

## An Overview of Physical Activity Guidelines for Americans

Exercise and physical fitness are essential components of health. Thus, in 2008, the US government issued its first official *Physical Activity Guidelines for Americans* to promote physical activity as a national health goal. Designed to complement the *Dietary Guidelines for Americans* (the federal policy document that emphasizes the importance of balancing healthy eating with physical activity), the *Physical Activity Guidelines* provide science-based guidance on the types and amounts of physical activity that offer substantial health benefits. Key recommendations include:

- The recommended “goal” amount of physical activity (at least 150 minutes per week) can be accumulated throughout the week, rather than in a set number of minutes per day.
- Exercise that’s moderate or vigorous in intensity, or a combination of both, can be counted toward reaching physical activity goals.
- Both aerobic (exercises that strengthen the heart and lungs) and muscle-strengthening physical activities are beneficial.

### Background

In October 2006, experts in health and exercise convened to evaluate the scientific evidence related to the health benefits of physical activity. The conclusion: there was sufficient evidence on which to develop national guidelines. An advisory committee was appointed to conduct an evidence-based review of physical activity and health across a broad range of health outcomes, including cardiovascular disease, diabetes, osteoporosis, mental health, etc., and for various populations, including youth, adults, pregnant women, older adults and individuals with disabilities. The findings were used by US Health and Human Services (HHS) staff, along with comments from the public and other government agencies, to develop the 2008 *Physical Activity Guidelines for Americans*. The primary audiences for the *Physical Activity Guidelines* are policymakers and health professionals charged with disseminating and implementing the guidelines for all Americans.



### Key Benefits of Physical Activity

A wide range of studies considered in developing the Guidelines finds that physically active people of all ages and both genders have higher levels of health-related fitness and lower rates of chronic disease compared to people who are inactive.

- Physically active children and youth have higher levels of cardio-respiratory endurance and muscular strength, lower levels of body fat, more favorable cardiovascular and metabolic disease risk profiles, enhanced bone health and reduced symptoms of anxiety and depression.
- Physically active adults have lower rates of all-cause mortality, coronary heart disease, high blood pressure, stroke, type 2 diabetes, metabolic syndrome, colon and breast cancer, depression, loss of functional ability and cognitive decline. (Note: Physical activity is also suggested as one step to promote brain health and help decrease risk of Alzheimer’s disease and age-related dementia.)
- Physically active adults and older adults also exhibit a higher level of cardio-respiratory and muscular fitness, report fewer falls and have enhanced bone health, greater success with weight loss (when combined with reduced calorie intake) and improved sleep quality.
- Moderate-intensity physical activity during pregnancy by generally healthy women increases cardio-respiratory and metabolic fitness without increasing the risk of low birth weight, preterm delivery or early pregnancy loss.
- Similar health benefits occur for people with disabilities and for those in every racial and ethnic group studied.

### Physical Activity Guidelines for Every Age and Life Stage

#### Children and Adolescents 6 to 17 Years

Children and adolescents should do 60 minutes (1 hour) or more of physical activity daily. Activities should be age-appropriate and include three types of physical activity.

1. **Aerobic activity** should make up most of the 60 or more minutes and can include moderate-intensity activity, such as walking to school or riding a bike, or vigorous-intensity activity, such as playing soccer or tag. Vigorous-intensity activity is recommended on at least 3 days per week.
2. **Muscle-strengthening** activities, such as gymnastics, climbing or push-ups, should be part of the 60 or more minutes on at least 3 days per week.
3. **Bone-strengthening** activities, such as jumping rope, skipping or running, should be part of the 60 or more minutes on at least 3 days per week.

### Moderate- vs. Vigorous-Intensity Activity

Intensity is how hard the body is working during aerobic activity. It can be measured by how an activity affects heart rate and breathing. The *talk test* is a simple way to measure intensity; a person can talk but not sing during moderate-intensity activity, while a person will not be able to say more than a few words without pausing for a breath during vigorous-intensity activity. All types of moderate-intensity or vigorous activities count, as long as the duration is *at least 10 minutes*. When counting a mix of moderate- and vigorous-intensity aerobic activities, figure that 1 minute of vigorous-intensity activity is about the same as 2 minutes of moderate-intensity activity.

#### Moderate Intensity

- Walking briskly (3 miles per hour or faster, but not race-walking)
- Water aerobics
- Bicycling slower than 10 miles per hour
- Tennis (doubles)
- Ballroom dancing
- General gardening

#### Vigorous Intensity

- Race walking, jogging or running
- Swimming laps
- Tennis (singles)
- Aerobic dancing
- Bicycling 10 miles per hour or faster
- Jumping rope
- Heavy gardening work (continuous digging or hoeing)
- Hiking uphill or with a heavy backpack

### Adults 18 to 64 Years

Adults are advised to do two types of physical activity each week to improve and maintain health.

1. **Aerobic activity** “time” recommendations vary, depending on the activity’s intensity. Moderate intensity activity, such as brisk walking, should add up to a total of 2 hours and 30 minutes (150 minutes) *per week*. Vigorous-intensity activity, such as jogging or running, should total 1 hour and 15 minutes (75 minutes) *per week*. An equivalent mix of moderate- and vigorous-intensity aerobic activity is also acceptable. Aerobic activity should be performed in intervals of at least 10 minutes, preferably spread throughout the week. Additional health benefits are gained by increasing the amount of aerobic activity *per week* to 5 hours (300 minutes) of moderate-intensity or 2 hours and 30 minutes (150 minutes) of vigorous-intensity activity.
2. **Muscle-strengthening** activities are advised on 2 or more days per week and should work all major muscle groups (legs, hips, back, abdomen, chest, shoulders and arms).

### What Counts as Muscle-Strengthening Activities?

To gain health benefits, muscle-strengthening activities should work the muscle groups to the point where it’s hard to do another repetition, or represent one complete movement of an activity. In general, at least 1 set of 8-12 repetitions is advised, but 2 or 3 sets will gain more benefits. Examples include:

- Lifting weights
- Working with resistance bands
- Doing exercises that use the body’s weight as resistance (e.g., push-ups, sit-ups)
- Heavy gardening work (hand-digging, -hoeing, -shoveling)
- Yoga

### Adults 65 Years of Age and Older

Older adults who are generally fit and have no limiting health conditions should follow the guidelines for adults 18 to 64 years old. If this is not possible, older adults are advised to be as physically active as their abilities allow and to avoid inactivity. Older adults should modify their activities as needed and choose activities to improve balance if they are at risk for falling. Many older adults find that water-based physical activities are a good option.

### *Individuals with Disabilities*

It is important to identify the types and amounts of activity appropriate for individuals with disabilities. When possible, children, adolescents and adults with disabilities should meet the age-appropriate guidelines for physical activity. Most importantly, they should avoid being inactive.

### *Pregnant and Postpartum Women*

Healthy women who are not already highly active should get at least 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity *per week* during pregnancy and the postpartum period. Women who engage in vigorous-intensity or high amounts of activity regularly can continue this activity during pregnancy and the postpartum period, provided that they remain healthy and discuss how and when activity should be adjusted with their health care provider.

### **Tips for Getting Started**

- “Start low and go slow,” especially if you are inactive; gradually increase the amount and intensity of physical activity to build up to the recommended amount of activity.
- Choose the types of physical activity appropriate for your current fitness level and health goals.
- Do a variety of activities you enjoy with friends and family to reach your target goals and sustain regular physical activity.
- Reduce the risk of injury by always using appropriate protective gear and sports equipment, following safety rules and exercising in safe environments.
- Consult your health-care provider about the types and amounts of activity appropriate for you if you have one or more chronic conditions or symptoms.
- Encourage your colleagues, family and friends to join you in finding a variety of enjoyable activities. Get started today.

The key takeaway messages from the guidelines: 1) every 10-minute segment of physical activity counts toward your goal, and 2) doing *something* is better than doing *nothing*. Resolve to get started and keep up the physical activity.

### **References:**

1. 2008 Physical Activity Guidelines for Americans: <http://www.health.gov/paguidelines/>
2. Centers for Disease Control and Prevention: <http://www.cdc.gov/physicalactivity/index.html>
3. President’s Council on Physical Fitness and Sports: <http://www.fitness.gov/>
4. U.S. National Physical Activity Plan: <http://www.physicalactivityplan.org/>
5. The President’s Challenge: <http://www.presidentschallenge.org/>
6. Let’s Move: <http://www.letsmove.gov/>