Exercise and Activity after Heart Surgery

Exercise is important for healthy healing and will help you return to a more active lifestyle. Aerobic exercise, defined as continuous training that uses the large muscle groups (i.e., your arms and legs), conditions the entire body. It helps your heart and lungs to work more efficiently. It also helps to control other risk factors for heart disease and stroke.

Benefits of Exercise

- To decrease your risk of another heart related event.
- To reduce your triglyceride and LDL (bad cholesterol) levels.
- To increase your HDL (good cholesterol) levels.
- To lower blood pressure.
- To decrease risk of developing diabetes.
- To reduce blood sugar levels in persons with diabetes.
- To help manage weight.
- To reduce stress and improve your emotional well-being.
- To reduce risk of osteoporosis as well as colon and breast cancer.
- To reduce risk of stroke.

What Kind of Exercise is Beneficial?

Aerobic exercise will help you return to an active lifestyle. This involves constant movement of your legs and/or arms. Aerobic exercise examples include: walking, biking, swimming, and dancing. Any type of activity that makes you breathe harder and faster for at least 10 minutes at a time is considered aerobic exercise.

Resistance training helps strengthen major muscle groups and helps burn more calories.

Your Hospital Exercise Program

While in the hospital, you will work with the Cardiac Rehabilitation team to find an initial program that is right for you. The staff will check your heart rate and blood pressure while you walk which helps them to know how your body is responding to exercise. It also helps them to suggest an initial home program that is best for you.
Your Home Exercise Program
When first home, you will want to follow these guidelines. Start your home exercise program the day after you go home from the hospital.

♥ What activity? Walking on a level surface or using a stationary bike or treadmill.

♥ How often? Most days of the week (5-6 days).

♥ How long? Start with ___ minutes of exercise ___ times a day. Increase your walking or exercise 1-2 minutes each day. Build up to at least 10 minutes, 3 times a day. The ideal goal is to reach 30-45 minutes of continuous training per day. Your goal is to reach 30-45 minutes of continuous exercise per day.

♥ How hard? Check your heart rate or your rating of perceived exertion (RPE). This will be explained later in this handout.

How Should I Increase My Exercise Program?

An example of how to increase the time and intensity of your exercise program is provided below. For more help go to page 5 or talk with the Cardiac Rehabilitation staff. Their contact information is on the last page of this handout.

Time: Begin with 3-5 minutes of walking, 4-5 times per day. Add 1-2 minutes to each session every day. As you add time, the number of sessions can be decreased. For instance, when you complete 10 minutes of exercise, decrease your routine to 2-3 sessions per day. When you complete 30 minutes, decrease the frequency to 1 session per day.

Intensity: When you are able to complete 20-30 minutes of exercise in one session, try to increase your intensity (i.e. how fast or hard you walk) for 3-5 minutes at a time. Then resume your normal routine for the rest of your workout. Always keep the Talk Test information in mind (see page 3).

How Your Body Responds to Exercise
Normally, you may notice you are breathing faster and your heart rate increases when you exercise. You can also expect to sweat and to have some muscle fatigue.
It is also important to know what is not normal. If you notice any of these symptoms, **STOP** exercising and call your local doctor. If you feel this is an emergency, call **911** right away.

| STOP | • Severe chest pain, pressure, or tightness (angina)  
|      | • Excessive shortness of breath  
|      | • Excessive sweating  
|      | • Blurred vision  
|      | • Frequent skipped heart beats (palpitations)  
|      | • Dizziness, light-headedness  
|      | • Nausea  
|      | • New weakness on one side of your body either arm or leg or both |

**Knowing How Long and Hard to Exercise**

Your heart rate and how you feel will guide how long and hard you should exercise and what activities you should do. Since certain medications, such as beta-blockers, decrease your heart rate response to exercise, we recommend using the **Talk Test**.

♥ **The Talk Test**

Choose a level of exertion that allows you to still talk while you exercise. You should be able to talk in short sentences, but will not be able to sing.

**What to Wear for Exercise**

Dress in loose-fitting, comfortable clothing. In warmer weather, a cotton T-shirt and shorts may be enough. In cooler weather, layer your clothing if you plan to exercise outdoors. For instance, a windbreaker over a long sleeve shirt may work well. Cover your nose and mouth with a scarf to help warm the air you breathe.

Avoid heavy, bulky coats or jackets as they can increase your work effort. Your body heat naturally increases as you exercise. You don’t want to become overheated by dressing too warm.

Women should wear a supportive bra to protect the breastbone.

Wear jogging or walking shoes. Shoes with supportive arches reduce foot and knee soreness that can occur when you exercise for longer times. If you have diabetes, be sure your shoes have a large enough toe box and the heels do not pinch or cause blisters.
Exercise Guidelines when you reach 20 minutes of exercise.

1. **Warm up for 5 minutes** by slowly walking or biking with no resistance. This will increase your blood flow and warm up your muscles for activity.

2. **Increase to a moderate intensity.** Increase your speed or resistance so that you are breathing heavier but still able to talk.
   - For walking – this means a brisk pace. If you must walk uphill, slow down your speed to maintain a constant level of exertion and heart rate.
   - For biking – maintain a moderate pedal speed of 40-50 rpm. After you are able to do this for 30-40 minutes, then (and only then) tighten the tension knob to increase your workload. Be sure to adjust the seat height so that there is a slight bend in your knee when the pedal is at its lowest level.

3. **Cool down for 5 minutes.** At the end of your session, slow down to an easy pace for 3-5 minutes. This prevents sudden changes in blood pressure that can occur if you stop too quickly.

**Stair Climbing**
While healing, you may need to climb stairs at a slower rate. At first, climb **one stair every 2 seconds**. As you heal, you can slowly increase your rate.

   **Do not pull yourself up using the stair rails.**
   **This is to prevent putting stress on your breastbone.**

If you had bypass surgery, follow the instructions below.
   - To climb **up** stairs, step up with the leg that you did **not** have surgery on. This may be called your good leg. Bring your other leg to the same stair and pause a few seconds.
   - To go **down** stairs, do the reverse. Use the leg you **did** have surgery on (this may be called your bad leg) and then follow with the other leg. Again, pause a few seconds.

If you had heart surgery other than bypass, follow the instructions below.
   - Step up and down with the leg on your dominant side. If you are right handed, this will be your right leg.
Activities You Can Expect to Do

<table>
<thead>
<tr>
<th>THE FIRST MONTH AFTER SURGERY</th>
<th>1-3 MONTHS AFTER SURGERY</th>
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</thead>
<tbody>
<tr>
<td>♥ Light housework, crafts</td>
<td>♥ Biking indoors</td>
</tr>
<tr>
<td>♥ Dining out</td>
<td>♥ Dancing</td>
</tr>
<tr>
<td>♥ Stair climbing</td>
<td>♥ Chipping with a golf club</td>
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<tr>
<td>♥ Shopping but no heavy lifting</td>
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<td></td>
<td>or reaching above the head</td>
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Things to Avoid For the First 6 Weeks
- Do not lift over 8 pounds. For the following 6 weeks, do not lift over 20 pounds.
- Do not drive for 4-6 weeks or while taking narcotics. Sit in the back seat of the car and use your seat belt.
- Avoid push-pull arm movements such as vacuuming and sweeping.
- Avoid arm motion that causes pain in your incision. If you feel any pulling, stretching, or popping in your chest, stop what you are doing. Do not repeat the motion that caused this feeling.
- Keep your elbows below shoulder height.
- Avoid putting extra pressure on your arms when getting up from a chair or climbing stairs.
- Brace your chest when coughing or sneezing. This is vital during the first 2 weeks at home.

Things to Avoid for 12 Weeks (3 months)
- Shoveling snow.
- Biking outdoors.
- Swimming.
- Driving a motorcycle.
- Heavy garden work.
- Lying on either side.

Arm Exercises
Your lifting and arm work is limited for 2-3 months while the breastbone and chest incision heal. During this time, the muscles of your chest and upper limbs need to stay mobile and flexible. The exercises below allow you to stretch your muscles without putting too much pressure on your wound. They also help you to maintain range of motion and avoid losing muscle tone in your chest, shoulders, and arms.
Plan to do these exercises daily for 1-2 months after surgery. Start by doing 5 of each daily. Slowly work up to 15 of each per day. While you exercise, remember to breathe. Do not hold your breath.

**The Chest Stretch**
Start with your arms in front of your chest. Hold a towel shoulder width apart.
- Slowly raise your arms to the point just before your feel discomfort.
- Slowly bend your elbows while bringing the towel into your chest.
- Straighten your elbows and return to your starting point.
- Repeat.

**Arm Circles**
- Place your hands on your shoulders.
- Move your arms clockwise as if you are drawing circles with your elbows. Start with little circles. Make the circles bigger and bigger.
- Repeat in the opposite direction.

**Showering**
As your breastbone heals, you should shower daily with your back facing the showerhead. This prevents water from spraying directly on your incision. Do not take long, hot showers. Do not bathe in a tub, hot tub, or sauna for 30 days or until wounds are fully healed. Use fragrance-free soap and pat your incision dry when done.

**Sexual Activity**
Once home, you may engage in sexual activity as you feel able and have the desire. The peak effort with sex is equal to climbing stairs at a moderate pace. As you are healing, you may want to try new positions to protect your incision. Positions that place less stress on your upper body work best.

Some heart medicines can affect your sexual drive and ability. If you have questions or concerns about this, please talk with your doctor or heart care team.

**Being Wary of Weather Extremes**

- **Hot weather** – Heat and humidity can cause strain on your heart and blood flow. Avoid exercising in direct sun or when it is over 85°F unless the humidity is low, there is a breeze, or there is shade. Early mornings and evenings are best.

  **Exercise outdoors only if the heat index is less than 85°F.**
Cold weather – Avoid exercising outdoors when the temperature or wind chill factor is below 0º F. The body and heart have to work harder to walk against wind and snow. Learn to pace yourself and avoid sudden bursts of effort. You may need to work and rest at intervals to maintain this rating.

Snow shoveling – You may be able to shovel light snow after 3 months. Before doing so, warm up, do gentle stretches and pace yourself. Use the Talk Test. If you are unable to talk in short sentences, you are working too hard. Avoid holding your breath.

Your Cardiac Rehabilitation Program
Cardiac Rehabilitation is a medically supervised program that features exercise and education for people recovering from a heart attack, bypass surgery, coronary angioplasty or stent, heart transplant, or valve surgery. The program is designed to help strengthen your heart and other muscles, as well as guide you to a heart healthy lifestyle. You can receive this follow-up care through the UW Health Cardiac Rehabilitation program or through a program close to your home.

Your local Cardiac Rehabilitation program: _______________________
Phone number: _______________________

UW Health Cardiac Rehabilitation    (608) 263-6630
Preventive Cardiology Inpatient Cardiac Rehabilitation

The Spanish version of this Health Facts for You is #7740

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 5/2017 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing; HF#5801