

Physical Activity and Weight Control

U.S. Department of Health
and Human Services

NATIONAL INSTITUTES OF HEALTH

NIDDK | NATIONAL INSTITUTE OF
DIABETES AND DIGESTIVE
AND KIDNEY DISEASES

WIN Weight-control Information Network

Physical activity is important for physical health, emotional well-being, and achieving a healthy weight. Physical activity may help you control your weight by using excess calories that would otherwise be stored as fat. Most foods and many beverages you eat and drink contain calories, and everything you do uses calories. This includes sleeping, breathing, digesting food, and moving around. Balancing the calories you eat with the calories you use through physical activity may help you maintain your current weight.



Calories in Food > Calories Used = Weight Gain

Calories in Food < Calories Used = Weight Loss

Calories in Food = Calories Used = Weight Control

How much physical activity do I need for general health?

Experts recommend at least 150 minutes (2 hours and 30 minutes) of moderate-intensity physical activity, or 75 minutes (1 hour and 15 minutes) of vigorous-intensity aerobic physical activity per week. This amount of physical activity may reduce your risk for some chronic diseases. Aerobic physical activities make your heart beat faster for a sustained period of time.

Regular physical activity may help you reach and maintain a healthy weight. Being physically active may also make you more energetic, improve your mood, and reduce the risk of developing some chronic diseases.

Examples of moderate-intensity activity include:

- brisk walking
- general gardening
- water aerobics

Examples of vigorous-intensity activity include:

- bicycling (at least 10 miles per hour)
- heavy gardening
- jogging or running
- racewalking
- rock climbing
- swimming laps
- training to run a 10K for charity

They also require your body to use more oxygen. Examples include bicycling, dancing, and walking.

You do not need to do all of your exercise at once to be physically active. In fact, experts recommend spreading physical activity throughout the week.

- You may break up your activity into shorter segments of 10 minutes or more.
- Moderate- or vigorous-intensity physical activities that last for at least 10 minutes count toward meeting the weekly recommendation.

How much physical activity do I need to control my weight?

People need different amounts of physical activity to lose and control weight. You may find that you need to do more or less than others.

The amount of activity needed for weight loss may differ greatly between people. Some people who are not very active may be able to achieve and maintain a healthy weight by doing the minimum amount of activity recommended by experts.

However, many adults need to do more activity to control their weight.

- Some adults need 300 minutes (5 hours) or more of moderate-intensity aerobic physical activity, or 150 minutes of vigorous-intensity aerobic physical activity, per week.
- These adults should build up to this level of activity, adding time each week until they reach their goal.

In order to maintain a healthy weight after weight loss, adults may need to further increase their physical activity. Studies show that physical activity is very important to successful long-term weight control.

How can my eating habits help me achieve a healthy weight?

The number of calories you eat is important. In addition to being physically active, all adults should follow a healthy eating plan. Try to consume fewer calories than you burn each day. Remember that your weight may be affected by the balance of “calories-in” and “calories-out.”

You may wish to speak with your health care provider, a fitness specialist, or a registered dietitian about the amount of activity and calories suitable for you.

You can also use interactive tools on the “ChooseMyPlate” website of the U.S. Department of Agriculture (USDA) to find out how much activity and how many calories you need. See the USDA listing under the Additional Resources section at the end of this fact sheet for a web link.

Becoming Physically Active

Physical activity may include structured activities such as walking, jogging, strength training, or sports. It may also include daily activities such as household chores, yard work, or walking the dog. Pick a combination of structured and daily activities that fits your schedule.

If you have been inactive for a while, start slowly and work up to at least 150 minutes per week at a pace that is comfortable for you. Remember that you may build up activity over the course of the day in sessions of 10 minutes or more if you are unable to be active for longer periods. For example, whether you take three 10-minute walks or one 30-minute walk, you will achieve the same health benefits.

If you want to lose weight, you may need to do more than 150 minutes of moderate-intensity aerobic activity per week. Remember that you can be active in several shorter sessions, and that your daily activities count toward calories used.

Health Benefits of Physical Activity

Regular physical activity may help you control your weight, and it may also help:

- Reduce your risk for type 2 diabetes, high blood pressure and cholesterol, heart disease, osteoporosis, arthritis, and some cancers.
- Build strong muscles, bones, and joints.
- Improve flexibility.
- Increase energy levels.
- Improve mood and sense of well-being.

Get started!

Here are some ideas to help you get started:

- Take a brisk walk around the block with family, friends, or coworkers.
- Walk up the stairs instead of taking the elevator when it is safe to do so.
- Mow the lawn.
- Take an activity break at work or home. Get up, stretch, and walk around.
- Park your car farther away from entrances of stores, movie theaters, or your home, and walk the extra distance when it is safe to do so.
- Take a beginner's level low-impact aerobics or step class.

Aerobic Activity

One way to meet your physical activity goals is by participating in aerobic activities. Aerobic exercise includes any activity that makes you breathe hard and increases your heart rate for a sustained period of time.

Common aerobic activities include:

- brisk walking
- cycling
- dancing
- playing basketball
- running
- swimming

Experts recommend moderate- to vigorous-intensity exercise. Moderate-intensity aerobic activity may make you breathe harder and make it more difficult to talk, but you should still be able to carry on a conversation. If you are just beginning, slowly work up to moving at a moderate-intensity pace.

Strength Training

Muscle-strengthening activities also provide health benefits. Experts recommend that adults do muscle-strengthening activities on 2 or more days per week **in addition** to meeting recommendations for aerobic physical activity.

However, muscle-strengthening activities can provide another way for you to meet the recommended aerobic physical activity each week. Moderate- to vigorous-intensity muscle-strengthening activities count toward the weekly physical activity recommendation if they involve one or more of the major muscle groups, such as those in the legs, hips, back, chest, abdomen, shoulders, or arms.

Strength training will help you:

- Burn extra calories.
- Build strong muscles, bones, and joints.
- Improve how your body works and moves.

Experts recommend 1 full day of rest between workouts to allow your muscles to recover.

If you are new to strength training or physical activity in general, consider hiring a certified personal trainer who can create a program that is fun and safe, and will help you meet your physical activity goals. A personal trainer who has a degree in exercise physiology or is certified through a national certification program, such as the American College of Sports Medicine or National Strength and Conditioning Association, may be able to help you reach your physical activity goals. You may need to contact your health insurer to make sure such services are covered by your plan.

Mind and Body Exercise

In addition to aerobic activity and strength training, you may wish to include other forms of exercise in your physical activity program. Alternatives to traditional exercise provide variety and fun. They may also help reduce stress, increase muscular strength and flexibility, and increase energy levels. Examples of these exercises include yoga, Pilates, and tai chi.

Tips for a Safe and Successful Physical Activity Program

- **Check with your health care provider.** If you have a chronic health problem such as obesity, diabetes, heart disease, or high blood pressure, ask your health care provider about what type and amount of physical activity is right for you.
- **Start slowly.** Add more physical activity into your daily routine and gradually work up to 150 minutes (2 hours and 30 minutes) of moderate-intensity physical activity per week to improve health. For additional health benefits, you may choose to work up to 300 minutes (5 hours) of moderate-intensity physical activity, or 150 minutes of vigorous-intensity physical activity, per week.
- **Set goals.** Set both short-term and long-term goals to keep motivated.
- **Set rewards.** Celebrate every success—you earned it!
- **Track progress.** Keep an activity log to track your progress. Note when you worked out, what activity you did, how

Keep moving!

Move at your own pace while you enjoy some of these activities:

- aerobic exercise classes (step aerobics, kick boxing, high- or low-impact aerobics)
- bicycling
- brisk walking
- dancing (square dancing, salsa, African dance, swing)
- jogging
- playing sports (tennis, basketball, soccer)
- swimming

Get strong!

Build strong muscles and bones with strengthening exercises. Try:

- Lifting free weights or using weight machines.
- Using resistance bands.
- Using stability or medicine balls.
- Doing push-ups and abdominal crunches.

long you did the activity, and how you felt during your workout. Also, record the days that you did not work out and what may have caused you to change your routine.

- **Think variety.** Choose a variety of physical activities to help you meet your goals, prevent boredom, and keep your mind and body challenged.
- **Be comfortable.** Wear comfortable shoes and clothes that are appropriate to the activity you will be doing.
- **Slow down if you feel out of breath.** The “Talk Test” is an easy way to monitor your physical activity intensity.
 - You should be able to talk during your activity, without gasping for breath.
 - When talking becomes difficult, your activity may be too hard.
 - If talking becomes difficult for you while exercising, slow down until you are able to talk comfortably again.
- **Listen to your body.** Stop exercising and consult your health care provider if you feel chest discomfort or pain, dizziness, severe headache, or other unusual symptoms while you work out. If pain does not go away, get medical help right away. If you are feeling fatigued or sick, take time off from your routine to rest. You can ease back into your program when you start feeling better.
- **Eat nutritious foods.** Choose a variety of nutritious foods every day, such as whole-grain breads and cereals, lean meats, low-fat or fat-free milk and milk products, and a variety of fruits and vegetables, like apples, berries, carrots, and kale. Remember that your health and weight depend on both your eating plan and physical activity level. Healthful foods will give you the energy you need to be active.
- **Get support.** Encourage your family and friends to support you and join you in your activity. Form walking groups with coworkers, play with your children outside, or take a dance class with friends.

Regular physical activity may help you feel and move better. Whether your goal is to achieve and maintain a healthy weight or improve your health, becoming physically active is a step in the right direction. It is never too early or too late to make physical activity a part of your life!

Additional Reading From the Weight-control Information Network (WIN)

Active at Any Size. National Institutes of Health (NIH) Publication No. 10–4352.

<http://win.niddk.nih.gov/publications/active.htm>

Healthy Eating and Physical Activity Across Your Lifespan: Better Health and You. NIH Publication No. 08–4992 (available in English and Spanish).

http://www.win.niddk.nih.gov/publications/better_health.htm

Changing Your Habits: Steps to Better Health. NIH Publication No. 08–6444.

<http://win.niddk.nih.gov/publications/changing-habits.htm>

Walking...A Step in the Right Direction. NIH Publication No. 07–4155.

<http://www.win.niddk.nih.gov/publications/walking.htm>

Weight Loss for Life. NIH Publication No. 04–3700.

http://www.win.niddk.nih.gov/publications/for_life.htm

Additional Resources

American College of Sports Medicine

P.O. Box 1440

Indianapolis, IN 46206–1440

Phone: (317) 637–9200

<http://www.acsm.org>

National Strength and Conditioning Association

1955 N. Union Boulevard

Colorado Springs, CO 80909

Phone: (719) 632–6722

Toll-free: 1–800–815–6826

<http://www.nasca-lift.org>

It is never too
early or too
late to make
physical activity
a part of your
life!

The President's Council on Fitness, Sports & Nutrition

1101 Wootton Parkway, Suite 560
Rockville, MD 20852
Phone: (240) 276-9567
<http://www.fitness.gov>

Websites

American Heart Association

<http://www.heart.org/HEARTORG>

National Heart, Lung, and Blood Institute

Aim for a Healthy Weight
http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt

National Institutes of Health

We Can! (Ways to Enhance Children's Activity & Nutrition)
<http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/index.htm>

Shape Up America!

<http://www.shapeup.org>

U.S. Department of Agriculture (USDA)

ChooseMyPlate
<http://www.choosemyplate.gov>

U.S. Department of Health and Human Services

2008 Physical Activity Guidelines for Americans.
October 2008.
<http://www.health.gov/PAGuidelines>

Inclusion of resources is for information only and does not imply endorsement by NIDDK or WIN.

Weight-control Information Network

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The Weight-control Information Network (WIN) is a national information service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) of the National Institutes of Health, which is the Federal Government's lead agency responsible for biomedical research on nutrition and obesity. Authorized by Congress (Public Law 103-43), WIN provides the general public, health professionals, the media, and Congress with up-to-date, science-based health information on weight control, obesity, physical activity, and related nutritional issues.

Publications produced by WIN are reviewed by both NIDDK scientists and outside experts. This fact sheet was also reviewed by Steven Blair, P.E.D., Professor, Department of Exercise Science, Arnold School of Public Health, University of South Carolina.

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NIH Publication Number No. 03-4031
Updated March 2010

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