

IN BRIEF:



Your Guide To Physical Activity and Your Heart

Physical Activity



Physical Activity: The Heart Connection

Chances are, you already know that physical activity is good for you. “Sure,” you may say, “When I get out and move around, I know it helps me to look and feel better.” But you may not realize just how important regular physical activity is to your health. Inactive people are nearly twice as likely to develop heart disease as those who are active. Lack of physical activity also leads to more visits to the doctor, more hospitalizations, and more use of medicines for a variety of illnesses. The good news is that physical activity can protect your heart in a number of important ways and keep you healthy overall.

Heart Disease Risk Factors

Risk factors are conditions or habits that make a person more likely to develop a disease. They can also increase the chances that an existing disease will get worse. Certain risk factors for heart disease, such as getting older or having a family history of early heart disease, can't be changed. But **physical inactivity is a major risk factor for heart disease that you can control.**

Other major risk factors for heart disease that you can control are smoking, high blood pressure, high blood cholesterol, overweight, and diabetes. (See the box on page 2, “You Have Control.”)

Every risk factor greatly increases the chances of developing heart disease and having a heart attack. A damaged heart can keep you from doing simple, enjoyable

Physical Activity and Your Health

What does it mean to get “regular physical activity?” To reduce the risk of heart disease, adults only need to do about 30 minutes of moderate activity on most, preferably all, days of the week. This level of activity can also lower your chances of having a stroke, colon cancer, high blood pressure, diabetes, and other medical problems. If you're also trying to manage your weight and prevent gradual, unhealthy weight gain, try to get 60 minutes of moderate- to vigorous-intensity activity on most days of the week. At the same time, watch your calories. Take in only enough calories to maintain your weight. If you're trying to keep weight off, aim a bit higher: Try to get 60–90 minutes of moderate-intensity activity daily, without taking in extra calories.



U.S. Department of Health and Human Services
National Institutes of Health
National Heart, Lung, and Blood Institute

You Have **Control**

Physical inactivity is one of several major risk factors for heart disease that you can do something about. The other major risk factors are:

Smoking. People who smoke are up to six times more likely to have a heart attack than nonsmokers. Check with local community groups for free or low-cost programs designed to help people stop smoking.

High blood pressure increases your risk of heart disease, stroke, and other conditions. It can be controlled by getting regular physical activity, losing excess weight, cutting down on alcohol, and changing eating habits, such as using less salt and other forms of sodium. For some people, medication is also needed.

High blood cholesterol can lead to a buildup of plaque in your arteries, which raises your risk for a heart attack. You can lower high blood cholesterol by getting regular physical activity, eating less saturated fat and *trans* fat, and managing your weight. For some people, medication is also needed.

Overweight. If you're overweight or obese, you're more likely to develop heart disease even if you have no other risk factors. However, there is good news: Losing just 5–10 percent of your current weight will help to lower your risk for heart disease and many other medical disorders.

Type 2 diabetes greatly increases your risk for heart disease, stroke, and other serious diseases. Ask your health care provider whether you should be tested for diabetes. Many people at high risk for diabetes can prevent or delay the disease by reducing calories as part of a healthy eating plan and by becoming more physically active.

things, such as taking a walk or climbing steps. But it's important to know that you have a lot of power to protect your heart health. Getting regular physical activity is especially important because it directly reduces your heart disease risk *and* your chances of developing other risk factors for heart disease. Physical activity can also protect your heart by helping to prevent and control diabetes. Finally, physical activity can help you to lose excess weight or to stay at a healthy weight, which will also help to lower your risk of heart disease.

The Benefits Keep Coming

In addition to protecting your heart, staying active:

- May help to prevent cancers of the breast, uterus, and colon
- Strengthens your lungs and helps them to work more efficiently
- Tones and strengthens your muscles
- Builds your stamina
- Keeps your joints in good condition
- Improves your balance
- May slow bone loss

Regular physical activity can also boost the way you feel. It may:

- Give you more energy
- Help you to relax, cope better with stress, and beat the blues
- Build your confidence
- Allow you to fall asleep more quickly and sleep more soundly
- Provide you with an enjoyable way to share time with friends or family

Physical Activity: The Calorie Connection

One way that regular physical activity protects against heart disease is by burning extra calories, which can help you to lose excess weight or stay at your healthy weight. To understand how physical activity affects calories, it's helpful to consider the concept of "energy balance." Energy balance is the amount of calories you take in relative to the amount of calories you burn. If you need to lose weight for your health, eating fewer calories and being more active is the best approach. You're more likely to be successful by combining a healthful, lower calorie diet with physical activity. For example, a 200-pound person who consumes 250 fewer

Go for the Burn!

Some physical activities burn more calories than others. Below is the average number of calories a 154-pound person will burn, per hour, for a variety of activities. (A lighter person will burn fewer

calories; a heavier person will burn more.) As you can see, vigorous-intensity activities burn more calories than moderate-intensity activities.

Moderate-Intensity Physical Activity	Calories Burned per Hour
Hiking	370
Light gardening/ yard work	330
Dancing; golf (walking and carrying clubs)	330
Bicycling (less than 10 mph)	290
Walking (3.5 mph)	280
Weight lifting (light workout)	220
Stretching	180

Vigorous-Intensity Physical Activity	Calories Burned per Hour
Running/jogging; bicycling (more than 10 mph)	590
Swimming (slow freestyle laps)	510
Aerobics	480
Walking (4.5 mph)	460
Heavy yard work (chopping wood, for example)	440
Weight lifting (vigorous workout)	440



If you are just starting or significantly increasing your physical activity, take proper precautions and check with your doctor first.

Source: Adapted from the 2005 Dietary Guidelines Advisory Committee Report

calories per day and walks briskly each day for 1½ miles will lose about 40 pounds in 1 year. Most of the energy you burn each day—about three-quarters of it—goes to activities that your body automatically engages in for survival, such as breathing, sleeping, and digesting food. The part of your energy output that *you* control is daily physical activity. Any activity you take part in beyond your body’s automatic activities will burn extra calories. Even seated activities, such as using the computer or watching TV, will burn calories—but only a very small number. That’s why it’s important to make time each day for moderate- to vigorous-intensity physical activity.

Great Moves

Given the numerous benefits of regular physical activity, you may be ready to get in motion! Three types of activity are important for a complete physical activity program: aerobic activity, resistance training, and flexibility exercises.

Types of Physical Activity

Aerobic activity is any physical activity that uses large muscle groups and causes your body to use more oxygen than it would while resting. Aerobic activity is the type of movement that most benefits the heart.

Examples of aerobic activity are brisk walking, jogging, and bicycling. If you're just starting to be active, try brisk walking for short periods such as 5 or 10 minutes, and build up gradually to 30 to 60 minutes at least 5 days per week. Always start with a 5-minute, slower paced walk to warm up, and end with a 5-minute, slower paced walk to cool down.

Resistance training—also called strength training—can firm, strengthen, and tone your muscles, as well as improve bone strength, balance, and coordination. Examples of resistance training are pushups, lunges, and bicep curls using dumbbells.

Flexibility exercises stretch and lengthen your muscles. These activities help improve joint flexibility and keep muscles limber, thereby preventing injury. An example of a flexibility exercise is sitting cross-legged on the floor and gently pushing down on the tops of your legs to stretch the inner-thigh muscles.

Family Fitness

When it comes to getting in shape, what's good for you is good for your whole family. Children and teenagers should be physically active for at least 60 minutes per day. A great way to pry kids off the couch—and help *you* to stay fit as well—is to do enjoyable activities together. Some ideas include:

- **Kick up your heels.** Take turns picking out your favorite music, and dance up a storm in the living room.
- **Explore the out doors.** Hit your local trail on weekends for some biking or hiking. Pack a healthy lunch, and let the kids choose the picnic spot.
- **Get classy.** Join family members in an active class, such as martial arts, yoga, or aerobics.
- **Play pupil.** Ask one of your children or grandchildren to teach you an active game or sport. Kids love to be the experts, and you'll get a work out learning a new activity!
- **Use online resources.** Check out the We Can! Web site at <http://wecan.nhlbi.nih.gov>. You'll find more family-friendly ideas for making smart food choices, increasing physical activity, and reducing “screen time” in front of the TV and other electronic attractions.

Creating Opportunities

It's easier to stay physically active over time if you take advantage of everyday opportunities to move around. For example:

- Use the stairs—both up and down—instead of the elevator. Start with one flight of stairs and gradually build up to more.
- Park a few blocks from the office or store and walk the rest of the way. If you take public transportation, get off a stop or two early and walk a few blocks.
- While working, take frequent activity breaks. Get up and stretch, walk around, and give your muscles and mind a chance to relax.
- Instead of eating that extra snack, take a brisk stroll around the neighborhood or your office building.
- Do housework, gardening, or yard work at a more vigorous pace.
- When you travel, walk around the train station, bus station, or airport rather than sitting and waiting.

To Learn More

Contact the National Heart, Lung, and Blood Institute (NHLBI) for information on physical activity, heart disease, and heart health.

NHLBI Health Information Center
P.O. Box 30105
Bethesda, MD 20824-0105
Phone: 301-592-8573
TTY: 240-629-3255
Fax: 301-592-8563
www.nhlbi.nih.gov



U.S. Department of Health and Human Services
National Institutes of Health



**National Heart
Lung and Blood Institute**
People Science Health

NIH Publication No. 06-5847
Originally Printed January 2007
Reprinted January 2008