

# Health and Fitness

## Section 20.1

### *Physical Activity*

■ **Main Idea** Choosing to include physical activity in your daily routine can improve your overall state of wellness.

## Section 20.2

### *Body Weight and Health*

■ **Main Idea** The best way to maintain a healthy body weight is to balance nutritious meals with physical activity.





### Explore the Photo

Think about the phrase “Move more and sit less.” *How do you think increasing your physical activity can to improve your life?*



### Writing Activity

#### Advertisement

**Physical Fitness is Fun** Write an advertisement for elementary-age children in your community, encouraging them to start being physically fit now. Consider activities they would enjoy. Make suggestions about how they can begin. Convince them that being physically fit is fun and important. Include graphics or clip art to support your text.

**Writing Tips** Follow these steps to write an advertisement:

1. Consider your audience. What is important to them? How can you appeal to them?
2. Make your language concise, clear, and age appropriate.
3. Emphasize the benefits of what you are advertising.

## Reading Guide

## Before You Read

**Preview** Look at the photos and figures in this chapter and read their captions. Begin thinking about how physical activity benefits overall health

## Read to Learn

## Key Concepts

- ✓ **Explain** how fitness affects your daily activities.
- ✓ **Describe** Describe what is needed to reach and maintain a healthy body weight.

## Main Idea

Choosing to include physical activity in your daily routine can improve your overall state of wellness.

## Content Vocabulary

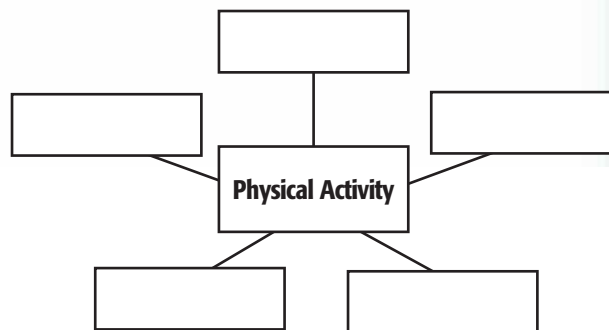
- fitness
- stamina
- aerobic


## Academic Vocabulary

- obtain
- flexible

## Graphic Organizer

As you read, identify five ways physical activity affects your body and your weight. Use a graphic organizer like the one shown to help you organize your information.



 **Graphic Organizer** Go to this book's Online Learning Center at [glencoe.com](http://glencoe.com) to print this graphic organizer.

## Academic Standards



## English Language Arts

**NCTE 4** Use written language to communicate effectively.



## Mathematics

**NCTM Algebra** Solve problems that arise in mathematics and in other contexts.



## Social Studies

**NCSS IV D Individual Development and Identity** Apply concepts, methods, and theories about the study of human growth and development, such as physical endowment, learning motivation, behavior, perception, and personality.

**NCTE** National Council of Teachers of English

**NCTM** National Council of Teachers of Mathematics

**NSES** National Science Education Standards

**NCSS** National Council for the Social Studies

**S**choolwork takes up much of Aaron's time. He has chores to do at home, and he has an after-school job delivering fliers for local restaurants. Aaron also spends time with friends. Even though Aaron is busy, he still finds time to be physically active and to eat well. He stays fit by riding his bike, skating, and swimming at the community pool. What do you do to stay healthy and fit?

# Wellness, Fitness, and Your Health

Wellness is taking positive steps toward your overall good health. Wellness has two main goals. One is to keep you healthy, and the other is to help you prevent disease and illness. When you choose wellness, you choose to take care of yourself. It is important that you make the effort now to become informed and to make smart choices that can help protect you for the rest of your life.

When you are physically fit, you look and feel your best. A healthy, fit body means you take care of yourself. **Fitness** is the ability to handle daily events in a healthy way. Fitness means that you:

- Have the energy to do your schoolwork and chores, with enough leftover to have fun too.
- Are confident about your abilities.
- Make physical activity and exercise a part of your life every day.
- Keep your weight at the right level for you.
- Can better deal with stress and the ups and downs of life.



 **Get Outdoors** Outdoor sports are ways to have fun while staying healthy and fit. *What types of outdoor physical activity do you enjoy?*

## As You Read

**Connect** Think about the physical activities you enjoy most. How can you make them part of your fitness routine?

## Vocabulary

You can find definitions in the glossary at the back of this book.



### Build Self-Esteem

**Make Friends** Make an effort to develop close friendships. These friends will offer support when you need it. It is important to have good friends and also to be a good friend.



# Hands-On LAB

## Walking as Exercise

In this activity you will learn how to incorporate walking into your regular activities. A brisk walk can burn up to 300 calories an hour. Before you begin, read through the entire Hands-On Lab assignment. Write down any questions that you have about the activity. Reread the text or ask your teacher for help if you need it.



### Supplies

- ✓ Comfortable clothes
- ✓ Shoes designed for walking
- ✓ Notebook
- ✓ Digital step counter (optional)

### Develop Your Plan

- Decide how far you want to walk.
- Consider the weather conditions.
- Find routes outdoors and indoors, such as a shopping mall.
- Determine where you can walk safely.

### Implement Your Plan

- Dress in comfortable clothes appropriate for weather conditions.
- Wear comfortable walking shoes.
- Walk the route or routes you chose.
- If possible, walk with a friend, family member, or pet.
- Walk at least once a week to start.

- Increase your frequency and distance each week for a month.
- Keep a log of your distance and time walked.
- Record any changes you notice in your physical fitness.

### Evaluate Your Results

How did you decide where to you walk? How far and for how long did you walk the first time? How much distance and time did you add to your walks? What differences did you notice in your physical fitness? Write one or more paragraphs to explain your answers.



**Projects and Activities** Go to this book's Online Learning Center through [glencoe.com](http://glencoe.com) for more labs and activities.

You cannot be fit unless you are physically active. By exercising regularly you will enjoy all the benefits of fitness:

- You can feel more positive about yourself. Knowing you are taking care of your body is good for your self-esteem.
- You can look your best. Physical activity helps you control weight and gives you a healthy appearance.
- Day-to-day tasks may seem easier because your energy level may improve.
- Relax and sleep more easily.
- Your physical and mental stamina may increase. **Stamina** is the ability to focus on or perform a single activity for a long time. For example, you may be able to dance without getting too tired, and you may be able to pay more attention in class and learn more.

There are plenty of enjoyable, inexpensive ways to exercise. What is important is that you make physical activity a regular part of your life. For example, Jennifer walks to school instead of taking the bus. Her friend Nick plays on a softball team and enjoys getting together with friends to play volleyball on weekends.

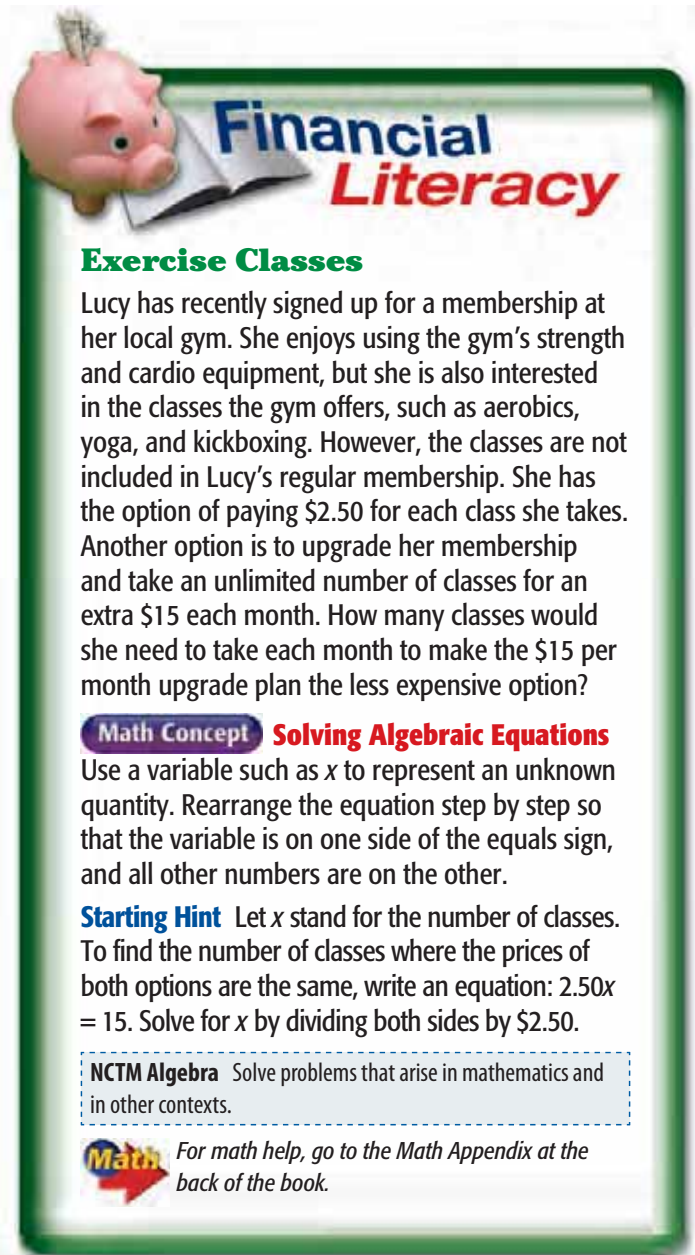


**Name** What are the two main goals of wellness?

## Exercise and Physical Activity

Physical activity is essential if you want to **obtain**, or reach, and maintain a healthy body weight. Whether you want to lose weight, gain weight, or maintain your weight, physical activity has many benefits.

**Calories** Physical activity burns calories. During physical activity, your body burns up calories from the food you eat. A calorie is a unit of energy. By using calories for energy, your body will store fewer calories as body fat. **Figure 20.1** shows how activities you may be doing can help you burn calories.



### Financial Literacy

#### Exercise Classes

Lucy has recently signed up for a membership at her local gym. She enjoys using the gym's strength and cardio equipment, but she is also interested in the classes the gym offers, such as aerobics, yoga, and kickboxing. However, the classes are not included in Lucy's regular membership. She has the option of paying \$2.50 for each class she takes. Another option is to upgrade her membership and take an unlimited number of classes for an extra \$15 each month. How many classes would she need to take each month to make the \$15 per month upgrade plan the less expensive option?

**Math Concept Solving Algebraic Equations**  
Use a variable such as  $x$  to represent an unknown quantity. Rearrange the equation step by step so that the variable is on one side of the equals sign, and all other numbers are on the other.

**Starting Hint** Let  $x$  stand for the number of classes. To find the number of classes where the prices of both options are the same, write an equation:  $2.50x = 15$ . Solve for  $x$  by dividing both sides by \$2.50.

**NCTM Algebra** Solve problems that arise in mathematics and in other contexts.

**Math** For math help, go to the Math Appendix at the back of the book.



## Safety Check

### Stay Hydrated

Be sure to drink plenty of water while working out. Fluids must be replaced to prevent dehydration, or loss of body fluid.

- Drink water before you feel thirsty.
- Watch for signs of dehydration, including fatigue, headache, nausea, and light-headedness.

There is no way to burn fat in a specific area of the body. Physical activity burns calories and fat from all parts of the body. That is why a variety of physical activity helps your overall appearance.

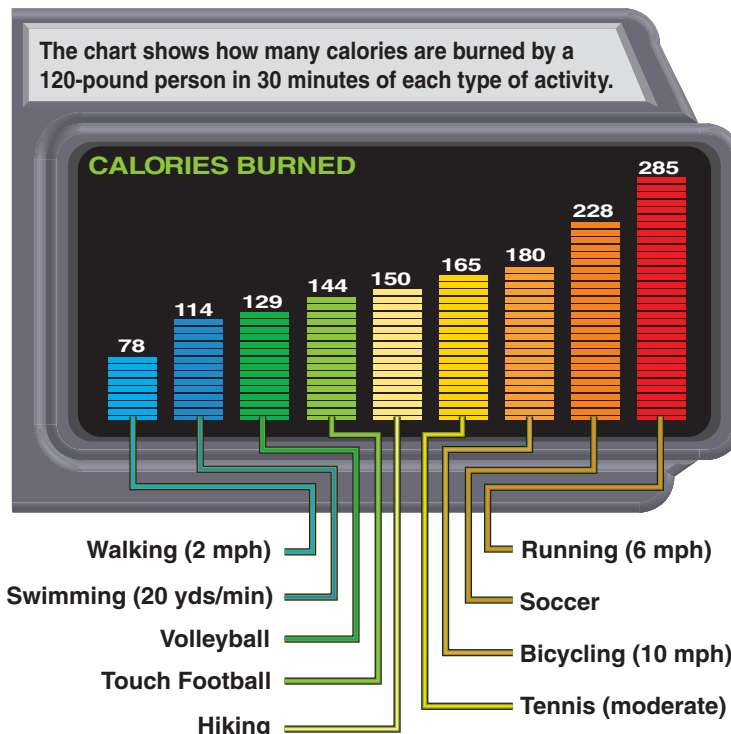
**Heart and Lungs** Staying physically active helps your heart and lungs work at peak function. **Aerobic** (er-'ō-bik) activities are continuous, rhythmic activities that improve the efficiency of your heart and lungs. Aerobic activities such as running, bicycling, and swimming increase your intake of oxygen and help improve circulation.

**Flexibility** Being **flexible** allows you to kneel, bend, turn, and throw. It also helps reduce your risk of injury. You can improve your flexibility by doing activities that involve stretching and bending.

**Appetite Control** Physical activity can help relieve stress and tension, which can trigger a desire to eat more or less than you normally would.

## Figure 20.1 Calories and Physical Activity

**What Can You Do in 30 Minutes?** Look at how many calories you can burn in 30 minutes by doing a variety of activities. *What other activities can you think of that are fun and burn calories at the same time?*

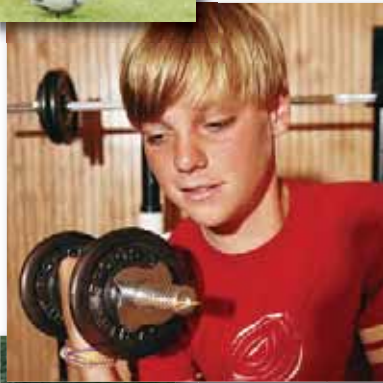


## Choose an Exercise Routine

To exercise regularly, you need to find an exercise routine that suits you and that you enjoy. From walking to dancing to team sports, the options are endless.



**Organized Exercise** Volleyball, baseball, basketball, and soccer are just a few types of organized ways to participate in physical activity. Sign up to be a part of a team, or organize your friends for a regular game.



**Indoor Exercise** You can lift small hand weights or work out on larger machines to build muscle and bone density. You can also use cardio machines indoors such as a treadmill, elliptical, or stationary bike.



**Outdoor Exercise** Walking, running, swimming, biking, and skating are activities you can enjoy outdoors. Being out in the fresh air and sunshine can be very motivating. Find an outdoor activity that you look forward to.



**Exercise Anywhere** Sit-ups, push-ups, jumping rope, martial arts, and yoga are examples of physical activities you can do anywhere, both indoors or outdoors. These types of activities are often easy to incorporate into your lifestyle since you can do them anywhere, and they require little or no special equipment.



## Character Counts

### Independence

Janet wants to run in a 10k race for a local charity, but she needs to get in shape. It is hard for Janet to train because her friends are not interested in training, and her family is too busy to train with her. The race is two months away, and Janet believes she needs to run four times a week for at least an hour, building up to more time as the run draws near.

### You Make the Call

How can Janet get her training done without the support of her friends and family? How can she benefit by training on her own? Write a paragraph explaining what Janet should do and why.

## Be More Active

There are many ways to put more movement into your life. You do not have to be an athlete to be active. Aim for at least 60 minutes of physical activity every day. You can do it all at once, or spread it out in 15- or 20-minute periods. Try these ideas:

**Use your feet.** When possible, walk instead of getting a ride.

**Use your wheels.** Skating and biking are great ways to get moving.

**Take the stairs.** Avoid elevators and escalators. Get your energy up by using the stairs.

**Let music get you moving.** Dance alone or with friends.

**Do chores.** Many chores, such as dusting, raking leaves, and taking out the trash can get you moving.

**Help others.** See if you have neighbors who need help with chores, pet walking, or yard work.

**Play and have fun!** Do what you enjoy, as long as it involves movement.

## Section 20.1 After You Read

### Review What You Have Learned

1. **Explain** the positive ways fitness helps you handle daily events.
2. **Identify** the benefits of exercise.

### Practice Academic Skills



#### English Language Arts

3. Write an essay that encourages teens to be fit. Include benefits of fitness with specific examples of how fitness helps you look and feel your best.

**NCTE 4** Use written language to communicate effectively.



#### Social Studies

4. Research the benefits of organized exercise versus more individual exercise. How can each aid in the development of not only a person's fitness and lifelong commitment to exercise but also other important characteristics. Be prepared to share you findings with you classmates.

**NCSS IV D** Apply concepts, methods, and theories about the study of human growth and development, such as physical endowment, learning motivation, behavior, perception, and personality.



**Check Your Answers** Check your answers at this book's Online Learning Center at [glencoe.com](http://glencoe.com).

## Reading Guide

## Before You Read

**How Can You Improve?** What reading strategies helped you on the last test you took? Make a list of ways to improve your strategies in order to succeed on your next exam.

## Read to Learn

## Key Concepts

- ✓ **List** the risks associated with obesity.
- ✓ **Explain** the most healthful way to lose excess weight.
- ✓ **Identify** how eating disorders can destroy your health.
- ✓ **Recognize** the causes of eating disorders.

## Main Idea

The best way to maintain a healthy body weight is to balance nutritious meals with physical activity.

## Content Vocabulary

- obesity
- anorexia nervosa
- fad diet
- bulimia nervosa
- eating disorder
- binge eating

## Academic Vocabulary


- expend
- fast

## Graphic Organizer

As you read, identify the three most common eating disorders. Use a graphic organizer like the one shown to help you organize your information.

Eating Disorders



 **Graphic Organizer** Go to this book's Online Learning Center at [glencoe.com](http://glencoe.com) to print this graphic organizer.

## Academic Standards



## English Language Arts

**NCTE 5** Use different writing process elements to communicate effectively.



## Science

**NSES F** Develop understanding of personal and community health.



## Social Studies

**NCSS IV J Individual Development and Identity** Examine factors that contribute to and damage one's mental health and analyze issues related to mental health and behavioral disorders in contemporary society.

**NCSS IA Culture** Analyze and explain the ways groups, societies, and cultures address human needs and concerns.

**NCTE** National Council of Teachers of English

**NCTM** National Council of Teachers of Mathematics

**NSES** National Science Education Standards

**NCSS** National Council for the Social Studies

**K**nowing what is healthful for you and your body is a life-long commitment. Though some teens may use celebrities or sports figures as models for the perfect body, it is important for everyone to accept the body they have and work to make it the best it can be. The best way to keep your body healthy is to eat well and exercise regularly.

## As You Read

**Connect** Think about how you view your own body. Is your perception of your body healthy? Are you comparing yourself too much to others?

## Vocabulary

You can find definitions in the glossary at the back of this book.

# Healthy Body Weight

Are you happy with your weight? Do you think that you are too heavy or too thin? People who maintain a healthy body weight are neither overweight nor underweight. Being overweight can lead to obesity. **Obesity** is a condition in which a person's weight is 20 percent or more above his or her healthy weight. Obese people are at greater risk for such illnesses as diabetes and heart disease.

Being underweight is unhealthy, too. People who are underweight often are not eating enough or properly. This means that they are not getting the nutrients they need.



## Reading Check

**Distinguish** How is being underweight considered unhealthy?



## Build Self-Esteem

**Help Others** Part of developing self-esteem is knowing that you can help others. You feel good about yourself when you offer support to your family or friends, or when you take part in community activities such as visiting the elderly or working with children.



**Healthy Weight** Your healthy body weight depends on your height and body type. *How does being overweight or underweight affect your health?*

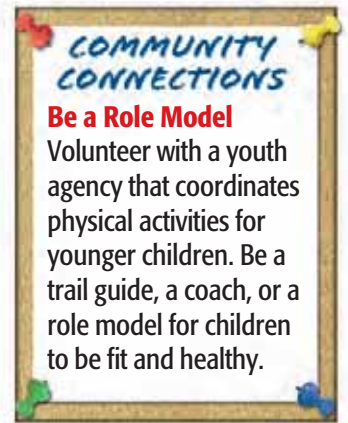
## Healthy and Unhealthy Weight Loss

Think of controlling your weight as a balancing act. You have to balance the calories you get from the foods you eat with the calories you **expend**, or use, for energy. You gain weight when you consume more calories than your body uses. You lose weight when your body uses more calories than you consume. To maintain your weight, you must make sure that the calories you eat equal those you burn as energy.

Many teens think that they need to lose or gain weight. They believe that they have to eat or avoid certain foods or skip meals. It is important to eat a balanced diet. Include foods you enjoy, but limit the amount of fats, oils, and sweets. The most healthful way to lose excess weight is to take in fewer calories and participate in more physical activities.


### Fad Diets

Achieving a healthy body weight through physical activity and a well-balanced diet takes time. Only a balanced meal plan combined with physical activity will work for healthy weight loss or maintenance, and long-term success. If you are overweight or obese, you might be tempted to lose weight quickly by going on a fad diet. A **fad diet** promises quick weight loss through unrealistic or unhealthful means.



## Discover International...

### Fitness



#### Yoga

The word yoga means union in Sanskrit, the language of ancient India where yoga began. The union is the relationship between the mind, body, and spirit. In the western world, yoga is most commonly understood as physical exercises and stretching. However, yoga is more than just stretching. It is about creating balance in the body through developing both strength and flexibility. This is done through the performance of poses or postures, each of which has specific physical benefits.

**Yoga** [ˌyō-gə] a system of exercises, breathing, and meditation for achieving bodily or mental control and well-being.

**NCSS I A Culture** Analyze and explain the ways groups, societies, and cultures address human needs and concerns.



## Balance

**Calories** You can still eat your favorite foods, such as ice cream or potato chips, if you balance physical activity, healthful foods, and calories. *How does exercising affect the amount of calories you can consume?*



Avoid any diet that encourages:

- **Consuming only liquids.** A low-calorie, all-liquid diet does not offer the food energy, fiber, or nutrients that you need.
- **Fasting.** If you **fast**, or stop eating, even for a short period, your body will not get the nutrients and energy needed to function properly. When you starve yourself, your body will use protein for fat instead of muscle, which is dangerous to your health.
- **The use of diet pills.** Diet pills contain drugs that can temporarily suppress, or hold back, your desire to eat. However, the drugs can cause harmful side effects like a rapid heart rate, anxiety, and addiction.

Fad diets are rarely successful in controlling weight. Most people who lose weight on a fad diet gain the weight back and sometimes more. Fad diets are often unbalanced, which means that they do not provide all of the nutrients you need. Some may even cause physical harm.

## Steroids

Steroids are prescription drugs used for specific medical conditions. Steroids should not be used as bodybuilding supplements. Steroids can damage your skin and even cause a heart attack or stroke. Also, steroids can make you irritable and restless.

The most sensible and healthy way to control your weight is to combine a nutritious and balanced meal plan with physical activity. In the long run, you will be more likely to maintain a healthy weight.



**Predict** What are some of the dangers of diet pills?

## Eating Disorders

Some people can develop an **eating disorder**, which is an extreme eating behavior that can lead to depression, anxiety, and even death. Eating disorders are psychological problems that are related to food. Both males and females can suffer from eating disorders. Teens with eating disorders often try to hide them. If left untreated, eating disorders will damage your body.

### Anorexia Nervosa

**Anorexia nervosa** ( $\text{a-n}\ddot{\text{a}}\text{-r}\ddot{\text{e}}\text{k-s}\ddot{\text{e}}\text{-}\ddot{\text{a}}$  ( $\text{n}\ddot{\text{a}}\text{-v}\ddot{\text{o}}\text{-s}\ddot{\text{a}}$ ) is an eating disorder in which a person feels an extreme fear of gaining weight. A person suffering from anorexia nervosa severely limits eating in an attempt to either lose weight or keep from gaining weight. No matter how thin the person becomes, he or she still feels overweight. Dieting turns into self-starvation. Someone suffering from anorexia nervosa may cut food into tiny pieces, chew food for a long time, or constantly rearrange food. An anorexic person also may exercise for dangerously long periods of time. He or she may also spend less time with friends. Anorexia can cause heart disease, stunted growth, brain damage, and even death.

### Target Heart Rate

When exercising, it is important to know how hard you may be working or how much harder you can work safely. Knowing your target heart rate zone is a good way to measure this. By measuring your heart rate during exercise, you can work to keep your heart rate in the correct zone.

**Procedure** During exercise, take your heart rate by putting your index finger to your neck or wrist. Count the beats for 15 seconds. Multiple that number of beats by 4.

**Analysis** Note your level of exertion. Now, try different types of exercise for different lengths of time (for example, walk quickly up a flight of stairs, run for 5 minutes, run for 2 minutes, walk for 10 minutes, do 50 jumping jacks). Find your heart rate during at least five different types of physical activity and then compare them. Is there consistency with your heart rate and how tired you are? If you exercised longer or harder, did your heart rate increase? What is your heart rate range?

**NSES F** Develop understanding of personal and community health.

## Bulimia Nervosa

**Bulimia nervosa** (bü-'lĕ-mĕ-ə (,)nər-'vō-sə) is an eating disorder in which a person eats very large amounts of food, then vomits or uses laxatives to get rid of the eaten food. Bulimia patients often suffer from depression and often become dependent on drugs. Bulimia is a secret ritual and can be hard to recognize. Bulimics usually weigh within 15 pounds of a healthy weight. A bulimic person often has stained teeth and swollen cheeks due to damage to the teeth, gums, and esophagus. Without help to control the disorder, bulimia can lead to kidney problems, heart failure, and even death.


## Binge Eating

**Binge eating** is an eating disorder in which a person eats large quantities of food at one time. A binge eater has a lack of control over his or her eating habits and cannot stop eating. Binge eaters do not exercise excessively. People with a binge eating disorder may be overweight or they may gain and lose weight frequently. Binging often results in weight gain, high blood pressure, heart disease, and diabetes.



**Connect** What health problems can be caused by eating disorders or extreme eating behaviors?



 **Self-Concept and Fitness** You are much more than the size or shape of your body. *What can you do every day to keep feeling good about yourself?*

# Take Care of Yourself

Eating disorders can be caused by low self-esteem, depression, troubled relationships, poor body image, and chemical imbalances in the brain. If you think you or someone you know has an eating disorder, talk to a parent, teacher, or counselor. It almost always takes medical, nutritional, and psychological counseling to defeat an eating disorder. A key part of preventing eating disorders is educating yourself. You need to be aware of the symptoms and be informed about where you can get help. It is also important to remember that your worth as a person is much deeper than your body size.

Remember that you are unique. Do not compare your body type to anyone else. Resist media images of “perfect” body types, such as those of supermodels, movie stars, and professional athletes. There is no such thing as a “perfect” body. Work to maintain a positive attitude about yourself and your life. Be the very best you can be by following a healthy meal plan and enjoying lots of physical activity.

## Section 20.2 After You Read

### Review What You Have Learned

1. **Define** obesity.
2. **Summarize** the relationship between the amount of calories you consume and the amount of physical activity you get.
3. **Name** the three most common eating disorders.
4. **Explain** what you should do if you think someone has an eating disorder.

### Practice Academic Skills



#### English Language Arts

5. Write a letter to a friend whom you think may have an eating disorder. Explain what the signs are and what the long-term effects could be. Encourage him or her to find support and help in dealing with the problem.

**NCTE 5** Use different writing process elements to communicate effectively.



#### Social Studies

6. Choose one of the common eating disorders mentioned in the chapter and research about how it develops, what contributes to its development, and how it is treated. Write an overview of what you discover about the disorder.

**NCSS IV I** Examine factors that contribute to and damage one's mental health and analyze issues related to mental health and behavioral disorders in contemporary society.



**Check Your Answers** Check your answers at this book's Online Learning Center at [glencoe.com](http://glencoe.com).



# Discovering Careers

## Focus on Careers in Health and Fitness



Do you like to help other people be fit and eat well? Have you spent time exploring your own health and fitness? If you answered yes to either of those questions, you might want to consider a future career in health and fitness. The following chart explores several careers in the health and fitness industry.

### Career Activities

#### At School

1 Select three of the careers listed. Research the education, training, and work experience required for each career. Write a summary of your results.

#### At Home

2 Create a log of your family's physical activity for a week. Then talk about how you and your family could improve your health and fitness.

#### At Work

3 Name three ways healthy employees benefit the workplace. Share your findings with your classmates.

#### In the Community

4 Contact and interview someone in your community who works in health and fitness. Ask this person to describe what his or her typical work day is like. Share what you learned with your class.

Learn More Online  [glencoe.com](http://glencoe.com)

**Career Investigations** Go to this book's Online Learning Center for activities and worksheets to help you explore careers.

Job Title	Job Description
<b>Weight-Loss Counselor</b>	Assists people in devising and carrying out a weight-loss plan. Discusses eating habits that encourage good nutrition.
<b>Sports Trainer</b>	Works with athletes and sports teams to support injuries and training challenges for individuals. Creates plans for training to avoid injury.
<b>Exercise Physiologist</b>	Develops exercise programs. Promotes physical fitness. Records patient's heart activity during exercise under physician's supervision. Checks physical condition of client.
<b>Personal Trainer</b>	Develops personalized training programs based on client's goals and aspirations. Works out with clients on regular basis.
<b>Eating Disorders Therapist</b>	Provides individual, group, and family therapy. Treats physical symptoms, psychological issues, social concerns, and nutritional problems. Works with dietitians and medical professionals to develop meal plans and food shopping strategies.



### Chapter Summary

#### Section 20.1 Physical Activity

Wellness is taking positive steps toward your good health, including physical activity. When you are physically fit, you look and feel your best. A healthy, fit body means you take care of yourself. Fitness is the ability to handle daily events in a healthy way. By exercising regularly you can enjoy all the benefits of fitness. Physical activity is necessary if you want to reach and maintain a healthy body weight. There are many activities you can add to your daily routine to get more movement.

#### Section 20.2 Body Weight and Health

People who maintain a healthy body weight are neither overweight nor underweight. You have to balance the calories you eat with the calories you use for energy. The most sensible and healthy way to control your weight is to combine a nutritious and balanced meal plan with physical activity. Some people develop eating disorders, or extreme eating behaviors, that can lead to depression, anxiety, disease, and even death. Work to maintain a positive attitude about yourself and your life.

### Words You Learned

1. Create a fill-in-the-blank sentence for each of these vocabulary terms. The sentence should contain enough information to help determine the missing word.

#### Content Vocabulary

- fitness (p. 445)
- stamina (p. 447)
- aerobic (p. 448)
- obesity (p. 452)
- fad diet (p. 453)
- eating disorder (p. 455)
- anorexia nervosa (p. 455)
- bulimia nervosa (p. 456)
- binge eating (p. 456)

#### Academic Vocabulary

- obtain (p. 447)
- flexible (p. 448)
- expend (p. 453)
- fast (p. 454)

### Review Key Concepts

2. **Explain** how fitness affects your daily activities.
3. **Describe** what is needed to reach and maintain a healthy body weight.
4. **List** the risks associated with obesity.
5. **Explain** the most healthful way to lose excess weight.
6. **Identify** how eating disorders can destroy your health.
7. **Recognize** the causes of eating disorders.

### Critical Thinking

8. **Compare and contrast** how being overweight and underweight affects the body.
9. **Propose** your own plan for balancing diet and exercise.

## Real-World Skills and Applications


### Problem-Solving

10. **Prioritize** For some people, it is often difficult to carve out time for exercise, yet it is something you need to do in order to be healthy. Look at your own daily schedule for a week. Make exercise a priority. Come up with a schedule where exercise is a high priority.

### Interpersonal and Collaborative

11. **Healthful Alternatives** Follow your teacher's directions to form groups. In your group, cut out advertisements for junk food. Then create your own advertisement for a healthful alternative made with fruits or vegetables. Cut out pictures or draw your own. Write your own advertisement to convince people to buy your product. Use descriptive language to explain the benefits, including taste and nutrition. Share your advertisements with the other groups.

### Financial Literacy



12. **Exercise More, Spend Less** Many people decide that the best way to commit to working out on a regular basis is signing up for a gym membership. Health clubs have many advantages: they offer a wide array of exercise classes and state-of-the-art fitness equipment. Many people also like working out in a group setting, and the opportunity to work with personal trainers. However, a gym membership can be very expensive. Think about some of the ways you can get some of the same benefits without purchasing a health club membership. Make a list of five low-cost (or no-cost) ways you can get strength training, cardiovascular training, and/or other fitness activities (like those offered in exercise classes) without signing up at a health club.



13. **Fitness Picnic** Take a group of friends to the park. Fly kites, play baseball, toss a football, run laps, do sit-ups and push-ups, or other simple physical activities. Picnic on delicious yet healthful snacks, such as fresh fruits and vegetables, breads, and cheeses after you have had a good workout. How did you feel after the fitness picnic? How was it better for you than other activities? Share the benefits of the picnic with your class.

14. **Research a Fruit or Vegetable** Choose a fruit or vegetable that you may not know much about. Research its history, how and where it is grown, who eats it, and the ways it can be prepared. Prepare a brief presentation on what you find to the class. Can you find an unusual recipe that incorporates your fruit or vegetable?



15. **Calorie Burning** With permission from your teacher or parents, go online and search for a calorie-burning calculator. Calculate how many calories you can burn doing different types of exercise. Record your findings in your Life Skills Binder and refer to them when you exercise.

## Academic Skills



### English Language Arts

16. **Other Benefits** Physical activity is great for the body, but it also benefits your mental health. It can help improve your perspective, or the way you look at life. Write a short essay to explain the ways physical fitness and good nutrition can improve more than just your physical health.

**NCTE 4** Use written language to communicate effectively.



### Science

17. **Cross Training** Cross training is important aspect of exercising. Using the same muscles over and over again makes your body accustomed to the activity and can leave you open to injury. It is important to do different types of exercise which use different muscle groups in different ways.
- Procedure** List different physical activities and how they work your body's muscles. Consider how you could add variety to your workouts.

**Analysis** Plan a physical fitness program that includes a variety of physical activities for cross training.

**NSES G** Students should develop understanding of science as a human endeavor.



### Mathematics

18. **Fitness Goal** Sheldon is planning to try out for his school's swim team. He does not have a pool at home, and the community pool is closed for repairs. Since jogging is easy and free, he decided to improve his health and stamina by setting a goal of jogging 20 minutes a day. Sheldon has most of the summer to get ready for the tryouts, so he plans to jog every weekday until school starts. If he jogs for 16 minutes on Monday, 30 minutes on Tuesday, 20 minutes on Wednesday, and 14 minutes on Thursday, how long should he jog on Friday to reach his average?

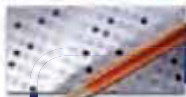
#### Math Concept

#### Calculating Mean

When you have a series of values, calculate the mean, or average, by finding the sum of all of the values, and dividing that sum by the number of values.

**Starting Hint** The sum of five values, divided by 5, equals 20. Write an algebraic equation to find the missing value:  $(16 + 30 + 20 + 14 + x) \div 5 = 20$ . Solve for  $x$ .

**NCTM Algebra** Represent and analyze mathematical situations and structures using algebraic symbols.



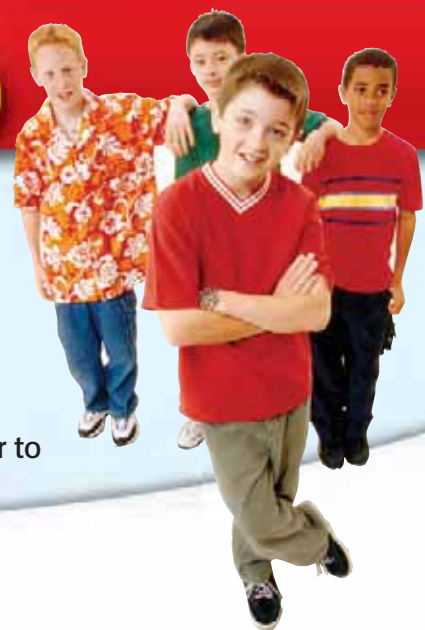
## Standardized Test Practice

### Multiple Choice

Choose the letter of the best answer.

**Test-Taking Tip** Eat well before taking a test. Have a good breakfast or lunch and avoid junk food. Studies show that you need good nutrition to concentrate and perform your best.

19. If I spend 6% of my time doing physical activity over 4000 hours, how much time have I spent?
- 240 hours
  - 600 hours
  - 24 hours
  - 200 hours



## Play with Your Food!

Eating well and exercising are good ways to keep healthy. Your doctor can give you advice to follow for your age and size. Participating in sports and walking are ways to keep active. This project will help you explore ways to stay healthy.



**My Journal** Complete the journal entry from page 417, and refer to it to select and research your play's topic.

### Project Assignment ▼

#### In this project, you will:

- List topics about health issues in your age group.
- Research facts about a health topic of your choice.
- Write a short play about nutrition and exercise.
- Interview an expert on physical fitness.
- Act out your play for your class.
- Include this project in the ninth section of your personal Life Skills binder.

#### Step 1 Select and Research Your Topic

Choose a health issue related to nutrition and fitness. Use the textbook to start your research. Look for more information from magazine articles, health books, or Web sites. Write a summary of your research.

#### Step 2 Write a Play About Taking Care of Your Body

Invent two characters and imagine a scene in which they talk about your topic. Write a dialogue that uses the facts you have researched to make a point. The play should last about two minutes. Use these questions to help you write the dialogue:

- ✓ Are your characters explaining the facts we need to know?
- ✓ Have you picked a situation for the characters that best illustrates the issue?
- ✓ Is the dialogue natural and understandable?
- ✓ Does the ending make a strong point?

#### Step 3 Interview An Expert on Nutrition and Fitness

Read your play to a health expert like a doctor, nurse, nutritionist, or personal trainer. Then ask these questions:

- ✓ Please give an example of how you handle my topic in your job.
- ✓ How effective is the play I wrote?
- ✓ What changes can I make so that I make my point clearly?

Use these interviewing skills when conducting your interview and these writing skills when writing the summary of notes from your interview.

#### Interviewing Skills

- Record interview responses and take notes.
- Listen attentively.

#### Writing Skills

- Use complete sentences.
- Use correct spelling and grammar.



### Step 4 Perform Your Play for Your Class

Use the Life Skills Project Checklist on the right to plan, memorize your lines, and perform your play for the class.

Use these speaking skills when presenting your final report.


#### Speaking Skills

- Speak clearly and concisely.
- Be sensitive to the needs of your audience.
- Use standard English to communicate.

### Step 5 Evaluate Your Presentation

Your project will be evaluated based on:

- ✓ The detail and organization of your research on the health issue you chose.
- ✓ The written dialogue of the play.
- ✓ The impact of your performance and memorization of lines.
- ✓ The summary written from interview notes.
- ✓ Grammar and sentence structure.
- ✓ Presentation to the class.
- ✓ Creativity and neatness.

 **Evaluation Rubric** Go to this book's Online Learning Center at [glencoe.com](http://glencoe.com) for a rubric you can use to evaluate your final project.

## Life Skills Project Checklist

### Research Nutrition and Fitness

- ✓ Gather facts about your chosen topic.
- ✓ Imagine a scene that would demonstrate the important ideas and facts of your topic.
- ✓ Interview a doctor, nutritionist, or other health professional.

### Writing Skills

- ✓ List the facts about your chosen topic.
- ✓ Write the facts into the dialogue of a play.
- ✓ Write a summary from your interview with a health professional.

### Present Your Findings

- ✓ Memorize the lines of your play, and partner with another classmate to perform it.
- ✓ Invite the students of the class to ask any questions they may have. Answer these questions with responses that respect their perspectives.
- ✓ Add this project to your Life Skills binder.

### Academic Skills

- ✓ Conduct research to gather information.
- ✓ Communicate effectively.
- ✓ Organize your presentation so the audience can follow along easily.
- ✓ Thoroughly express your ideas.

**NCTE 4** Use written language to communicate effectively.

**NCTE 12** Use language to accomplish individual purposes.