

Managing Your Weight

To be truly fit, you need to maintain a healthy weight—now and throughout your lifetime. Your own healthy weight probably will not be the same as the weight of a high-fashion model, a bodybuilder, or your best friend. You can use some general guidelines, however, to judge your weight and to keep it within a healthy range.

HEALTH TERMS

overweight

obesity

underweight

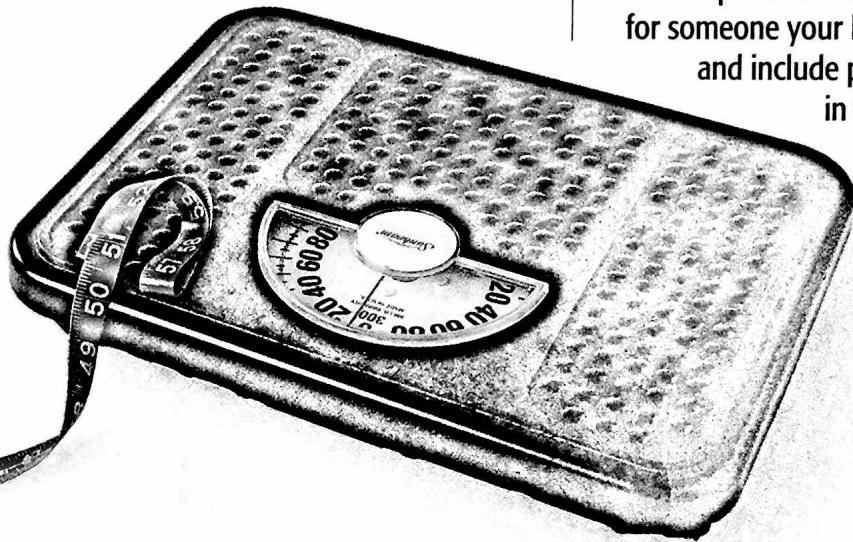
undernutrition

body mass index (BMI)

nutrient-dense

HEALTH CONCEPTS

- Being obese, overweight, or underweight poses risks to your total health.
- Physical activity is an important part of weight management and maintenance.
- The only way to lose weight is by burning more calories than you consume. You need to consume an adequate number of calories for someone your height and age, and include physical activity in your life.



Calorie Basics

In order to understand weight management, you need to understand calories—what they are, where they come from, and how they affect body weight. When people hear the word *calories*, they often think of fattening foods. Calories, or more correctly, kilocalories, are simply a unit to measure energy. Calories are a measure of the energy in food and the energy your body burns. Calories are not nutrients.

Calories: Their Source

Some foods have more calories than others. The specific number of calories depends on the amount of carbohydrate, fat, and protein in the food as well as the portion size. The way a food is prepared or cooked also affects the calorie count.

In the previous chapter you learned about three nutrients that supply energy, or calories. Carbohydrate, the main source, and protein each supply four calories per gram. Fat supplies more than twice as much—nine calories per gram. For this reason, even small amounts of fat in a food significantly increase its caloric content.

Calories to Burn

How many calories do you need? Several factors play a role, such as rate of growth, body size, gender, age, and metabolic rate. For example, some people have a higher metabolic rate than others, so they need more calories. Children and teens need more calories than adults do because they are still growing. Taller and bigger people need more calories than shorter and smaller people do. A person's activity level also plays a major role. Active people need more calories than sedentary people do in order to remain active.

Balancing the Energy Equation

Keeping a healthy weight is an issue of energy balance. Simply stated, calories consumed must equal calories burned. You gain or lose weight by tipping the balance. By taking in fewer calories than you expend, you lose body weight. When you take in more calories than you expend, you gain. Your body stores the extra calories as body fat.

Each pound (0.5 kg) of body fat equals about 3,500 calories. To lose 1 pound (0.5 kg) a week, which is a realistic, healthy goal, you need to consume 500 fewer calories than normal each day. Here is the calculation you can use: 500 calories per day x 7 days = 3,500 calories = 1 pound (0.5 kg) of body fat. What will happen if you also burn 250 extra calories a day through physical activity?

Weight Problems: Risky Business

Being too heavy or too thin increases the risk of developing health problems later on. In the meantime, weight problems can certainly affect the quality of life.

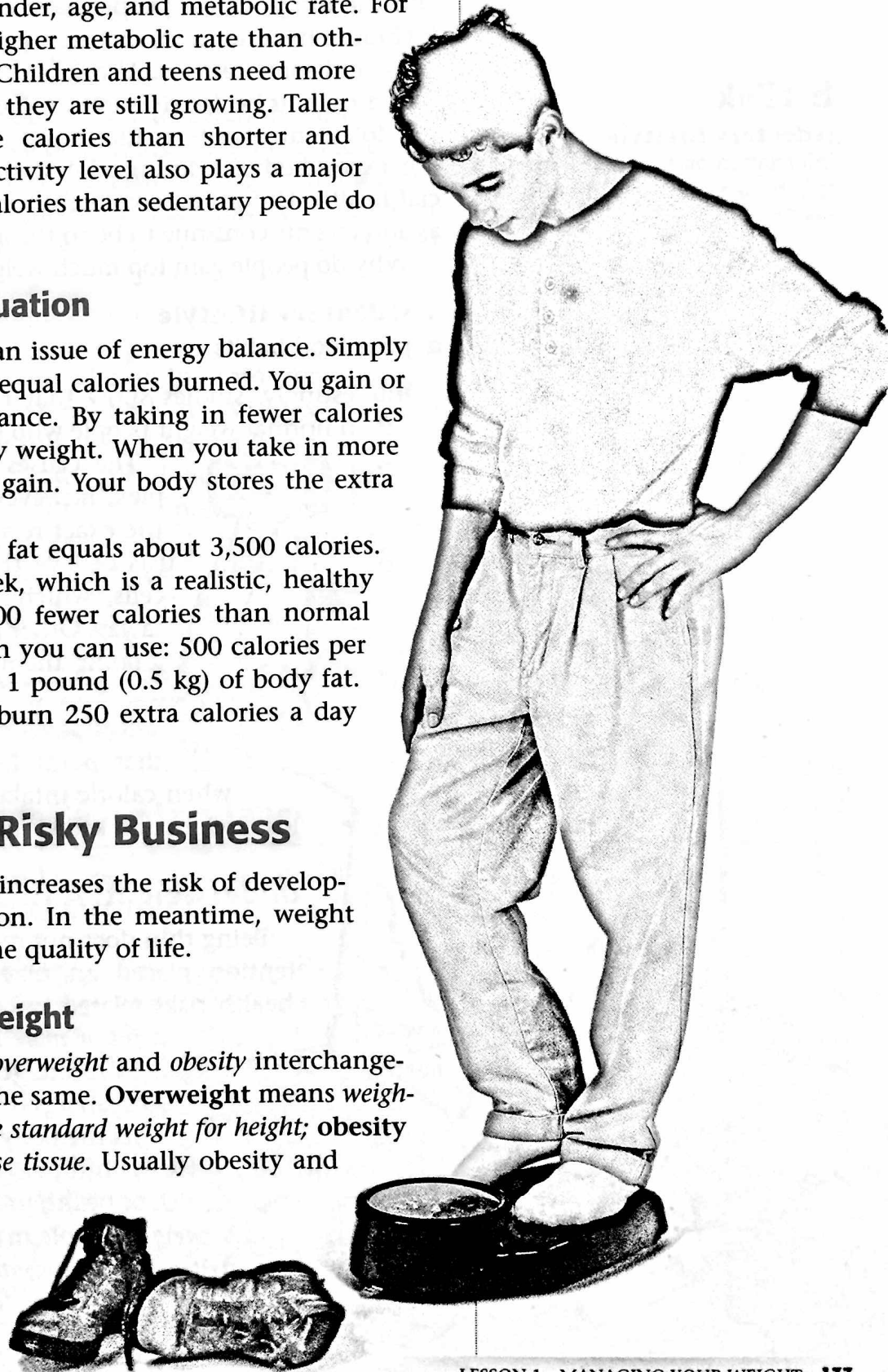
Body Fat versus Body Weight

Although we use the terms *overweight* and *obesity* interchangeably, these conditions are not the same. **Overweight** means *weighing more than 10 percent over the standard weight for height*; **obesity** means *excess body fat, or adipose tissue*. Usually obesity and overweight go together.

From a health standpoint, being overweight or being obese is risky. However, in

▼ **People come in all different shapes and sizes.**

ACTIVITY Explain how to determine whether or not you are overweight or underweight.



certain situations, being overweight might not be a risk. A football player or bodybuilder may be overweight because of excess muscle, not excess fat. Body composition, rather than weight, is often a better measure of fitness.

Obesity: A Hazard to Health

Obesity is a common health risk in the United States. Excess body fat strains the body frame and increases the workload of the heart and the lungs. Obese people have a higher risk of health problems, including hypertension, diabetes, high blood cholesterol, atherosclerosis, and some cancers. Also, obese people are often inactive, which increases their health risks even more.

Adolescent obesity is increasing. Besides the health risks later in life, excess body fat during adolescence may affect self-esteem and social health. Unfortunately, many teens who are overweight or obese as adolescents continue to be so through adulthood.

Why do people gain too much weight? There are two main reasons:

- sedentary lifestyle
- poor food habits

Interestingly, studies show that many obese people actually eat less than normal-weight people who exercise more.

The causes of obesity may be more complex, however. Heredity may play a role, but the exact relationship is unclear. Some scientists believe that obese people have more fat cells, which may get smaller but never go away. Other researchers are exploring the set point theory. This theory says that each person has a biological set point for weight and body fat. The body works to maintain that point by lowering the metabolic rate when caloric intake goes down. Then it is hard to lose weight and keep it off.

Underweight: A Health Risk

Being thin does not mean being fit. With so much attention placed on obesity, we sometimes forget the health risks related to being **underweight**, or *being 10 percent or more below normal weight*. Being too thin means that a person has little body fat as an energy reserve, and perhaps less of the protective nutrients the body stores. This condition makes it harder for an overly thin person to fight off infection and increases the risk of health problems when surgery is needed.

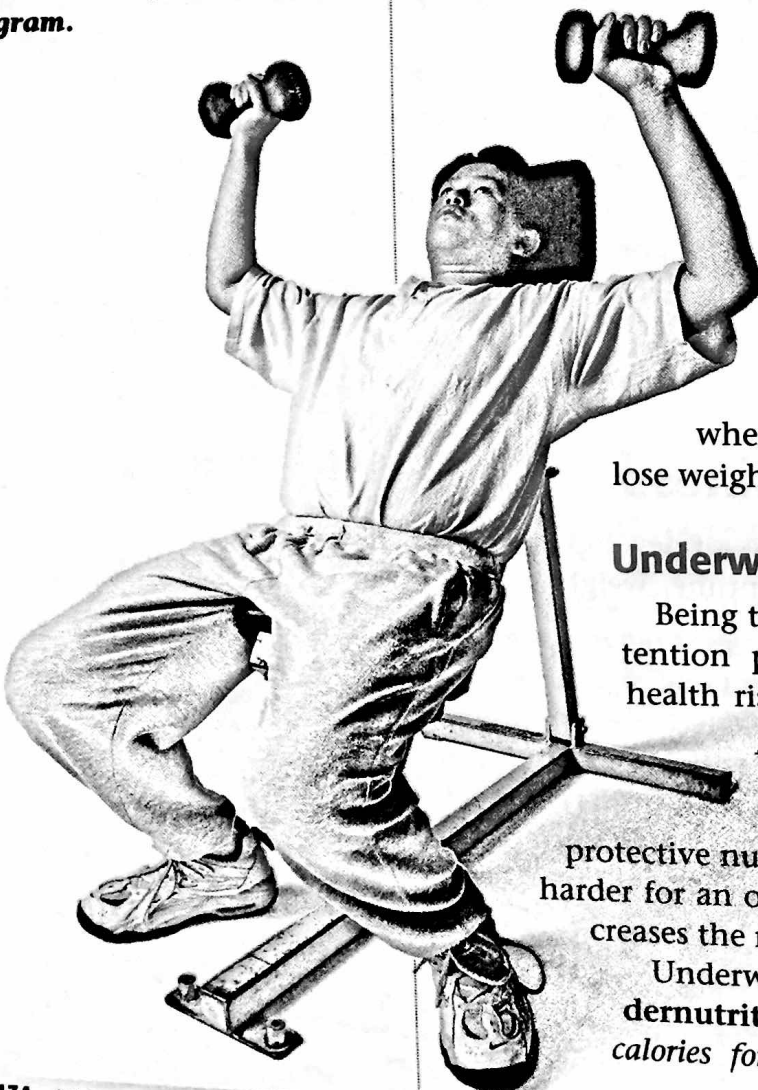
Underweight people may be undernourished, too. **Undernutrition** is *not consuming enough essential nutrients or calories for normal body functions*. Among other health

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sedentary lifestyle For more information on factors that contribute to a sedentary lifestyle, see Chapter 3, page 54.

▼ **Regular physical exercise is a key to maintaining your proper weight.**

ACTIVITY Describe two other benefits of a regular exercise program.



risks, underweight people have a greater chance of developing iron-deficiency anemia.

Managing Body Weight

How many people do you know who have tried to lose weight? How many lost weight, only to regain it shortly afterward? Why? Perhaps they did not follow realistic and effective weight-control strategies.

Determining a Healthy Weight

Height and weight charts are often used to determine a person's proper weight. However, the range of weights listed on these charts can vary a great deal when accounting for different body frames. For example, two people who are the same height can have very different weights. A large-boned person will weigh more than a small-boned person of the same height.

Measuring a person's body composition is a more accurate way to determine a healthy weight.

The chart shown on page 136 provides an indicator for acceptable weight. This chart determines **body mass index (BMI)**. This is the ratio of weight to height. BMI is a better measure of disease risk than body weight alone. Certain groups, however, should not use BMI as a predictor of health risk. These include athletes, such as body builders, and pregnant women, both of whom have abnormally high BMIs.

Health Risk Based on BMI

BMI CATEGORY	HEALTH RISK
Under 25	Minimal
26-27	Low
28-30	Moderate
31-34	High
35-39	Very High
40 and higher	Extremely High

connections Math

Determining Your Body Mass Index

There are several quick and easy ways to compute your BMI. One is to use the chart on the next page. A second is the following formula:

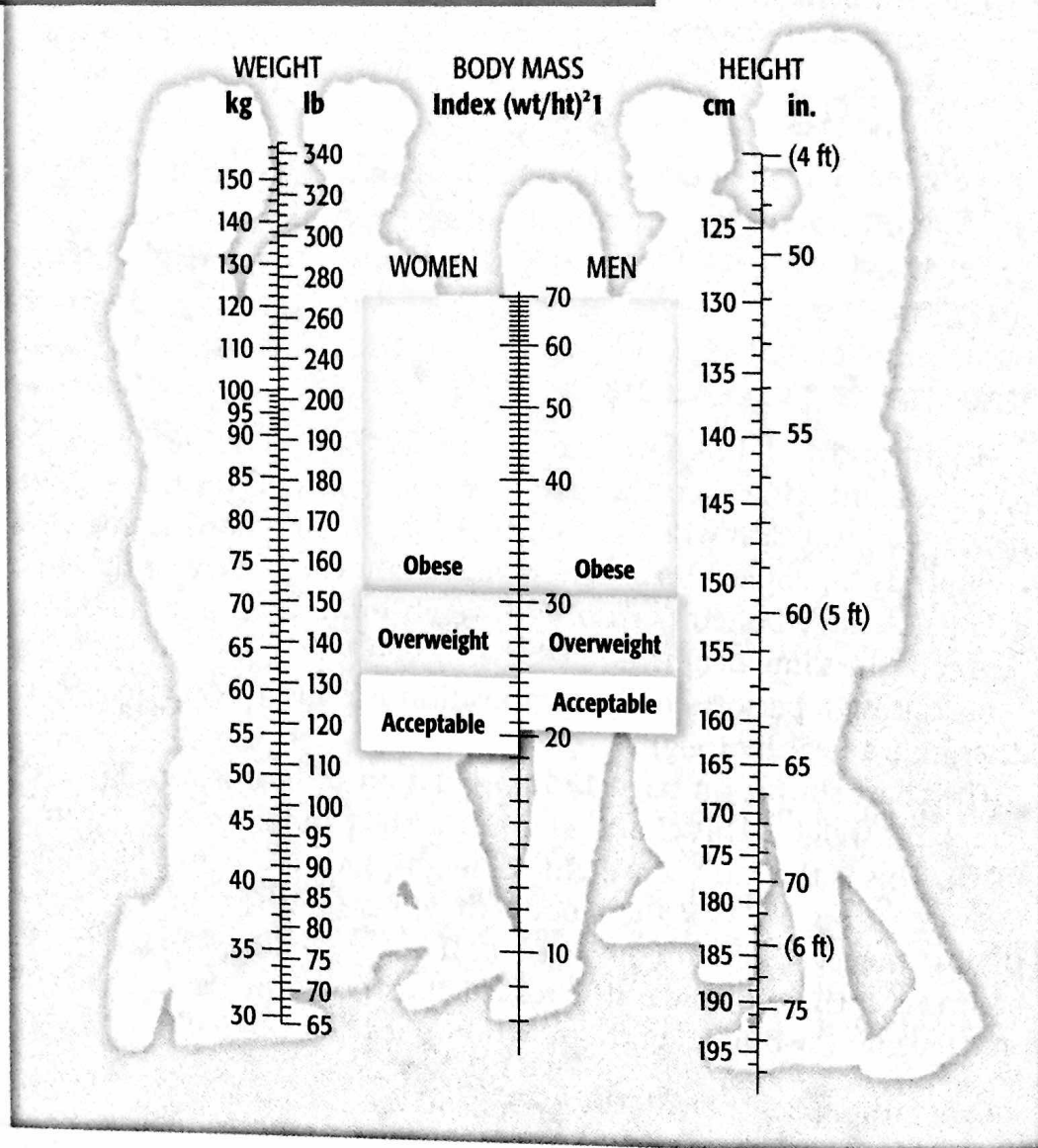
1. Multiply your weight in pounds by 703 (e.g., for a person weighing 149 pounds, this would be $149 \times 703 = 104,747$).
2. Multiply your height in inches times itself (e.g., for a person 65 inches tall, this would be $65 \times 65 = 4,225$).
3. Divide the answer in Step 1 by the answer in Step 2 (e.g., $104,747 \div 4,225 = 24.8$, or 25 when expressed as a rounded number).

Refer to the table on this page titled "Health Risk Based on BMI" to see the risk category associated with your BMI. How do you rate?

YOUR ACCEPTABLE WEIGHT

This chart provides a fairly simple way to determine whether you have too much body fat. Find your weight in the left-hand column (lb.) and your height in the right-hand column (in.). Then put a ruler between the two numbers. If the line falls within the acceptable range, in the middle of the chart, your weight is all right. If the line falls in the overweight or obese range, consult a physician.

This chart can only let you know whether you are overweight. It is not a scientific measure of healthful weight. Even if you come out in the acceptable range on the chart, talk with your physician if you think you may have a weight problem.



▲ You can improve your overall health by staying within your acceptable weight range.

ACTIVITY Find your own acceptable weight on the chart. What can you do to maintain your acceptable weight?

Starting a Weight-Control Plan

The true meaning of the word *diet* is everything a person eats and drinks, not a restrictive eating plan. The truth is teens especially need the nutrients from all the food groups for growth and should not consider restricting their food intake. A healthy eating plan and physical activity are often all you need to do to get to an appropriate weight.

These steps can get you started if you are considering a weight-control plan:

- **Target your weight.** Based on your body frame, choose a target weight that is within a healthy range and not too thin. Ask a health care professional what range is healthy for you.
- **Set smart goals.** Losing or gaining one-half to one pound (0.2 to 0.5 kg) a week is realistic, attainable, and safe.
- **Make a personal plan,** preferably one that includes both a nutritious eating plan and regular physical activity. Consider your own food preferences and lifestyle. Choose activities you will enjoy doing. It is easier to follow a plan that you create yourself.

- **Put your goal and plan in writing.**
- **Stick to your plan.** To help, keep a diary of what you eat and when, so that you become more aware of your food habits. Focus on eating a variety of foods with at least the minimum number of servings from the Food Guide Pyramid. Avoid meal skipping; try to eat three or more meals a day.
- **Think positively.** If you slip up occasionally, that is okay. Focus on your progress, and get back on track.
- **Evaluate your progress, but avoid weighing yourself every day.** Instead, weigh yourself once a week at the same time of day.
- **Recognize that plateaus are normal.** Plateaus are a period of time when your weight does not change.

Smart Weight-Loss Strategies

The best weight-loss strategies are easily summed up as follows:

- Eat fewer calories (and make them nutrient dense). **Nutrient-dense foods** are *foods high in nutrients relative to their caloric content*.
- Burn more calories through exercise.
- Better yet, do both.

This advice is the same no matter how much you need to lose—5, 15, even 50 pounds (2.3, 6.9, even 22.7 kg). These strategies can help your weight-loss plan work for you:

- As a teen, eat at least 1,400 to 1,600 calories daily. Otherwise, you may miss out on essential nutrients.
- Eat mainly low-calorie foods from the five food groups, including fruits and vegetables.
- Eat foods you like. If your favorites are high in calories, have just a tiny portion from time to time.
- Make meals last. Take small bites.
- If you are tempted to snack, choose low-calorie snacks such as carrots or celery.

Smart Weight-Gain Strategies

Some people want to gain weight to look better; others want to gain to participate in sports. Smart weight gain includes physical activity and an eating plan that is higher in calories. Without exercise, extra food calories turn mainly to body fat. Consider these tips:

- Increase caloric intake, especially with foods high in complex carbohydrates, such as bread, pasta, rice, and potatoes.
- Eat more frequently. Take second helpings.
- Eat nutritious snacks, but space them two to three hours before meals to avoid spoiling your appetite.

HEALTH
Online



Learn the basics of weight management from Shape Up America, including strategies for decreasing food intake and increasing physical activity, at health.glencoe.com.



Things to Do While Dieting

Here are a few tips to keep you on track once you have begun a weight-loss program:

- Try to avoid eating while you are alone or standing and avoid eating foods that you can gulp down quickly.
- Make meals last at least 20 minutes. Take small bites and put your eating utensils down between bites.
- Wait five minutes before taking a second helping.
- Do something else when you are tempted to eat.
- Have a plan to follow when you are bored, especially when you are home in the evening.
- Reward yourself with treats other than food when you do something that is worth a reward.
- Make exercise a part of your daily routine.

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exercise For more information on exercise and its importance to good physical health, see Chapter 3, page 53.

Physical Activity and Weight Management

People can lose body fat just by dieting, but increased physical activity helps them reach their target weight faster, easier, and, over the long run, more effectively. Whether you need to lose, gain, or maintain weight, you need physical activity. Consider the following benefits of regular **exercise**:

- It burns calories, which promotes loss of body fat.
- It tones and builds muscles to give a firm, lean body shape. Without exercise, the weight lost may be lean tissue as well as body fat.
- It helps promote a normal appetite response, which helps anyone trying to gain, lose, or maintain weight.
- It helps relieve the stress that often leads to overeating or under-eating.
- It helps increase metabolic rate, so the body burns more calories for several hours, even while resting. It takes more calories to maintain muscle tissue than body fat. Exercise may help lower your set point.
- It increases self-esteem, which helps keep your plan on track.

To build muscles and spend calories, you really need to work your muscles on a regular basis. Adding exercise to your daily routine, such as using stairs instead of an elevator or walking instead of driving, helps. To set up a realistic, yet effective, exercise program, refer to Chapter 4.