

Exercise Prescription

Starting an Exercise Program

Exercise is very important for good health. Your health care provider may tell you that you need to get more exercise. To do this, you will need to get into the habit of exercising so that it becomes part of your normal weekly routine. The best exercise for you is one that you enjoy and that you will do on a regular basis. If you start a jogging program, but hate to jog, you are not likely to keep it up. Find an activity you enjoy, such as basketball, soccer, dance, or hiking. Try to involve family members or friends. Join a team or an exercise class and make it fun.

Exercise can come during all times in the day. For example, take the stairs instead of an elevator, park far away in a parking lot and walk briskly to your destination, or walk during your lunch break. The benefits are lifelong - so have fun and stick to it!

What is aerobic exercise?

An aerobic exercise is any activity that makes your muscles use oxygen. When you are doing an aerobic exercise, your heart has to work harder to get more oxygen to your muscles. This makes your heart stronger. Any activity that lasts longer than 3 minutes is considered aerobic (such as biking, jogging, walking, swimming, or basketball). Aerobic exercise should be the main focus of your exercise program.

Aerobic exercise:

- ▶ Decreases your blood pressure, which reduces your risk for having a stroke
- ▶ Decreases your resting heart rate, which puts less stress on your heart
- ▶ Increases the levels of HDL (the good cholesterol in your blood)
- ▶ Increases your cardiac output, which means your heart pumps more blood throughout your body with each heart beat.
- ▶ Decreases your resting respiratory rate, which means your lungs don't work as hard when you are at rest

- ▶ Increases blood flow to your lungs, which allows you to get more oxygen into your bloodstream with every breath
- ▶ Burns calories, which will help you lose weight.

What is anaerobic exercise?

Anaerobic exercise is a good complement to your aerobic exercise program. Exercise activities that take less than 3 minutes are considered anaerobic activities. Although anaerobic activities do not help strengthen your heart, they do help strengthen your muscles.

You have the opportunity to do anaerobic exercise often during the day. Walking up a flight of stairs, carrying groceries, or sprinting to catch a bus, are all considered anaerobic exercise.

Interval training is a great anaerobic exercise. An interval can be done with many types of exercise (for example, running, biking, swimming, or weight lifting). An interval is done by increasing your pace for a short period of time (for example, between 10 to 60 seconds) then having a slow recovery period that is at least 3 times as long as the interval. To interval train, you simply repeat these bursts of exercise during the course of your workout. For example, you jog for 30 seconds, then walk for 2 minutes, jog for 30 seconds, walk for 2 minutes and so on. One benefit from anaerobic exercise is that it raises your metabolic rate for nearly 18 hours after the activity is finished. This means you burn calories at an accelerated rate well after the exercise is completed, which can help you lose weight. In contrast, aerobic exercise only raises your metabolic rate for 2 hours.

How often and how long should I exercise?

There are three ways to measure your exercise: frequency, duration, and intensity.

- ▶ **Frequency:** This is how often you exercise. Try to get aerobic exercise at least 3 times a week, although 5 to 6 times a week is even better. Do anaerobic exercise 2 or 3 times a week.
- ▶ **Duration:** This is how long you exercise. Each exercise workout should last 30 to 60 minutes.

- ▶ **Intensity:** This is how hard you are working when you exercise. While you are doing aerobic exercise, you should keep your heart rate up. To make sure you are benefiting from your exercise, you need to check your heart rate (pulse) during your workout. You need to set a target heart rate for yourself so that you can make sure you are exercising hard enough to help your heart, yet easy enough so you can complete the exercise safely. The key is to maintain your target heart rate during your exercise for at least 30 minutes. You can also use your target heart rate to evaluate your progress over time.
- ▶ After a few weeks of training, you can start to improve your level of fitness by increasing the frequency, duration, or intensity of your exercise.

How do I calculate my target heart rate?

To figure out your target heart rate, you first need to figure out your maximum heart rate (MHR). Your maximum heart rate is calculated by subtracting your age from 220.

- ▶ $220 - \text{Age} = \text{MHR}$

For example, if you are 40 years old, your MHR would be 180 beats per minute.

- ▶ $220 - 40 \text{ (years old)} = 180 \text{ beats per minute}$

Next you need to figure out your target heart rate (THR). Your THR is based on a percentage of your MHR. For aerobic activity, you need to try to keep your heart rate between 60% and 85% of your MHR. For example, if you are 40 years old your target heart rate range should be 106 to 153 beats per minute.

- ▶ $180 \text{ (MHR)} \times 0.6 \text{ (60\%)} = 106 \text{ beats per minute}$

- ▶ $180 \text{ (MHR)} \times .85 \text{ (85\%)} = 153 \text{ beats per minute}$

During your exercise, you should check your pulse from time to time to see if you are hitting your target heart rate. You do this by finding your pulse on the thumb side of your wrist (the radial pulse) or in your neck to the side of your Adam's apple (the carotid pulse). Using a clock or watch with a secondhand, count the number of heartbeats in 10 seconds, then multiply that number by 6 to get the number of heartbeats per minute.

If your heart rate is too fast (over your 85% mark) then slow down. If your heart rate is below your 60% mark then you need to pick up your pace.

What about warming up and cooling down?

You should include warm-up and cool-down exercises before and after exercise. Muscles that have not been used are cool. Stretching or walking slowly for 5 to 10 minutes before beginning your workout warms your muscles, making them more flexible and less prone to injury.

Right after exercise, allow your heart rate to return slowly to normal. Walking slowly, for example, will let you cool down and allow your heart and breathing to return to normal levels. You should also stretch the muscles you used during your exercise. After stretching, your muscles will be more flexible and less stiff. Devote a total of 5 to 10 minutes to cooling down.