



## How much physical activity do adults need for health benefits?

Adults who are active are healthier, are less likely to develop many chronic diseases, and have better aerobic fitness than adults who are inactive. Adults need to do two types of physical activity each week to improve health – aerobic **and** muscle-strengthening activities.

### Aerobic Activities

For **substantial health benefits**, adults need to do at least

- **2 hours and 30 minutes** (150 minutes) each week of **moderate-intensity\*** aerobic activity,
- OR
- **1 hour and 15 minutes** (75 minutes) each week of **vigorous-intensity\*** aerobic activity,
- OR
- An **equivalent mix of moderate- and vigorous-intensity** aerobic activity.



Aerobic activity should be performed for **at least 10 minutes at a time**, preferably, **spread throughout the week**.

**\*Intensity** is the level of effort required to do an activity.

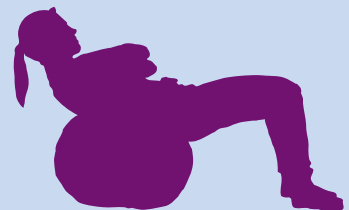
A person doing **moderate-intensity** aerobic activity can talk, but not sing, during the activity.

A person doing **vigorous-intensity** activity cannot say more than a few words without pausing for a breath.

### Muscle Strengthening Activities

Muscle strengthening should be done **2 or more days a week**.

- All major muscle groups should be worked. These are the legs, hips, back, abdomen, chest, shoulders, and arms.
- Exercises for each muscle group should be **repeated 8 to 12** times per set. As exercises become easier, increase the weight or do another set.



# How can adults get additional health benefits?

## Aerobic Activities

For **greater health benefits**, adults should do

- **5 hours** (300 minutes) each week of **moderate-intensity** aerobic activity,
- OR
- **2 hours and 30 minutes** (150 minutes) a week of **vigorous-intensity** aerobic activity,
- OR
- An **equivalent mix of moderate- and vigorous-intensity** aerobic activity.

## Health Benefits from Regular Physical Activity

Participating in regular physical activity provides many health benefits, as summarized below. Reducing risk of some of these conditions may require years of participation in regular physical activity. Other benefits, such as increased heart and lung—or cardiorespiratory—fitness, may require only a few weeks or months of participation.

### Strong Evidence for Health Benefits

- **Lower risk of:**
  - Early death
  - Coronary heart disease
  - Stroke
  - High blood pressure
  - High cholesterol or triglycerides
  - Type 2 diabetes
  - Metabolic syndrome
  - Colon cancer
  - Breast cancer
- **Prevention of weight gain**
- **Weight loss, particularly when combined with reduced calorie intake**
- **Improved cardiorespiratory (aerobic) fitness and muscular strength**
- **Prevention of falls**
- **Reduced depression**





## Aerobic Activities by Level of Intensity

There are different ways to classify intensity of exercise. **Absolute intensity** is the amount of energy expended per minute of activity. Moderate-intensity activities expend 3.0 to 5.9 times the amount of energy expended at rest. The energy expended in vigorous-intensity activities is 6.0 or more times the energy expended at rest.

**Relative intensity** is the effort required for an individual to do an activity. Relative intensity of aerobic activity is related to cardiorespiratory fitness. Less fit people generally require a higher level of effort than fitter people to do the same activity. Relative intensity can be estimated using a scale of 0 to 10, where sitting is 0 and the highest level of effort possible is 10. A moderate-intensity activity is a 5 or 6. A vigorous-intensity activity is a 7 or 8.

For most people, light daily activities such as shopping, cooking, or doing the laundry do not count toward the guidelines. Here are some examples of aerobic activities that require moderate-intensity and vigorous-intensity effort:


Level of Intensity	Type of Aerobic Activities	
<p><b>Moderate-Intensity</b></p> <p>A person doing moderate-intensity aerobic activity can talk, but not sing, during the activity.</p>	<ul style="list-style-type: none"> <li>• Brisk walking (3 miles-per-hour or faster, but not race walking)</li> <li>• Water aerobics</li> <li>• Bicycle riding slower than 10 miles per hour</li> <li>• Tennis (doubles)</li> <li>• Ballroom dancing</li> <li>• General gardening</li> </ul>	
Level of Intensity	Type of Aerobic Activities	
<p><b>Vigorous-Intensity</b></p> <p>A person doing vigorous-intensity activity cannot say more than a few words without pausing for a breath.</p>	<ul style="list-style-type: none"> <li>• Race walking, jogging, or running</li> <li>• Swimming laps</li> <li>• Tennis (singles)</li> <li>• Aerobic dancing</li> <li>• Bicycling 10 miles per hour or faster</li> <li>• Jumping rope</li> <li>• Heavy gardening (continuous digging or hoeing with heart rate increases)</li> <li>• Hiking uphill or with a heavy backpack</li> </ul>	

## Muscle-Strengthening Activities

Adults also need to do muscle-strengthening activities **at least 2 days a week**, at a moderate to high level of intensity. These activities should **work all the major muscle groups**: the legs, hips, back, chest, abdomen, shoulders, and arms.

No specific amount of time is recommended for muscle strengthening, but exercises should be performed to the point at which it would be difficult to do another repetition. A **repetition** is one complete movement of an activity, like lifting a weight or doing a sit-up. Adults can do activities that strengthen muscles on the same or different days that they do aerobic activity, whichever works best. Muscle-strengthening activities do not count toward the aerobic activity total.

Below are some examples of muscle-strengthening physical activities for adults.

Types of Muscle-Strengthening Activity	
<ul style="list-style-type: none"> <li>• Lifting weights</li> <li>• Working with resistance bands</li> <li>• Doing exercises that use body weight for resistance (push-ups, sit-ups)</li> </ul>	

# Ways for Adults to Get Physical Activity

To help adults understand the physical activity guidelines and to encourage them to add physical activity into their lives, the following materials are available at [www.cdc.gov/physicalactivity](http://www.cdc.gov/physicalactivity):

- Tips on getting active
- Videos showing how to do muscle-strengthening activities and what counts as aerobic and muscle-strengthening activities

In addition, the following Health and Human Services (HHS) Web site has information and tools to help adults become and stay active: [www.health.gov/PAGuidelines](http://www.health.gov/PAGuidelines).

On this Web site you will find:

**2008 Physical Activity Guidelines for Americans Toolkit** to assist organizations in promoting the physical activity guidelines.

- Users' Guide – Promoting the Physical Activity Guidelines for Americans in Your Community: A Guide to Building Awareness and Participation
- *Physical Activity Guidelines for Americans* booklet
- *Be Active Your Way: A Guide for Adults*
- *Be Active Your Way: A Fact Sheet for Adults*
- *At-A-Glance: A Fact Sheet for Professionals*
- Posters, event flyers, Frequently Asked Questions (FAQs)

