

Getting Started: Aerobic Exercise

■ What is aerobic exercise?

Aerobic exercise is any activity that makes your heart beat faster and your breathing faster. When you exercise, your muscles are working hard and they need more oxygen to do that work. So you breathe faster to take in more oxygen and your heart beats faster to send that extra oxygen out to the muscles through the blood stream. Since your heart and lungs are working hard, they get stronger over time. Aerobic exercise is a major part of a complete physical activity program.

Aerobic exercise includes walking, biking, dancing, shooting baskets, swimming, and yard work like raking and shoveling.

How much aerobic exercise do I need?

Adults should engage in either...

- 30 minutes of moderate physical activities on 5 or more days of the week **OR**
- 20 minutes or more of vigorous physical activity 3 or more days per week

Start slow. This is what you want your exercise program to look like eventually, but you can start slow and build up to this amount of activity over a few weeks or even a few months. If you haven't been very active recently, plan to start with 10 minutes of walking a day, or every other day. Add 5 more minutes each week until you work up to walking 30 minutes most days.

Break it up. You can do your 30 minutes of moderate aerobic activity all at once, or break it up to fit into your schedule. For example, walk 10 minutes before you leave for work in the morning, 10 minutes at lunch, and 10 minutes before dinner.

How do I know it's moderate?

Sticking to moderate physical activity will get your heart and lungs working without overdoing it or increasing your chance for injury. But what does moderate mean? How can we be sure we are working hard enough, but not working too hard? There are several ways to tell.

1. Check the list. The list below includes many common activities so you will know whether they are "light intensity" (not working hard enough to get full benefits), "moderate intensity" (just right), or "vigorous intensity" (working too hard). Activities are called light, moderate, or vigorous intensity based on the amount of oxygen a normal person needs to do them. What is "moderate" for you can be affected by your health, weight, and age.

Even though "light-intensity" activities will not work your heart and lungs enough, you can use them as a warm-up or cool-down for a few minutes before you start and after you end your moderate exercise.

Light-Intensity Activities:

- Walking slowly
- Golf, using powered cart
- Swimming, slow treading
- Gardening or pruning
- Bicycling, very light effort
- Dusting or vacuuming
- Conditioning exercises, light stretching, or warm up

Moderate-Intensity Activities:

- Walking briskly
- Golf, pulling or carrying clubs
- Swimming, recreational
- Mowing lawn, using power motor
- Tennis, doubles
- Bicycling 5 to 9 mph, level terrain, or with a few hills
- Scrubbing floors or washing windows
- Weight lifting, Nautilus machines, or free weights

Vigorous-Intensity Activities:

- Racewalking, jogging, or running
- Swimming laps
- Mowing lawn, using hand mower
- Tennis, singles
- Bicycling more than 10 mph, or on steep uphill terrain
- Moving or pushing furniture
- Circuit training

2. Do the Talk Test. A person who is active at a *light* intensity level should be able to sing while doing the activity. One who is active at a *moderate* intensity level should be able to carry on a conversation comfortably while engaging in the activity. If a person becomes winded or too out of breath to carry on a conversation, the activity can be considered *vigorous*.

3. Check your pulse. For moderate physical activity, your heart rate should get up to about 50 to 70 percent of its maximum during the activity. To use this method, you'll need to know what your target heart rate is and then you need to check your pulse while you are exercising to see if you have reached your target.

Target heart rate

To get your target heart rate, subtract your age from 220, then multiply that number by .5 (beginner) or .7 (intermediate). See the calculations below. The table on the next page shows the target heart rate for some ages.

$$(220 - \text{your age}) \times 0.5 = \text{target heart rate for } \underline{\text{beginner}}$$

$$(220 - \text{your age}) \times 0.7 = \text{target heart rate for } \underline{\text{intermediate}}$$

Target Heart Rates for Moderate Aerobic Exercise

AGE	Beats per minute	
	Beginner	Intermediate
20	100	140
25	98	137
30	95	133
35	93	130
40	90	126
45	88	123
50	85	119
55	83	116
60	80	112
65	78	109
70	75	105

Checking your pulse

If you do not have a heart rate monitor, stop during exercise and immediately begin counting the number of heartbeats in 15 seconds. (To count your heart beats, place your index finger and middle finger next to your Adam's apple until you can feel your pulse. Use a watch with a second hand, or other means to count out 15 seconds.) Multiply the number you get by 4 to get the number of beats per minute. Compare the number of times your heart is beating per minute to your target heart rate for moderate aerobic exercise in the table above.

If your heart is beating slower than your target heart rate, pick up your pace a little. If your heart is beating faster than your target heart rate, you can slow down a little.

Sources

CDC Physical Activity for Everyone (<http://www.cdc.gov/nccdphp/dnpa/physical/everyone.htm>)

Metro Louisville Department of Public Health and Wellness (<http://www.louisvilleky.gov/Health/CHEP.htm>)

NHLBI Guide to Physical Activity (http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/phy_act.htm)