A Report of the Surgeon General

Physical Activity and Health

At-A-Glance

1996

A New View of Physical Activity

This report brings together, for the first time, what has been learned about physical activity and health from decades of research. Among its major findings:

- People who are usually inactive can improve their health and well-being by becoming even moderately active on a regular basis.
- Physical activity need not be strenuous to achieve health benefits.
- Greater health benefits can be achieved by increasing the amount (duration, frequency, or intensity) of physical activity.

The Benefits of Regular Physical Activity

Regular physical activity that is performed on most days of the week reduces the risk of developing or dying from some of the leading causes of illness and death in the United States. Regular physical activity improves health in the following ways:

- Reduces the risk of dying prematurely.
- Reduces the risk of dying from heart disease.
- Reduces the risk of developing diabetes.
- Reduces the risk of developing high blood pressure.
- Helps reduce blood pressure in people who already have high blood pressure.
- Reduces the risk of developing colon cancer.
- Reduces feelings of depression and anxiety.
- Helps control weight.
- Helps build and maintain healthy bones, muscles, and joints.
- Helps older adults become stronger and better able to move about without falling.
- Promotes psychological well-being.

A Major Public Health Concern

Given the numerous health benefits of physical activity, the hazards of being inactive are clear. Physical inactivity is a serious, nationwide problem. Its scope poses a public health challenge for reducing the national burden of unnecessary illness and premature death.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
The President's Council on Physical Fitness and Sports

The Nation's Prevention Agency
CDC 50
Centers for Disease Control and Prevention

The President's Council on Physical Fitness and Sports

What Is a Moderate Amount of Physical Activity?

As the examples listed in the box show, a moderate amount of physical activity* can be achieved in a variety of ways. People can select activities that they enjoy and that fit into their daily lives. Because amount of activity is a function of duration, intensity, and frequency, the same amount of activity can be obtained in longer sessions of moderately intense activities (such as brisk walking) as in shorter sessions of more strenuous activities (such as running):†

Examples of Moderate Amounts of Activity

Washing and waxing a car for 45–60 minutes
Washing windows or floors for 45–60 minutes
Playing volleyball for 45 minutes
Playing touch football for 30–45 minutes
Gardening for 30–45 minutes
Wheeling self in wheelchair for 30–40 minutes
Walking 1 3/4 miles in 35 minutes (20 min/mile)
Basketball (shooting baskets) for 30 minutes
Bicycling 5 miles in 30 minutes
Dancing fast (social) for 30 minutes
Pushing a stroller 1 1/2 miles in 30 minutes
Raking leaves for 30 minutes
Walking 2 miles in 30 minutes (15 min/mile)
Water aerobics for 30 minutes
Swimming laps for 20 minutes
Wheelchair basketball for 20 minutes
Basketball (playing a game) for 15–20 minutes
Bicycling 4 miles in 15 minutes
Jumping rope for 15 minutes
Running 1 1/2 miles in 15 minutes (10 min/mile)
Shoveling snow for 15 minutes
Stairwalking for 15 minutes

*A moderate amount of physical activity is roughly equivalent to physical activity that uses approximately 150 Calories (kcal) of energy per day, or 1,000 Calories per week.

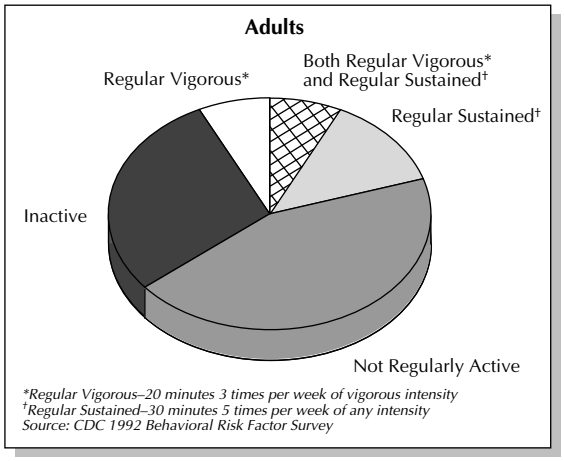
†Some activities can be performed at various intensities; the suggested durations correspond to expected intensity of effort.

Precautions for a Healthy Start

To avoid soreness and injury, individuals contemplating an increase in physical activity should start out slowly and gradually build up to the desired amount to give the body time to adjust. People with chronic health problems, such as heart disease, diabetes, or obesity, or who are at high risk for these problems should first consult a physician before beginning a new program of physical activity. Also, men over age 40 and women over age 50 who plan to begin a new ***vigorous*** physical activity program should consult a physician first to be sure they do not have heart disease or other health problems.

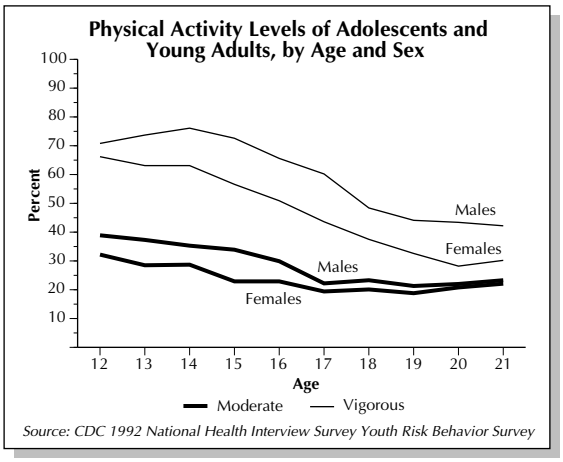
Status of the Nation—A Need for Change

Adults



- More than 60 percent of adults do not achieve the recommended amount of regular physical activity. In fact, 25 percent of all adults are not active at all.
- Inactivity increases with age and is more common among women than men and among those with lower income and less education than among those with higher income or education.

Adolescents and Young Adults



- Nearly half of young people aged 12–21 are not vigorously active on a regular basis.
- Physical activity declines dramatically with age during adolescence.
- Female adolescents are much less physically active than male adolescents.

High School Students

- In high school, enrollment in daily physical education classes dropped from 42 percent in 1991 to 25 percent in 1995.
- Only 19 percent of all high school students are physically active for 20 minutes or more in physical education classes every day during the school week.

Ideas for Improvement

This report identifies promising ways to help people include more physical activity in their daily lives.

- Well-designed programs in schools to increase physical activity in physical education classes have been shown to be effective.
- Carefully planned counseling by health care providers and worksite activity programs can increase individuals' physical activity levels.
- Promising approaches being tried in some communities around the nation include opening school buildings and shopping malls for walking before or after regular hours, as well as building bicycle and walking paths separated from automobile traffic. Revising building codes to require accessible stairwells is another idea that has been suggested.

Special Messages for Special Populations

Older Adults

No one is too old to enjoy the benefits of regular physical activity. Of special interest to older adults is evidence that muscle-strengthening exercises can reduce the risk of falling and fracturing bones and can improve the ability to live independently.

Parents

Parents can help their children maintain a physically active lifestyle by providing encouragement and opportunities for physical activity. Family events can include opportunities for everyone in the family to be active.

Teenagers

Regular physical activity improves strength, builds lean muscle, and decreases body fat. It can build stronger bones to last a lifetime.

Dieters

Regular physical activity burns Calories and preserves lean muscle mass. It is a key component of any weight loss effort and is important for controlling weight.

People with High Blood Pressure

Regular physical activity helps lower blood pressure.

People Feeling Anxious, Depressed, or Moody

Regular physical activity improves mood, helps relieve depression, and increases feelings of well-being.

People with Arthritis

Regular physical activity can help control joint swelling and pain. Physical activity of the type and amount recommended for health has not been shown to cause arthritis.

People with Disabilities

Regular physical activity can help people with chronic, disabling conditions improve their stamina and muscle strength and can improve psychological well-being and quality of life by increasing the ability to perform activities of daily life.

For more information contact:

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