

Exercise and Activity After Heart Surgery

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

Benefits of Exercise

- Decreases your risk of another heart related event.
- Reduces your triglyceride and LDL (bad cholesterol) levels.
- Increases your HDL (good cholesterol) levels.
- Lowers blood pressure.
- Decreases risk of developing diabetes.
- Improves blood sugar levels in persons with diabetes.
- Helps manage weight.
- Reduces stress and improves your emotional well-being.
- Reduces risk of osteoporosis as well as colon and breast cancer.
- Reduce risk of stroke.

Kinds of Exercise

Aerobic exercise involves constant movement of your legs and/or arms. Aerobic exercise examples include: walking, biking, swimming, and dancing. Any 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 Home Exercise Program

When first home, follow these guidelines. Start your exercise program the day after you go home from the hospital.

Activity Plan

Walk on a level surface or using a stationary bike or treadmill. Do this most days of the week (5-6 days).

Start with _____minutes of exercise _____times a day. Increase by 1-2 minutes each day. Build up to 10 minutes, 3 times a day. The goal is to reach 30-45 minutes of continuous exercise per day.

Check your heart rate or use the Talk Test. This is explained later in this handout.

How to Increase My Exercise

See below for an example of how to increase the time and intensity of your exercise program. For more help, talk with the Cardiac Rehabilitation staff.

Time: Begin with 3-5 minutes of walking, 4-5 times per day. Add 1-2 minutes to each time every day. As you add time, the number of times per day can be decreased.

For instance, when you complete 10 minutes of exercise, decrease your routine to 2-3 times per day. When you complete 30 minutes, decrease the frequency to 1 time per day.

Intensity: When you are able to exercise for 20-30 minutes at a time, 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.

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 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.

- 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. Since certain medicines, 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

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 warmly.

Women should wear a supportive bra to protect the breastbone.

Wear jogging or walking shoes. Shoes with supportive arches reduce foot and knee pain 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

Follow these guidelines when you reach 20 minutes of exercise or more.

- **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.
- **Increase to a moderate pace.** 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.

- **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. Lead with the leg you feel most comfortable and safe with.

Do not pull yourself up using the stair rails. This prevents putting stress on your breastbone.

All patients have restrictions after heart surgery. Your breastbone (sternum) is a broken bone that cannot have a cast. It takes a long time to heal. Things to avoid are:

Things to Avoid for the First 8 Weeks

- Do not lift over 10 pounds. This is about the weight of a gallon of milk.
- Do not drive for 4 weeks or while taking narcotic pain medicine. Sit in the back seat of the car and use your seat belt.
- Avoid pushing and pulling arm movements such as vacuuming, mopping, and sweeping.
- Avoid reaching too far across your body.
- 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 (no reaching overhead).
- Avoid pushing with 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.
- **Do not** lay on either side

During the 8 weeks after surgery, avoid activities that involve twisting or heavy lifting. This includes but is not limited to:

- Snow shoveling
- Lawn mowing, heavy yard work/gardening
- Golf
- Tennis and other racquet sports
- Hunting and fishing
- Running (walking is safe and encouraged)
- Bike riding
- Motorcycle riding
- Contact sports (soccer, football)
- Weightlifting
- Bowling

When 8 weeks have passed, you may resume your normal activities. Call your surgeon's office if you have questions.

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. You will also 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

1. Start with your arms in front of your chest.
2. Hold a towel shoulder width apart.
3. Slowly raise your arms to the point just before you feel discomfort.
4. Straighten your elbows and return to your starting point.
5. 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 sit 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.

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, talk with your doctor or heart care team.

Be Careful 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. Early mornings and evenings are best. **Exercise outdoors only if the heat indexes less than 85°F.**

Cold weather: Avoid exercising outdoors when the temperature or wind chill factor is below 0°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 alternate between work and rest.

Snow shoveling: You may be able to shovel **light** snow after 2 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 Inpatient Cardiac Rehabilitation
(608) 263-6630

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 © 7/2020 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#5801