. Tell us the what, where, and when of your health problems. Are there things you can't do now that you wish you could?

Please give your one best answer to the following questions:

1. In general, would you say your health is:

Excellent **Very Good** **Good** **Fair** **Poor**

2. Compared to one year ago, how would you rate your health now?

Much better **Somewhat better** **About the same** **Somewhat worse** **Much worse**

3. Does your health now limit you in the following activities:

a. Vigorous activities, such as running, lifting heavy objects, or sports?

Not limited **Limited a little** **Limited a lot** **Never did this**

b. Moderate activities, such as moving a table, pushing a vacuum, bowling, or golf?

Not limited **Limited a little** **Limited a lot** **Never did this**

c. Lifting or carrying groceries?

Not limited **Limited a little** **Limited a lot** **Never did this**

d. Climbing stairs?

Not limited **Limited a little** **Limited a lot** **Never did this**

e. Bending, kneeling, or stooping?

Not limited **Limited a little** **Limited a lot** **Never did this**

f. Walking several blocks?

Not limited **Limited a little** **Limited a lot** **Never did this**

g. Walking one block?

Not limited **Limited a little** **Limited a lot** **Never did this**

h. Bathing or dressing yourself?

Not limited **Limited a little** **Limited a lot** **Never did this**

Code	0	1	2		

4. During the past 4 weeks, how much has your health interfered with your normal or desired level of work or social activities?

	Not at all	Slightly	Moderately	Quite a bit	Extremely
Code	0	1	2	3	4

Past Medical History

Have you been affected by any of the following problems or conditions? If so, when was it first found?

Condition	When?	Yes	No
High blood pressure	_____	☐	☐
Low blood pressure	_____	☐	☐
Heart attack	_____	☐	☐
Angina or coronary disease	_____	☐	☐
Heart failure	_____	☐	☐
Diabetes	_____	☐	☐
Kidney failure or trouble	_____	☐	☐
Thyroid disease	_____	☐	☐
Heart rhythm problems	_____	☐	☐
Pacemaker	_____	☐	☐
Heart murmur	_____	☐	☐
Anemia or low blood iron	_____	☐	☐
Passing out	_____	☐	☐
Falls	_____	☐	☐
Poor circulation	_____	☐	☐
High cholesterol	_____	☐	☐
Depression	_____	☐	☐
Arthritis	_____	☐	☐
Asthma or lung trouble	_____	☐	☐
Overweight	_____	☐	☐

Current Medical History

Please list the medical conditions currently affecting you or that you are currently receiving treatment for.

Condition	When Did It Begin?

Psychiatric History

Please list all psychiatric conditions or treatments you have had, with the approximate date of onset for each.

Condition or Treatment	Date

Operations

Please list all operations with the date of operation.

Operation	**Date**

Hospitalizations

List the reason and month/year for hospitalizations in the past 10 years.

Reason	**Month/Year**

Family History

Please indicate which family members have had any of the following medical conditions (give the relationship to you, not the relative's name).

Condition	**Family Member(s)**
Heart disease/heart attacks	_____
Sudden death	_____
Stroke	_____
Poor circulation	_____
High cholesterol	_____
Diabetes	_____
Obesity	_____
Heart failure	_____

Health Habits

If you ever smoked, how many packs per day and for how many years? _____

If you no longer smoke, when did you quit?

Have you ever used "street" drugs?

_____ No _____ Yes

Do you drink alcoholic beverages on most days?

_____ No _____ Yes

If yes, how many drinks per day, usually?
(1 drink is 1 beer, 6 oz of wine, or 2 oz of hard liquor)

_____

Have you ever been a heavy drinker (6 drinks a day or more)?

_____ No _____ Yes

Exercise History

In the last few months, how much time each week did you spend in at least moderate exercise?

< 15 min. 15 – 60 min. 60 – 120 min. > 120 min.

Moderate exercise can be walking, bicycling, swimming, or heavy housework (vacuuming, cleaning). For example: 30 minutes per day, 3 days a week would be 90 minutes total for the week.

What kind of exercise activities do you do?

_____

_____

_____

_____

Salt

Condition	**Yes**	**No**
Do you add salt before you taste your food?	☐	☐
Do you usually salt food at the table?	☐	☐
Do you eat foods from the following list on most days (don't count low-salt versions)?	☐	☐

- Processed meats (*luncheon meats, bacon, sausage*)
- "Fast food"
- Cheeses
- Canned vegetables
- TV dinners or other prepared meals
- Chips or crackers
- Pastries or donuts

Medication History

Please list all **prescription** medicines that you are currently taking.

Name of Medication	**Strength and Times per Day**

Please list all **over-the-counter** medicines that you are currently taking at least once a week.

Name of Medication	**Strength and Times per Day**

Review of Symptoms

Have you been bothered by any of the following problems in the past few months? Please describe any problems briefly, with approximate dates. If you need more room, write on the back of the sheet. Leave the line empty if the problem has not occurred.

Problem	**Description, Date(s)**
Lack of energy	
Daytime sleepiness	
Dizziness	
Passing out	
Chest pain or discomfort	
Shortness of breath	
Cough	
Leg swelling	
Palpitations or skipped beats	
Sweating at night	
Trouble sleeping	
Depression or sadness	
Frequent or nighttime urination	
Confusion	
Sudden weight loss or gain	
Loss of appetite	
Joint pains or arthritis	
Problems having sex	
Trouble with the heat	
Prop up on pillows to sleep	

Prior Tests Questionnaire

(Fill out and give to the office staff before you leave)

Your doctor wants to have all useful information about your heart before changing your treatment. Please complete the following about previous tests done on your heart. If you don't know, leave it blank.

1. When and where was your last EKG (electrocardiogram)?

2. When and where was your last Chest X-ray?

3. When and where was your most recent echocardiogram (ultrasound or sonar of the heart)?

4. When and where was your most recent cholesterol check?

5. Have you ever had a heart catheterization? Yes No

   If yes, when and where?

6. Have you been seen by a cardiologist? Yes No

   If yes, who, when, and where?

7. Have you been hospitalized for heart trouble? Yes No

   If yes, when and where?

8. Have you had an exercise stress test (treadmill test)? Yes No

   If yes, when and where?

Heart Failure Follow-Up Questionnaire

Patient Name _____ **Date** _____

For questions 1 and 2, choose the one best response.

1. During the past week, how much has your health interfered with your normal level of work or social activities?

None **Slightly** **Moderately** **Quite a bit** **Extremely**

2. Compared to your last visit, how would you rate your health problems now?

Much better **Somewhat better** **About the same** **Somewhat worse** **Much worse**

3. Check the activities from the list below that you do several days a week:

- ☐ Getting out of bed
- ☐ Walking to the bathroom
- ☐ Bending and/or stooping
- ☐ Carrying groceries
- ☐ Light housekeeping (dust, straighten, vacuum, sweep 10 minutes or less)
- ☐ Walking a block
- ☐ Heavy housework (move furniture, more than 30 minutes sweep, vacuum, mop)
- ☐ Walk several blocks
- ☐ Climb a flight of stairs
- ☐ Vigorous exercise (walk more than a mile, running, cycling, climbing several flights of stairs)

4. Estimate (a rough guess) how many minutes of at least moderate exercise you have done in the past 7 days. Moderate exercise can be walking, bicycling, swimming, or heavy housework (vacuuming and cleaning). For example, 30 minutes for 3 days a week would be 90 minutes total for the week.

Total for the week: _____ minutes

Heart Failure Follow-Up Questionnaire

Review of Symptoms

Have you been bothered by any of the following problems in the past few months? Please describe any problems briefly, with approximate dates. If you need more room, write on the back of the sheet. Leave the line empty if the problem has not occurred.

Problem	**Description, Date(s)**
Lack of energy	
Daytime sleepiness	
Dizziness	
Passing out	
Chest pain or discomfort	
Shortness of breath	
Cough	
Leg swelling	
Palpitations or skipped beats	
Sweating at night	
Trouble sleeping	
Depression or sadness	
Frequent or nighttime urination	
Confusion	
Sudden weight loss or gain	
Loss of appetite	
Joint pains or arthritis	
Problems having sex	
Trouble with the heat	
Prop up on pillows to sleep	

Information About Heart Failure

What Is Heart Failure?

Heart failure is not a “failure.” It is a weakness that makes the heart unable to pump enough blood throughout the body.

Heart failure can also occur when the heart becomes so thick or stiff that it cannot let enough blood go through to meet the body's needs.

The heart can be weakened by other diseases, such as high blood pressure, atherosclerosis (ath uh roh skluh ROH sis), or blockages in the arteries.

Can Heart Failure Be Treated?

Heart failure can shorten your life. However, new treatments, drugs, and exercise can give you the chance to live a longer and healthier life.

To treat your heart failure, your doctor will:

- Ask you about your symptoms, other diseases, and other medical tests that you have had.
- Look at the effect your heart failure is having on the rest of your body. You may need special tests, such as exercise testing and echocardiograms (ek o KAR de o grams).
- Decide the best treatment for you. This may include other medicines, exercise, and a change in your eating habits.

continued

What Can You Do?

Heart failure is not managed only by your doctor. **You** are the key to the success of managing your heart failure.

You will be asked to learn about the disease. You will also learn how to monitor your condition and adjust your medicines. Prepare yourself to work with your doctor and to be an important part of your own care.

Glossary

Term	Pronunciation	Definition
Atherosclerosis	ath uh roh skluh ROH sis	A common arterial disease in which fat builds up in the large- and medium-sized arteries, causing the arteries to become narrow or harden
Echocardiogram	ek o KAR de o gram	A test that shows the heart's shape and size and what happens when the heart beats

Heart Failure Evaluation

What Causes Heart Failure?

Heart failure is an illness caused when your heart is not able to pump blood throughout your body. Other diseases may increase your chances of developing heart failure. The most common are high blood pressure and blocked arteries to the heart.

What Happens in an Evaluation?

Your doctor will do a series of tests, or an evaluation, to find out how serious your heart problem is and what has caused it. This evaluation lets your doctor find the best treatment for you.

Your doctor will start with a complete physical examination and medical history. The medical history includes:

- Your personal risk factors for heart disease such as obesity and smoking, which increase your risk of heart failure
- Your family history
- Your current symptoms
- Any physical abilities that you are limited in and that could be linked to your heart

What Other Tests Will You Have?

Your first examination will help your doctor decide whether you need additional tests.

- Blood and urine tests show causes of heart failure and other health problems that can make heart failure worse.

  These tests can tell your doctor whether an unusual problem caused your heart failure. They also tell how well your organs are working and what your cholesterol level is.

What Other Tests Will You Have? continued

- An electrocardiogram (i LEK troh KAHR dee uh gram), or EKG, measures the electrical impulses that come from the heart to show the overall health of your heart.
- An echocardiogram (ek o KAR de o gram) shows the heart's shape and size and what happens when the heart beats. This test can tell your doctor a lot about the kind of heart failure you have and what caused it.
- A "stress test" shows if you have serious artery disease and can tell you how much exercise is safe for you. The stress test is also called an exercise tolerance test. It is usually done on a treadmill.

  In this test you walk quickly while your heart is monitored for signs of poor blood flow and heart rhythm problems.

Glossary

Term	Pronunciation	Definition
Echocardiogram	ek o KAR de o gram	A test that shows the heart's shape and size and what happens when the heart beats
Electrocardiogram	i LEK troh KAHR dee uh gram	A measure of the electrical impulses that come from the heart to show the overall health of your heart

Blood Pressure and Heart Failure

What Are the Effects of High Blood Pressure?

High blood pressure, or hypertension, is a common cause of heart failure, heart attacks, and stroke. As blood pressure goes up, the heart has to work harder to pump blood through the body and the heart can eventually fail. Blood pressure must be controlled to prevent the heart from becoming overworked and failing.

What Causes Low Blood Pressure?

Medications taken to treat heart failure help your heart and lower your blood pressure. Sometimes these medicines can cause your blood pressure to go too low and can make you weak or dizzy.

Often, blood pressure levels get too low at some point during your treatment for heart failure. If this happens, your doctor will adjust the amount of medicine you take.

How Is Blood Pressure Reported?

Blood pressure is reported as two numbers.

- The first number is the pressure while the heart is squeezing. This is called systolic (sis TOL ik) blood pressure.
- The second number is the pressure while the heart is relaxing. This is called diastolic (di a STOL ik) blood pressure.

Blood pressure is usually written with the systolic blood pressure first, followed by a slash, then the diastolic blood pressure. An example is 134/76. A blood pressure reading of more than 140/90 is generally considered high blood pressure.

How Is Blood Pressure Reported? continued

There is no number that identifies your blood pressure as too low. If you are being treated with heart failure medicines, at times your systolic number may be as low as 90.

Signs that your blood pressure is too low are dizziness, weakness, and the inability to exercise. These symptoms mean that too little blood is reaching your head, muscles, or other vital organs.

In general, the best blood pressure for your heart when you have heart failure is below 140/90, but not so low that you cannot stand, walk, and exercise without feeling weak or dizzy.

When Should You Take Your Blood Pressure?

Blood pressure changes from minute to minute and according to the body's position. Blood pressure goes down when you go from lying down to sitting or standing up.

Because your blood pressure changes so often, you should check your blood pressure at home and at different times of the day. You should do this especially if you have high blood pressure or heart failure. A blood pressure test is also useful if you are having trouble with lightheadedness or dizziness after you stand.

Your blood pressure should be measured both when you are sitting comfortably and after you have been standing up for a few minutes.

You or someone you know should learn how to take your blood pressure. Most drug stores sell the equipment, and your doctor's office can help you learn how to use it.

What Should You Do with Your Blood Pressure Measurements?

Keep track of your blood pressure while you are being treated for heart failure. If you get the measurements at home or in the drug store, take them with you to the doctor. Also let your doctor know immediately if your heart failure medicine is making you feel weak or dizzy.

Glossary

Term	Pronunciation	Definition
Systolic	sis TOL ik	The pressure when the heart is squeezing (contracting)
Diastolic	di a STOL ik	The pressure when the heart is relaxing

Heart Failure and Atrial Fibrillation

What Is Atrial Fibrillation?

Atrial fibrillation is a very common heart problem. It is an irregular heart beat or rhythm that affects the upper two chambers of the heart. The heart is made up of four chambers. The upper two chambers of the heart are called the atria, and the lower two are called the ventricles.

This irregular heart rhythm often causes the upper chambers to beat too fast. This leaves too little time for blood to pump into the two lower chambers. As a result, the amount of blood that flows to your body is reduced.

If you have atrial fibrillation, your heart works very hard, but it still can't pump enough blood for your body's needs. You may always feel tired and particularly weak or dizzy during activity since too little blood is getting to your muscles or to your brain.

Atrial fibrillation may make you feel bad, but it is not serious. Your doctor may choose not to treat it.

How Can You Control Atrial Fibrillation?

If your doctor decides to treat your atrial fibrillation, he or she may use medication to help your heart beat slower.

On the next page is a list of three types of drugs that are used to control heart rate. Any of them can be harmful if taken incorrectly, so it is very important to take them only as directed by your doctor.

How Can You Control Atrial Fibrillation? continued

Type of Drug	Generic Name	Brand Name
Beta-Blockers	metroprolol	Lopressor
	carvedilol	Coreg
	atenolol	Tenormin
Calcium Channel Blockers	diltiazem	Cardizem Dilacor Tiazac
	verapamil	Calan Verelan Isoptin Covera
Digitalis	digoxin	Lanoxin

With atrial fibrillation, you have an increased chance of developing blood clots. These clots can then break off and cause strokes or other damaging effects.

Blood thinners may reduce the chance of stroke caused by atrial fibrillation. Warfarin (or Coumadin) is the most commonly prescribed blood thinner. But it is also very toxic when taken in the wrong dosage. Your blood level must be checked frequently by the doctor to be sure that the medicine is safe and effective for you.

High Cholesterol and Heart Failure

What Is Cholesterol?

Cholesterol is a waxy substance that comes from your liver and from the food you eat. Your body needs it to function properly. There are two main types of cholesterol — HDL and LDL.

- High-density lipoprotein (lip o PRO teen), or HDL cholesterol, is considered the "good" cholesterol. It helps remove excess cholesterol from the body.
- Low-density lipoprotein, or LDL cholesterol, is considered the "bad" cholesterol. It leads to blockages of the arteries and to heart disease.

Why Is LDL Cholesterol Bad?

Even a very thin layer of LDL cholesterol can be bad for your blood vessels and arteries.

- The LDL cholesterol builds up plaque (PLAK) on the inside of your blood vessels and artery walls. This is much like the plaque that builds up on your teeth.
- Then, parts of the blood called platelets can stick to the plaque and block the vessels around your heart.
- These blockages can cause a heart attack and make your heart weak. Platelets can also block the arteries that lead to your brain and can cause a stroke.

High levels of LDL cholesterol, combined with other heart problems, can greatly increase your risk of heart attack and stroke.

What Causes a High LDL Cholesterol Level?

A high level of LDL cholesterol can result from foods you eat. It can also be caused when your body naturally makes more cholesterol than it needs.

Your body's tendency to make too much cholesterol may be inherited, but it also becomes more common as people get older. Even if you haven't had cholesterol problems before, your risk increases as you grow older.

How Can You Control Your LDL Cholesterol Level?

Fortunately, you can lower your LDL cholesterol level. By doing so, you can slow and even reverse cholesterol-related problems. Here are some ways you can lower your cholesterol.

Medications

In most cases, you can lower your cholesterol, at least in part, with medications. These medications help correct your body's tendency to make more cholesterol than it needs.

Medications called "statins" (STAT ins) can help reduce the risk of heart attacks, strokes, and heart failure.

Diet

A healthy diet will help lower your LDL cholesterol. Medication alone cannot make up for a diet filled with too much bad cholesterol.

continued

How Can You Control Your LDL Cholesterol Level? continued

Diet, continued

Here are some foods that you should eat if you want to keep your heart healthy.

Foods to Eat	Some Heart Healthy Choices
Fruits	Fresh, frozen, or dried fruit Fruit canned in its own juice
Vegetables	Fresh, frozen, or canned vegetables Vegetables with no butter or cheese sauce
Grains	Brown rice Oatmeal Whole grain cereals Whole wheat and multi-grain breads Low-fat rye crackers and multi-grain crackers
Low-Fat Protein	Grilled, baked, or poached fish Skinless chicken and turkey Non-fat milk and milk products Low-fat yogurt Eggs (only 3 egg yolks a week) Grilled or roasted lean meats (round and sirloin steak, pork tenderloin and loin chops, ground round, veal, and leg of lamb)
Fats and Oils Low in Saturated Fat	Tub margarines Canola oil Olive oil Low-fat salad dressings Low-fat mayonnaise

Here are some foods you should avoid or eat very rarely.

Foods to Avoid	Some Unhealthy Choices for Your Heart
Fatty Meats	Poultry with skin Regular ground beef Bacon and sausage Prime rib T-bone and rib eye steak Liver Luncheon meats
Sweets and Snacks	Pastries and donuts Pies and cakes Ice cream Chocolate and candy (Some low-fat versions may be acceptable in limited amounts)

How Can You Control Your LDL Cholesterol Level? continued

Exercise

Exercise is key to a healthy heart and blood vessels. It helps blood vessels stay healthy by increasing good cholesterol (HDL). It also helps reduce diabetes and the effects of overeating, which are two problems that often add to cardiac risks.

Exercise such as walking, swimming, or even dancing helps you control your cholesterol levels. Try to exercise for at least 30 minutes three to five times a week. Ask your doctor about how to begin an exercise routine.

Alcohol Consumption

When you limit the amount of alcohol you drink, you help keep your heart strong and your body functions normal. While small amounts of alcohol may help your heart, it is best to limit how much you drink. The recommendation is:

- One drink per day if you are small (140 pounds or less)
- Two drinks a day if you are bigger

If you drink more, you will weaken your heart.

Where Can You Get Additional Information?

Information on a healthy heart diet can be found in most bookstores and on the American Heart Association Web site, www.americanheart.org.

continued

Glossary

Term	Pronunciation	Definition
Lipoprotein	lip o PRO teen	Compounds of protein that carry fats and fat-like substances, such as cholesterol, in the blood
Plaque	PLAK	A combination of cholesterol and lipids that can accumulate on the inside of arteries
Statins	STAT ins	A class of drugs that lowers cholesterol

Stress Testing for Heart Failure Patients

What Is Exercise Stress Testing?

Exercise stress testing can help your doctor find the right treatment for your heart failure. This test tells your doctor whether your heart is getting enough oxygen when you exercise and how much exercise you can do safely.

The stress test can show other heart problems as well, such as fast or slow heart rates, skipped beats, or abnormal blood pressure changes. If problems are found, your doctor can treat them.

What Happens in the Exercise Stress Test?

If you are able to walk well for a few blocks, you will be able to do the stress test on a treadmill. The treadmill will start slowly and then gradually increase speed until you need to rest or until the technician sees problems with your heart or blood pressure. Treadmill tests can be done safely even if you are very weak.

The technician who runs the test will talk to you about how much exercise you can handle. If you can't walk easily or safely, you can use an exercise bicycle for the test.

While you are doing the test, you will be hooked up to equipment that monitors your heart beats and measures your blood pressure. You might also be asked to breath into a tube for a few minutes.

If you feel that the exercise is becoming too difficult for you, you can ask to stop the test at any time.

After the exercise part of the test is over, you will sit or lie down to see how long it takes your heart to return to a normal or resting state.

What If You Cannot Exercise Easily?

If you cannot exercise easily, the technician may give you an easier exercise test combined with another special test. This special test may be either an ultrasound or nuclear (noo KLE er) isotope (EYE suh tohp) imaging. These techniques give the technician another way to see, or "visualize," how your heart is pumping during exercise and to see if there are any problems with the flow of blood to your heart.

These techniques are also used to check the oxygen supply to your heart. Your doctor may want to see whether you have something called "ischemia" (ih SKI mi uh).

The ultrasound test can see areas of the heart that beat abnormally when the area is not getting enough blood. It can also see a heart valve problem and the effect that the valve problem has on the flow of blood through your heart.

Nuclear isotope tests are also used to detect areas of the heart that are not getting enough blood. In these tests, something called a "tracer," like a dye, is injected into your vein. Then you lie down under a special camera that can see how the tracer is moving through your heart. This can show areas where the blood flow to your heart is decreased.

What If You Cannot Exercise at All?

If you cannot exercise at all, a stress test is still important to see how your heart is pumping and whether there is decreased oxygen supply to your heart. Medications can be used instead of exercise during testing.

What If You Cannot Exercise at All? continued

These medications cause your heart to react in the same way it does when you exercise or exert yourself. They are usually combined with the ultrasound or nuclear isotope tests to find areas of the heart that are not getting enough blood.

Glossary

Term	Pronunciation	Definition
Ischemia	ih SKI mi uh	An inadequate supply of blood to a part of the body, caused by partial or total blockage of an artery
Nuclear Isotope Imaging	noo KLE er EYE suh tohp	A technique used to create a visual image of the body or its function

Echocardiography

What Are Echocardiography and an Echocardiogram?

Echocardiography (ek o KAR de o grafe), or heart ultrasound, takes a motion picture of the inside of the heart as it pumps. It is commonly used for patients with heart failure. It tells the doctor more about how the person's heart is working.

Echocardiography is very safe. It does not use x-rays, and you do not need an injection. This test uses the same method that is used to look at babies before they are born.

With echocardiography, high-frequency sound waves are sent into the chest where they bounce off of the heart's walls and valves. The returning "echoes" or sounds produce an image of the heart on a computer screen. This image is called an echocardiogram (ek o KAR de o gram), or "Echo."

If you have heart failure, this study is very important because it allows your doctor to see the shape of your heart's chambers, valves, and walls. It also allows your doctor to see if your heart muscle is contracting or squeezing properly.

What Happens During an Echocardiogram?

During an echocardiogram you will be asked to lie on your left side, usually for about 15 to 20 minutes. First, the technician places jelly on your chest. The jelly helps the sound waves from the ultrasound move back and forth. Then the technician positions a small plastic wand or "probe" on your chest.

This probe transmits sound waves to the computer. The computer turns the sound waves into clear moving pictures of your heart. These pictures show your heart valves and the blood flow within the heart.

How Do You Prepare for an Echocardiogram?

On the day of your echocardiogram, you should wear a shirt or blouse that opens in the front. Women's bras will have to be removed.

If you have a cough or a chronic breathing problem, you should take your normal cough or breathing medications before your test. The test is easier if you are not coughing.

What Are the Results?

When the test is over, a doctor who is a heart specialist looks at the computer pictures and sends the test results to your doctor. This may take a few days. Your doctor will then tell you what the results show.

One useful result is your heart's ejection fraction. This is a percentage that says how much of the blood in the main chamber of your heart is pumped out during each beat. The higher the percentage, the more blood your heart is pumping out.

The normal range of ejection fractions is from 55% to 70%. Among heart failure patients, this ejection fraction number is usually lower.

Another useful result is to show how thick or stiff your heart wall is and the size of the chamber. The test can also show heart valve problems and signs of earlier heart attacks.

If you have heart failure and your ejection fraction is normal, it often means your heart failure has been caused by a heart muscle that is too thick or stiff for the heart chambers to fill normally.

Echocardiograms are completely safe and comfortable. They are a very important tool for the doctor to use in order to treat your heart condition.

Glossary

Term	Pronunciation	Definition
Echocardiogram	ek o KAR de o gram	A test that shows the heart's shape and size and what happens when the heart beats
Echocardiography	ek o KAR de o grafe	A test that uses ultrasound waves to create an image of the heart muscle

Living Longer with Heart Failure: ACE Inhibitors

My ACE Inhibitor is: _____

What Are ACE Inhibitors?

Many medications are used to treat the symptoms of heart failure, but only a few are known to help you live longer. ACE inhibitors can do this. Medical research shows that patients who take ACE inhibitors often live longer and their hearts work better.

ACE inhibitors help the heart and body work more normally again, especially if the heart is or the heart muscle is stiff or thick.

What Are the Common Side Effects of ACE Inhibitors?

Low Blood Pressure

The ACE inhibitor lowers blood pressure. And it can even be used if your blood pressure is already low.

If you have low blood pressure and take an ACE inhibitor, you may feel dizzy or lightheaded, especially when you stand up. To reduce this feeling, sit up for a few seconds before standing. Stand up slowly to give your body a chance to adjust.

High Potassium Levels

The amount of potassium in your blood may increase when you take an ACE inhibitor. If you are taking a potassium pill, the amount you take may need to be changed. Your doctor will check your blood tests to monitor the amount of potassium in your blood.

What Are the Common Side Effects of ACE Inhibitors? continued

Dry Cough

Occasionally, ACE inhibitors also cause a dry cough that doesn't go away. If this occurs, your doctor can give you a different medication that has many of the same advantages as ACE inhibitors, but it does not cause coughing. This alternative medicine is an angiotensin (AN je o TEN sin) receptor blocker.

Tell your doctor if you are feeling dizzy or if the medicine is making you feel bad in any other way. Remember that alcohol and overeating can make side effects worse.

How Do You Take Your ACE Inhibitor?

ACE inhibitors cause fewer problems when your doctor starts with a low dose and gradually increases it. For this reason, don't worry if your doctor changes the amount you take.

If you have trouble with low blood pressure or dizziness, it may help to take the ACE inhibitor at a different time from when you take other blood pressure medicines.

Try to take the ACE inhibitor close to the same time every day. Don't stop taking the medicine without first talking to your doctor. Work with your doctor to get the right amount of ACE inhibitor and take it as directed.

Glossary

Term	Pronunciation	Definition
Angiotensin	AN je o TEN sin	A hormone that causes blood pressure to rise

Living Longer with Heart Failure: Beta-Blockers

My Beta-Blocker is: _____

What Are Beta-Blockers?

Beta-blockers help a weak heart work better and longer. They also help the heart rhythm problems that are common in heart failure. Several large medical research studies show that beta-blockers can help you to live longer if you have heart failure.

Beta-blockers work well if the main chamber of your heart is not pumping enough blood with each beat. They are also helpful if your blood pumps normally, but you have heart failure caused by a heart that is stiff and thick.

What Are the Side Effects?

Beta-blockers may make you feel slightly worse for the first few weeks after you start taking the medication. These side effects usually go away. They include:

- Shortness of breath
- Tiredness
- Weight gain
- Slow pulse
- Lower blood pressure
- Dizziness
- Worsened asthma (AZ muh)

Why Should You Work with Your Doctor?

It is always important to let your doctor know if you are having side effects. Your doctor can try another beta-blocker or change the amount you are taking to reduce the side effects.

Why Should You Work with Your Doctor? continued

For instance, you can weigh yourself every day and tell your doctor if you gain more than a few pounds. Your doctor may tell you to increase the amount of water pill you are taking as your body adjusts to the beta-blocker.

If side effects continue and the beta-blocker needs to be stopped, work closely with your doctor. Stopping it too quickly can cause serious problems with your blood pressure and heart rhythm.

Let your doctor know if anything keeps you from taking your beta-blocker. Never stop taking a beta-blocker without first talking to your doctor.

How Is the Proper Dosage Determined?

To reduce the chance of side effects, your doctor will probably give you a very low dose of the beta-blocker at first, and then slowly increase it over several months until it is right for you.

Beta-blockers can help improve your health. It is very important to use these drugs even if there is a small chance of side effects. Work with your doctor to get on the right dose of your beta-blocker, and take it as directed.

Glossary

Term	Pronunciation	Definition
Asthma	AZ muh	A medical condition that makes breathing difficult by causing the air passages to become narrow or blocked

Leg Swelling and Fluid Retention

What Causes Leg Swelling?

If you have heart failure, your feet, ankles, or legs can swell. This is a common problem.

Swelling is often caused when blood backs up in your blood vessels because the heart cannot pump hard enough to push the blood completely through the body. In some ways, this situation is similar to a sink backing up and not being able to drain.

Your feet can swell when your heart becomes so thick and stiff that it can't let the blood in fast enough. This is called diastolic (di a STOL ik) heart failure.

Your body can make the build-up of fluids worse when it tries to make up for the lower amount of blood being pumped by the heart. In other words, your body automatically tries to help itself by holding onto fluid, but it is actually making the problem of heart failure worse.

Gravity also makes the swelling worse. It causes blood and fluid to settle in the lower parts of your body, especially when you stand for several hours.

What Are Some Ways to Control Swelling?

When your shoes feel too tight or your legs look larger than usual, you are probably retaining water. You can do several things to control or help reduce this build-up of fluid.

- Limit the amount of salt in what you drink and eat. This is the most important thing you can do to reduce swelling.

  Salt causes your body to hold in fluid and makes you thirstier. Restrict your salt intake to less than 2 grams a day, if possible.

What Are Some Ways to Control Swelling? continued

- Lie down and/or raise your legs above the level of your heart. For example, rest with your legs up on pillows.

  When you are lying down to sleep, fluid moves from the legs into the central part of your body. This may cause you to have to go to the bathroom and interrupt your sleep. Try to keep your feet elevated as much as possible during the day.

- Limit how much water you drink. If you have swelling, drink less than 2 quarts or 2 liters a day of all fluids. Ask your doctor what he or she recommends for you.

- Wear support stockings to prevent water build-up in your legs. Put the stockings on in the morning and wear them throughout the time you plan to be standing.

How Do You Use Diuretics?

Diuretics (di u RET iks), or water pills, can help your body get rid of excess water and salt. Your doctor will adjust your medicine according to the amount of extra water you retain, your kidney function, and your overall health.

Even when you take water pills, you need to control your salt and water intake. Sometimes, they make you feel more thirsty because you are passing so much liquid.

If you are a heart failure patient, you should restrict your fluid intake to less than 2 quarts or a liter per day in order for water pills to help you.

How Can You Use Weight Gain to Measure Fluid Retention?

Your weight is the best single measure of your body's water status from day to day. Your weight will change before you can see your feet swell.

How Can You Use Weight Gain to Measure Fluid Retention? continued

Weigh yourself every morning or evening. Try to wear the same amount of clothing, or no clothing, every time you weigh yourself. Write down your weight so you can see how it goes up and down from day to day.

If you gain several pounds in one day, you are probably retaining fluid. It is very hard to gain that much weight in one day from overeating.

Ask your doctor how much your weight can change before you should call his or her office. Also, when you change your water pills, ask your doctor how much change in your weight you can expect and what you should do if your weight changes too slowly or too quickly.

How Can You Ease Skin Problems Caused by Swelling?

When your legs swell, your skin can become red, dry, scaly, or itchy. It can also cause ulcers to develop. Keeping your legs elevated will help keep your skin healthy.

In many people with heart failure, water pills alone will not keep the swelling and skin problems away. You may also need to elevate your legs and wear support stockings to prevent swelling, skin problems, and ulcers of the legs.

Glossary

Term	Pronunciation	Definition
Diastolic	di a STOL ik	The pressure when the heart is relaxing
Diuretics	di u RET iks	A medicine that increases the flow of urine to rid the body of extra fluid

Heart Failure and Being Overweight

Why Lose Weight?

You carry your weight with you. You know how much harder it is to walk or climb stairs with a couple of heavy grocery bags. If you are overweight, you have extra weight on you all of the time.

Losing weight will reduce the amount of work needed from your heart.

How Does Weight Affect Heart Failure?

If you have heart failure, extra weight puts more stress on your heart as it tries to pump blood during your usual daily activities.

In addition, extra fat raises your bad cholesterol, lowers good cholesterol, raises blood pressure, and can cause diabetes. All of these conditions can cause heart attacks and heart failure.

What Did Survey Findings Show About Losing Weight?

A survey was done of people who lost 30 pounds or more and kept the weight off for a year. The survey found that:

- 90% of these people had tried to lose weight before and were not successful.
- Over 50% used a program, such as Weight Watchers, or a professional, such as a dietitian or a psychologist, to help them lose weight.
- 80% of these people exercised more.
- 66% of these people were stricter with their diet.

What Did Survey Findings Show About Losing Weight? continued

The hard work proved to be worth the effort. The weight loss improved everyone's health. And seven out of eight also reported they felt better mentally or physically after losing the weight.

What Is a Good Weight Loss Program?

There is no perfect, guaranteed weight-loss program, but there are many good ones. Most of them ask you to make a plan you can follow. They give you moral support and suggest activities that will help you get rid of some calories.

Watch out for over-the-counter diet pills, though. Almost all of them are dangerous for your heart.

As you watch your weight, remember that fast changes in weight are usually due to fluid gain or loss. These fast changes should be discussed with your doctor.

Where Can You Get Additional Information?

Don't be discouraged about your weight. Instead, look around for the weight loss programs available to you.

Get more information about obesity. The American Obesity Association has a lot of information about weight loss products and plans. Start losing weight today!

Following a Low-Salt Diet

Why Is Salt a Problem?

If you have heart failure, you should avoid salt and salty foods. Salt, or sodium chloride, holds water in your body. This causes your legs to swell, your lungs to fill with fluid, and your heart to work harder.

How Can You Control Your Salt Intake?

You can control your salt intake easily if you follow these simple tips:

- Choose foods that are naturally low in salt. These include most fresh meats, vegetables, starches, and fruits.
- Prepare all foods with little or no additional salt. Instead, try a low-salt spice mix to add zest and flavor.
- Look for low-sodium foods that can be found in many stores. You can probably find salt-reduced versions of the foods you like.
- Read labels so you can find out how much salt is in the package of food. Even foods that have “no salt added” can still contain a large amount of sodium.

You will find that over time your taste buds get used to less salt. Be patient!

continued

Which Foods Should You Avoid?

Some foods have a high amount of salt in them already. You should stay away from them as much as possible. These include:

- Processed foods (for example, cold cuts)
- Prepared meals that you buy in a supermarket (for example, frozen dinners)
- Canned vegetables and canned soups
- Catsup, pickles, relish, and many condiments and marinades
- Cheese (even cottage cheese has a lot of sodium)
- Most restaurant foods

Below is a list of foods with high salt content. Avoid eating the following:

Anchovies	Chipped beef	Lox	Salt
Bacon	Cocoa	Meat tenderizer	Salted butter
Baking powder	Cold cuts	MSG	Salted meat
Baking soda	Corned beef	Mustard	Salted nuts
Barbecue sauce	Cottage cheese	Olives	Saltines
Bleu cheese	Dips	Pancake mixes	Sauerkraut
Bouillon	Garlic salt	Pickles	Sausage
Buttermilk	Gravy	Pretzels	Soup (canned)
Canned fish	Ham	Processed cheese	Soup mixes
Canned veggies*	Hot dogs	Relishes	Soy sauce
Casserole mixes	Instant cereals	Salad dressings	Steak sauce
Catsup	Instant popcorn	Salsa	Stuffing mix

** If you use mostly canned vegetables, you can lower their salt content by draining them first and rinsing them in fresh water.*

Exercising with Heart Trouble

Why Do You Need to Exercise?

Your heart and your body need exercise to stay fit. Regular exercise is an important way to reduce the risk of developing heart failure. It is also a way to improve health and well-being after you have heart failure.

If you have heart failure, mild to moderate exercise can have a good effect on your health. Exercise also increases good (HDL) cholesterol, lowers blood pressure, helps control diabetes, promotes weight loss, and reduces the risk of heart attacks.

What Do You Need to Do Before You Start Exercising?

Before you start exercising, check with your doctor. Your doctor may suggest that you start with an exercise test. This test monitors your heart rhythm and blood pressure during exercise to make sure that exercise is safe for you.

Your doctor may also suggest that you start your exercise with a hospital-based program called “cardiac (KAR de ak) rehabilitation.” This is very helpful if you feel very weak or very anxious about starting an exercise routine.

If you have a specific disability, such as a bad knee, exercise still has value. But it is important to discuss the problem with your doctor or with a therapist to determine the safest types of exercise for you.

What Types of Exercise Are Helpful?

Many types of exercise can help you keep your heart healthy. You can walk, swim, dance, or participate in some other type of physical activity that you like.

You can also use stationary exercise bicycles, treadmills, and other such machines. These machines make it easier to exercise in several short time periods, which is often the safest way.

Doing different activities may make exercise less boring. Try to find a place and an activity that you like. Few people stick with an exercise routine they don't like, no matter how good it is for them.

Be creative. Exercise while you watch your favorite TV show or listen to music. Find a way to enjoy it!

What Should You Do Before Exercising?

Start slowly, and then try to gradually increase the length of your exercise time. Do sitting stretches before you start and when you finish. See the attached handout "Exercising with Heart Trouble: Stretches" for stretching exercises you can do.

Start at an easy pace for 5 minutes, at least 3 times a week. Then increase your time by a minute each week (6 minutes each session in the second week). Set a goal of at least 20 minutes of exercise 3 times a week. Don't worry about missing a day now and then.

What Are Some Useful Exercise Pointers?

Here are some ways to make your exercise enjoyable, safe, and helpful.

- Exercise at a comfortable pace. Work fast enough to break a sweat, but not so fast you can't talk.

What Are Some Useful Exercise Pointers? continued

- Exercise with a partner in a cool setting. Shopping malls are great in the summer.
- Always wait an hour after you eat or take your medications.
- Take a cell phone if you are exercising away from home.
- If you must exercise alone, consider taking an emergency alert system (most hospitals can tell you where to get one).
- Stop exercising and consult your doctor if you develop unusual shortness of breath, heavy sweating, dizziness, chest pain or pressure, or heart pounding.
- Go to an emergency room if you keep having these symptoms.

What Precautions Should You Take?

Don't walk very fast or exercise very hard if you have heart failure. For heart failure patients, the common expression "no pain, no gain" is not true. Slow, comfortable, and enjoyable exercise is best and will help you the most.

The benefits of exercise increase with the amount of time you spend at it. Remember, the time spent exercising is more important than how far or how fast you do it. Don't overdo it!

Glossary

Term	Pronunciation	Definition
Cardiac Rehabilitation	KAR de ak	A comprehensive exercise, education, and behavioral modification program designed to improve the physical and emotional condition of patients with heart disease

Exercising with Heart Trouble: Stretches

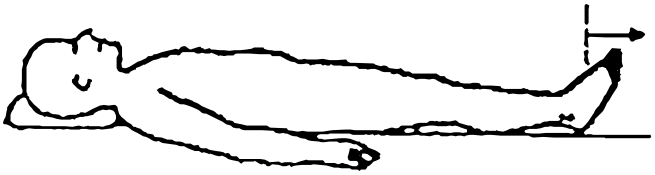
The following are some sitting stretches you should do before you start and when you finish exercising.

Stretches While Lying Down

Ankle Pumps

Lie flat on the floor. Pump one foot by pointing your toes away from your body and the back toward the ceiling. Repeat with the other foot.

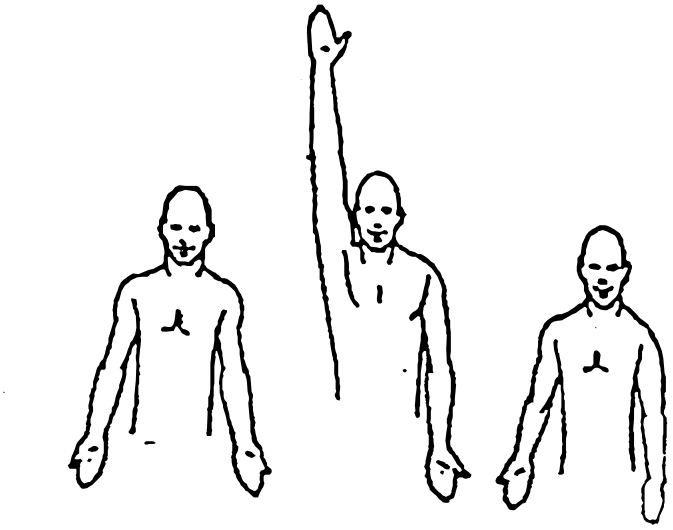
These pumps can be done in a sitting position also. Point your toes toward the floor and then toward the ceiling.



Stretches While Sitting

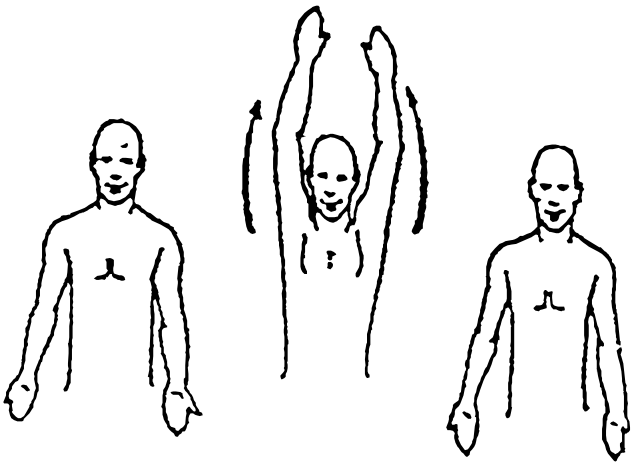
Arm Raise

Raise one arm above your head as high as possible. Slowly lower your arm to your side. Repeat with the other arm.



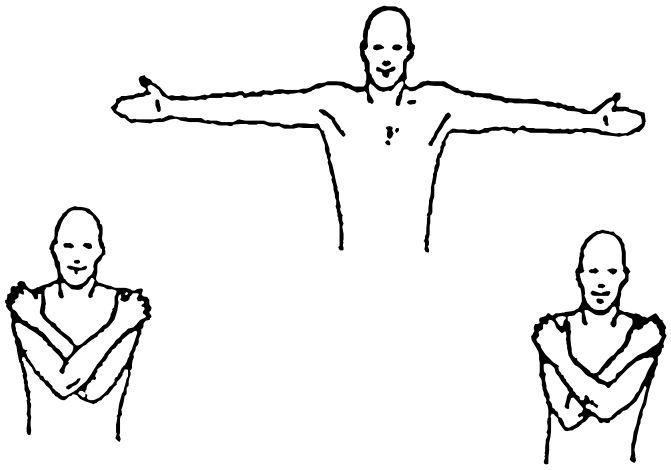
Double Arm Raise

Raise both arms above your head. Slowly lower your arms to your sides.



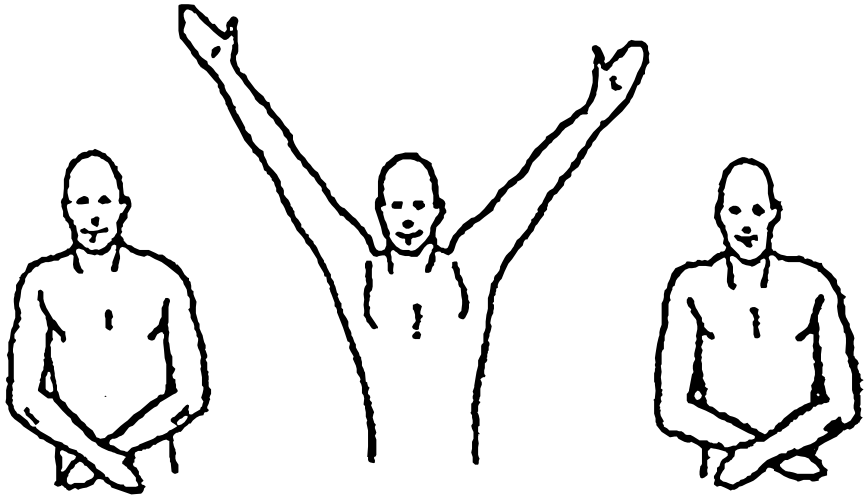
Arm Hug

Spread your arms out. Then give yourself a hug. Repeat.



Arm Cross

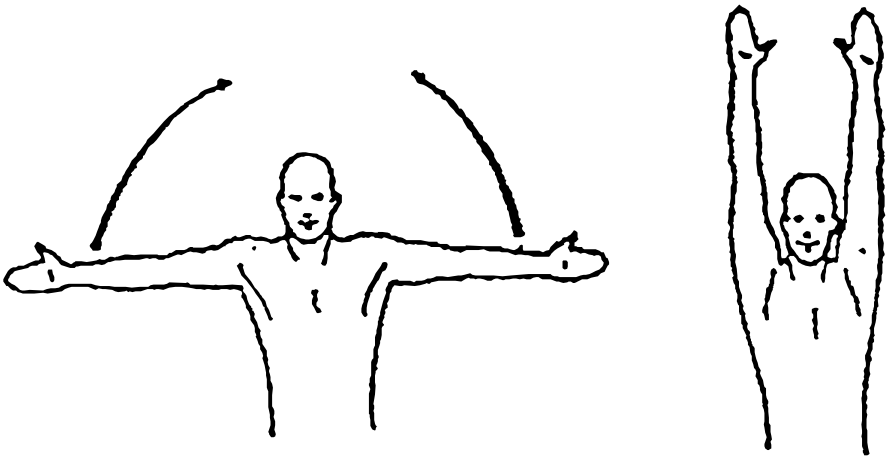
Cross your arms in your lap. Uncross your arms as you lift them up and out. Slowly lower and re-cross your arms.



Stretches While Sitting continued

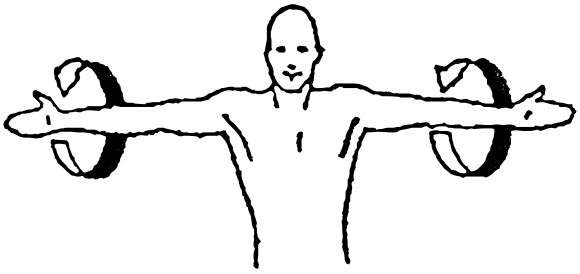
Side Arm Raise

Start with your arms out to your sides, at shoulder height. Lift your arms out above your head and back down.



Arm Circles

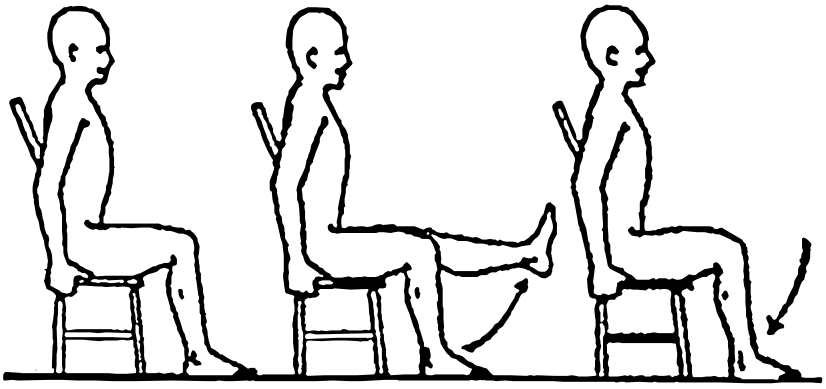
Lift arms out to your sides, at shoulder height. Keeping your arms at shoulder height, circle them forward and then backward.



Stretches While Sitting continued

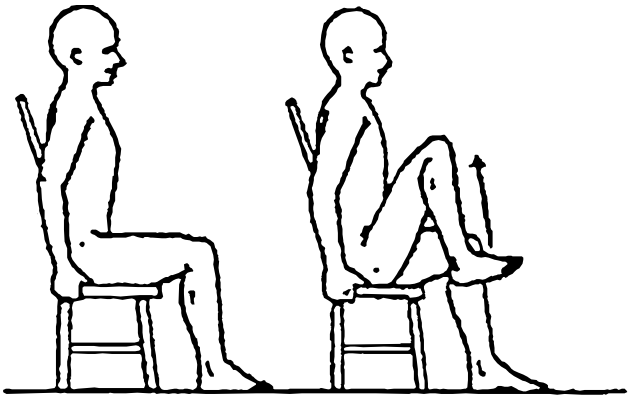
Leg Lifts

Extend one leg straight out, and then slowly lower the leg. Repeat with the other leg.



Knee Lifts

Raise one knee toward your chest, and then lower it to the floor. Alternate knees as if you are marching in place.



Advice for Smokers with Heart Failure: Quit

Why Is Smoking Unhealthy for the Heart?

Everyone knows that smoking is bad for the lungs. But we often don't think about how smoking affects the heart.

Even for a healthy person, smoking increases the chances of getting heart failure. It also can lead to heart attacks, strokes, high blood pressure, and sudden death. For those who have heart failure already, smoking greatly increases these risks.

Why Should You Quit?

When you stop smoking, you can cut your risk of developing heart failure in half. Even if you have smoked for a long time, quitting now will allow you to live longer and have a better quality of life.

If you already have heart failure, quitting smoking helps you more than heart failure medications or therapy.

There are other benefits as well. When you stop smoking, you decrease the chance of getting cancer, emphysema (em fuh SEE muh), bronchitis (bron KYE tis), high blood pressure, and stomach ulcers.

Where Can You Get Help?

If you are ready to quit, ask your doctor about treatments that can help you. Nicotine patches and nicotine gum help some people stop.

Remember that few people quit for good the first time they try, so keep at it. It is worth the effort. Your life depends on it.

Glossary

Term	Pronunciation	Definition
Bronchitis	bron KYE tis	An inflammation of the air passages between the nose and the lungs
Emphysema	em fuh SEE muh	A chronic respiratory disease where there is over-inflation of the air sacs in the lungs, causing a decrease in lung function