



HEALTH FOR LIFE

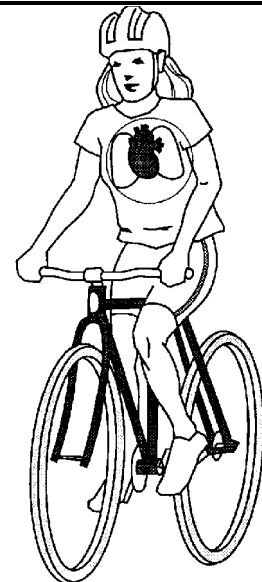
Pulmonary Rehabilitation Program Home Exercise Program

Getting Started

Regular exercise should be a part of life for everyone. Exercise improves the body's tolerance to activity and work, strengthens muscle tone and bones. It also helps to lower high blood pressure, manage stress, and lose weight. Exercise can improve one's sense of well being.

Most patients with chronic lung problems or who have had lung surgery are encouraged to participate in a regular exercise program. Your exercise plan, however, depends on several factors:

- Current physical condition
- Stage in the recovery process
- Surgery or presence of any complications from your illness
- How much you exercised in the past
- Medications
- Level of activity on the job
- Personal likes and dislikes



If there are complications, your activities will be limited until your symptoms or problems clear up. Do not exercise without instructions from your doctor or the Pulmonary Rehabilitation staff.

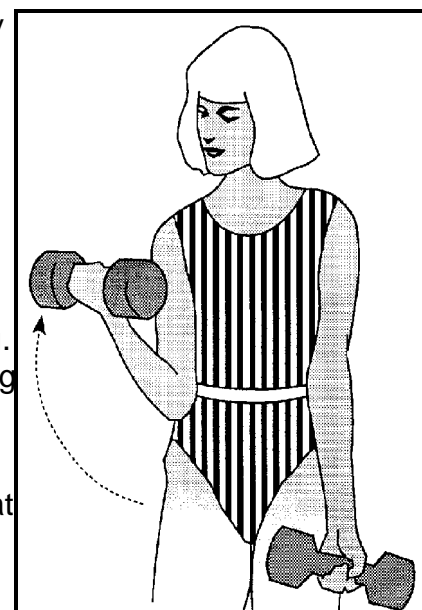
Types of Exercise

The type of exercise you do is important because different exercises have different effects on your body. The best exercises for the heart, lungs, and circulatory system are activities that involve **continuous rhythmic motion** such as walking, cycling, running, swimming and dancing. These are called isotonic (aerobic exercise) and help increase the body's muscle tone, strength, and cardiovascular endurance.

Exercise or activity that involves muscle contractions without body movement are called **isometric**. Examples of isometric exercises are pushing, pulling, lifting, and carrying. These activities should be limited during your first 6 weeks of recovery and only added after discussing these with your doctor or cardiac rehabilitation staff. Isometric activities are helpful in keeping muscle tone and strength, but they provide no benefit to your cardiovascular system.

Choose a type of exercise that is enjoyable and convenient to you. If you are starting a new exercise program, walking and / or cycling on a stationary bicycle are recommended.

If you have had surgery, aerobic exercises such as walking and / or stationary cycling are good ways to start. These can be done at a low level and do not put strain on your breastbone. After the first six weeks of recovery, other types of exercise may be added, but first check with your doctor or Pulmonary Rehabilitation staff.




Intensity of Exercise

How Hard You Should Exercise

One of the purposes of exercise is to gradually increase your heart rate and breathing rates. You want to exercise hard enough to benefit your heart, but not so hard that you strain. While you are exercising you should be able to carry on a conversation, and not feel breathless.

Start your exercise at a low intensity, and after a few minutes, gradually increase the intensity to a higher level. If you start with walking, either on a treadmill or a flat surface at home, start at a slow pace and increase your speed as you feel comfortable. If you use a stationary cycle, begin peddling at a low level, and after a few minutes, increase that intensity.

 **Use the rating scales for dyspnea and exertion to rate your intensity. Keep your exertion and dyspnea ratings between 4 and 6 while exercising.**

Frequency of Exercise

Shorter, more frequent periods of activity are recommended at first, especially if you are in the hospital, recently discharged, or are being treated for an active lung problem. Depending on your current level of endurance, strength, and lung condition, the Rehabilitation staff will give you guidelines that will help build up your strength and endurance. If you are very weak, the staff will recommend exercising everyday for 4 to 5 periods a day for just a few minutes at a time. The frequency can be decreased as the exercise time increases. **The goal will be to exercise once a day, 4 to 5 times a week.**

Duration of Exercise

How Long You Should Exercise

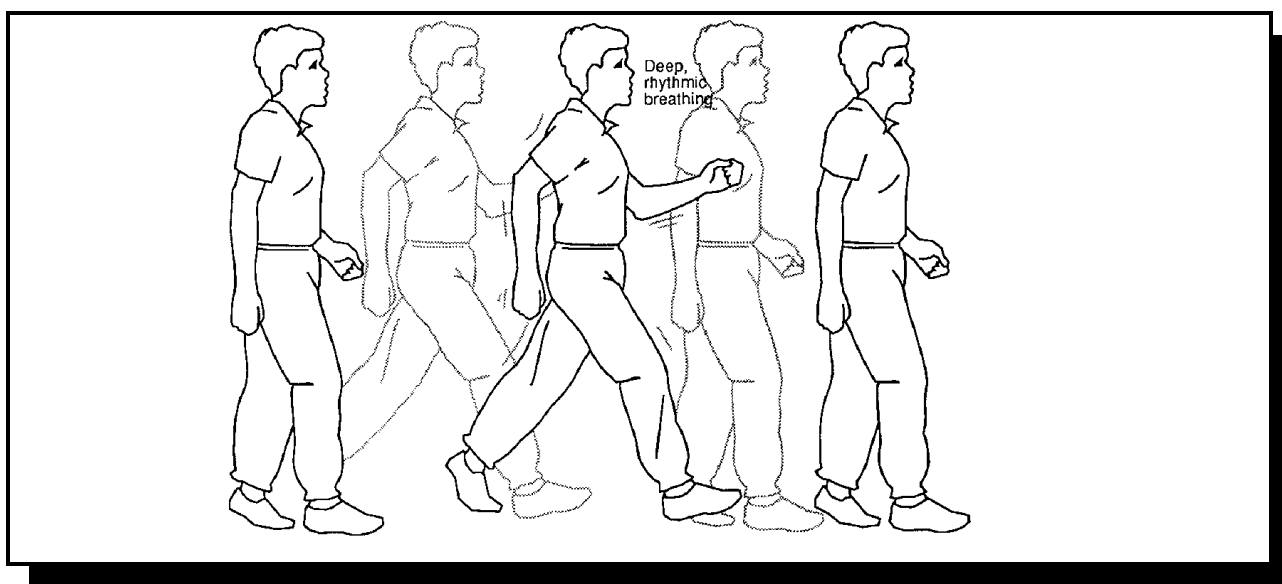
The Rehabilitation staff will provide guidelines for how long you should exercise and what your goals should be. Starting out with 5 to 15 minute intervals with rest periods in between are generally suggested. Increase the duration by a few minutes each time. **The goal will be to accomplish 20 to 40 minutes of continuous exercise.**

Warm-up

It is beneficial to start with 5 minutes of stretching or conditioning exercises before beginning your exercise program. These will help your body prepare for exercise by gradually increasing your heart and breathing rate. Stretching exercises are important in improving your flexibility and preventing muscle or joint injury. Warm up should start with the stretching exercises given to you by the Rehabilitation staff. When you begin your aerobic activity, such as walking or cycling, exercise at a low level of 3 - 4 on the exertion and dyspnea scales for 5 minutes is recommended.

Cool-down

It is also important to allow your heart rate and blood pressure to gradually return to a resting state. After you exercise, cool down by exercising at a slower pace for a few minutes.



Warm Up
5 minutes

Walk
20 - 45 minutes

Cool Down
5 minutes

Exercise Tips

- Oxygen is needed to help supply your body with energy to carry out bodily functions. As you increase your level of activity, your body has to supply more energy and this creates a greater need for oxygen. Often due to lung disease or after lung surgery, the body is not able to meet these needs. In this case, your doctor will place you on oxygen. The Rehabilitation staff will help you and your doctor determine the right amount of oxygen you need at rest and when you increase your activities. It is not unusual to have to increase your oxygen flow with activity and decrease it with rest. It is important, however to keep within the guidelines the Rehabilitation staff or your doctor has outlined.

Your oxygen flow is now at _____ liters a minute (l/min) at rest. With exercise, increase this flow to _____ l/min. If you have any effort symptoms, discontinue the exercise and call your doctor or Pulmonary Rehabilitation staff before starting again.

- Walk after a rest period, not when you are already tired from another activity.
- In hot and / or humid weather, exercise in the morning or evening when it is cooler. Exercising in an enclosed mall or fitness facility is a good idea when the temperature is very hot (above 85 degrees Fahrenheit).
- During cold weather, cover your nose and mouth with a scarf. Exercising in an enclosed mall or fitness facility is a good idea when the temperature is very cold (below 32 degrees Fahrenheit).
- Wear loose, comfortable clothing whenever you are exercising. Wear enough clothing to keep you warm but not overheated, especially when you are outdoors. Several light layers that you can put on or take off are more comfortable and convenient than heavy clothing.
- Try walking with friends or a family member to make your exercise program more enjoyable.

