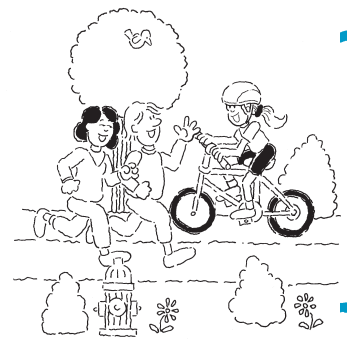


Better Health and Fitness Through Physical Activity

Guidelines for Teens



What exactly is physical fitness? Being fit means you have more energy to do daily tasks, can be more active, and do not tire as easily during the day. Being fit also helps you build a positive self-image and feel better about yourself.

You do not have to spend hours in a gym to be physically active. Every time you throw a softball, swim a lap, or climb up a flight of stairs, you are improving your health and fitness level.

The American Academy of Pediatrics has developed this brochure to help you understand what physical fitness is and to give you ideas on how you can become more physically active.

Benefits of physical activity

Physical activity has many proven benefits. When you are physically fit, you feel and look better, and you stay healthier. Physical activity can help you to:

- Prevent high blood pressure
- Strengthen your bones
- Ward off heart disease and other medical problems
- Relieve stress
- Stay active as an adult
- Maintain or achieve an appropriate weight for your height and body build

A major benefit of physical activity is that it helps reduce stress. Learning to cope with stress is an important part of healthy living. Family problems, conflicts with friends, and school pressures can cause stress. Major changes in your life, such as moving to a new home or breaking up with someone, are also sources of stress. Exercise helps you relax by causing physical changes inside your body that help it react to and handle stress.

Physical activity also has many other health benefits, such as helping to ward off heart disease. Coronary heart disease is the leading cause of death in the United States. Research has shown that your risk factors as an adult for developing heart disease start during your childhood. A lack of physical activity is one of the major risk factors influencing heart disease, such as high blood pressure, and other medical illnesses.

Physical fitness is a balance of many areas

To be physically fit, you must work on all aspects of fitness, including the following:

Cardiorespiratory endurance (aerobic fitness)—This is the ability of the heart, lungs, and circulatory system to deliver oxygen and nutrients to all areas of your body. When you are active, you breathe harder and your heart beats faster so that your body is able to get the oxygen it needs. If you are not fit, your heart and lungs have to work extra hard during physical activity.

Body composition (body fat)—This is the percentage of body weight that is fat. Overweight people have more body fat in relation to the amount of bone and muscle in their bodies than do people who are physically fit. Overeating, not exercising enough, or both often lead to more body fat. Being overweight increases your risk of diabetes, high blood pressure, and heart attacks.

Muscle strength and endurance—This is the amount of work and the amount of time that your muscles are able to do a certain activity before they get tired, such as lifting heavy objects or in-line skating.

Flexibility—Flexibility is the ability to move joints and stretch muscles through a full range of motion. For example, people who are very flexible can bend over and touch the floor easily. A person with poor flexibility is more likely to get hurt during physical activity.

What can I do to become more fit?

First, you have to make the commitment to become more physically active. Try to do some physical activity every day, whether it is through physical education classes in school or an activity on your own. Exercise should be a routine part of your day, just like brushing your teeth, eating, and sleeping. It may help to plan a physical activity with a friend or family member. Most people find that it is more fun to exercise with someone else. More importantly, though, is that you like the exercise or activity. You are more apt to stay in the habit of doing whatever activity you choose if it is one that you enjoy.

Now is a good time to pick a “life sport” that you enjoy. Unlike a competitive team sport like football or baseball, a life sport is any kind of physical exercise or activity that you can do throughout your life. Examples of life sports are:

- Swimming
- Golf
- Bicycling
- Jogging
- Tennis
- Walking
- Skating

Regular exercise should include aerobic activity. Aerobic activity is continuous. It makes you breathe harder and increases your heart rate. This type of exercise increases your fitness level and makes your heart and lungs work more efficiently. It also helps you maintain a normal weight by burning off excess fat. Examples of aerobic activities are brisk walking, basketball, bicycling, swimming, in-line or ice skating, soccer, jogging, and taking an aerobics or step class. Baseball and football do not involve as much continuous exercise because you are not active the whole time.

In general, the more aerobic an activity, the more calories—and eventually fat—you will burn. The chart at the end of this brochure gives you an estimate of the aerobic level of many different activities. You will notice that all physical activities burn more calories than sitting does.

Choose any activity you enjoy. If you like the exercise, you will want to keep doing it. Anything that involves movement qualifies as exercise. You do not have to be on a sports team, have expensive athletic clothes or shoes, or be good at sports to become more fit. Any type of regular, physical activity is good for your body. Household chores, such as mowing the lawn, vacuuming, or scrubbing, involve exercise and may have fitness benefits, depending on how vigorously you do the chores. The most important thing is that you keep moving.

Be sure to include stretching exercises in your daily routine. Before you do any physical activity, you should stretch out your muscles. This warms them up and helps protect against injury. Stretching makes your muscles and joints more flexible, too. It is also important to stretch out after you exercise to cool down your muscles. Exercise videotapes, programs on television, and magazines can show you examples of how to stretch out different muscle groups, as well as different exercises you can do.

Just about any physical activity will improve fitness. For example, walking is better than riding in a car, and using the stairs is better than taking an elevator. Making small changes like these in your everyday life can make you more physically fit.

Is it safe to train with weights?

You may want to include strength training as part of your regimen of physical activity, along with some form of aerobic exercise. Strength training, also called “weight training” or “resistance training,” is where you use free weights and/or weight machines to increase muscle strength and muscle endurance.

When you strength train, it is more important to focus on proper technique and number of repetitions than on the amount of weight you are lifting. If you decide to strength train or weight train, make sure you use the proper safety measures. You should always have a trained adult supervise you.

You should avoid weight lifting, power lifting, and body building until your body has reached full adult development (usually between the ages of 15 and 18) because these sports can result in serious injury. Your pediatrician can help determine your stage of development.

How Often Should I Exercise?

Make exercise a part of your lifestyle. Your goal should be to do some type of exercise every day, or at the very least, three to four times a week. Try to do some kind of aerobic activity that requires continuous physical activity without stopping for at least 20 to 30 minutes each time. Do the activity as often as possible, but do not exercise to the point of pain because this can lead to injury.

Like all things, exercise can be overdone. You may be exercising too much if:

- Your weight falls below what is normal for your age, height, and build
- It starts to interfere with your normal school and other activities
- Your muscles become so sore that you risk injuring yourself

If you notice any of these signs, talk with your parents or pediatrician before health problems occur.

Exercise is only one part of living healthy

Besides the physical and mental health benefits, regular physical activity can also help you become more self-confident, organize your time better, learn new skills, and meet people with similar interests. To make more time for exercise, limit the amount of time you watch television or play computer or video games.

Whenever possible, eat three healthy meals a day, including at least two to four servings of fruit and three to five servings of vegetables each day. Limit your intake of fat, cholesterol, salt, and sugar. Also, get enough sleep and take time to do things you enjoy. For even better health, don't smoke, drink alcohol, or do other drugs.

Physical activity is just one important part of preventive health care, which should be a part of your daily lifestyle. The activities you decide to do should be enjoyable, use a variety of muscle groups, and include some weight-bearing exercises. If you are not exercising much now, increase your level of activity gradually and have fun! Exercise for a better today and a healthier tomorrow!

Fitness Activity Chart

Activity	Calories Burned During 10 Minutes of Continuous Activity	
	77-lb Person (35 kg)	132-lb Person (60 kg)
Basketball (game)	60	102
Cross Country Skiing	23	72
Bicycling (9.3mph or 15 km/h)	36	60
Judo	69	118
Running (5 mph or 8 km/h)	60	90
Sitting (complete rest)	9	12
Soccer (game)	63	108
Swimming (30 m/min or 33 yd)		
Breaststroke	34	58
Freestyle	43	74
Tennis	39	66
Volleyball (game)	35	60
Walking (2.5 mph or 4 km/h)	23	34
3.7 mph or 6km/h	30	43

kg = kilogram; mph = miles per hour
km = kilometer; m = meter
Modified from Bar-Or O. Pediatric Sports Medicine for the Practitioner. New York, NY: Springer-Verlag; 1983: 349-350.
Ferguson JM. Habits, Not Diets. Palo Alto, CA: Bull Publishing Co; 1988.

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.