Chapter 11
Your Body Image

Chapter Preview

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▲ Working with the Photo

The media can influence the way we feel about our bodies. How can what you see in the media affect your self-esteem?
How much do you know about body image?
Take the short quiz on this page. Keep a record of your answers.

HEALTH QUIZ Choose the best answer for each of the following questions:

1. Which of the following statements is true?
   a. It does not matter how much you weigh, as long as you like yourself.
   b. Being realistic about your body is important.
   c. The thinner you are, the better.
   d. Being overweight does not affect your overall health.

2. The best weight for a teen is:
   a. the lowest number of pounds possible.
   b. whatever weight makes the teen happiest.
   c. the weight that fits the teen’s height, gender, and age.
   d. None of the above.

Visit glencoe.com and complete the Chapter 11 crossword puzzle.

Foldables® Study Organizer
Make this Foldable® to help you record what you learn about body weight in Lesson 1. Begin with a plain sheet of 8½” × 11” paper.

1. Fold the sheet of paper in half along the long axis.

2. Turn the paper and fold it into thirds.

3. Unfold and cut the top layer along both fold lines. This makes three tabs.

4. Turn the paper vertically and label the tabs as shown.

Under the appropriate tab of your Foldable®, record definitions and take notes on each term relating to body weight.

Visit glencoe.com and complete the Chapter 11 crossword puzzle.
**Maintaining a Healthy Weight**

**Guide to Reading**

- **Building Vocabulary**
  Try to define the terms below in your own words. As you read, check and revise your definitions.
  - body image (p. 260)
  - appropriate weight (p. 261)
  - body mass index (BMI) (p. 262)
  - overweight (p. 263)
  - underweight (p. 263)

- **Focusing on the Main Ideas**
  In this lesson, you will learn to
  - identify the importance of a healthy body image.
  - explain how eating and physical activity affect weight.
  - describe ways to maintain a healthy weight.

- **Reading Strategy**
  **Identifying Cause and Effect**
  As you read, identify factors that can have an effect on your body image.

- **Foldables® Study Organizer**
  Use the Foldable® on p. 259 as you read this lesson.

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**Quick Write**

Write a paragraph describing what actions you currently take to try and maintain a healthy body weight.

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**Body Image**

A group of teens were sitting in a circle eating lunch at school and talking about their weight. Crystal, who studies ballet and is tall and slender, said she wished she could lose 10 pounds.

Craig had never been very athletic and was a little thin. “Personally, I’d like to look like a bodybuilder,” he said with a laugh.

Have you ever wished you could change something about your body or have you compared yourself to a celebrity or professional athlete? If so, you are not alone. As a teen, your body is going through big changes. As your body changes in your teen years, so do your thoughts and feelings about how you look. The way you see and feel about your body is called your body image.

Sometimes the media seems to suggest that there is one perfect body type. How can this cause teens to develop a distorted body image?
Body Image and Self-Esteem

How you feel about your body can affect your self-esteem. Self-esteem refers to what you value about yourself, both inside and out. If you feel uncomfortable about how your body looks, your self-esteem can be negatively affected.

It is important to understand that the changes your body is going through are normal. Though the media tends to portray females as thin and males as muscular, the real world is very different. People come in all shapes and sizes. It is more important for you to be healthy than to try to look like someone else.

The key to a positive body image and high self-esteem is having an optimistic attitude and a healthy lifestyle. Know what makes you happy, set realistic goals, and spend time with people who respect and appreciate you. Eat well, get plenty of rest and exercise, and avoid comparing yourself to people in the media or to those around you. All these things will help you feel good about yourself and your body.

Reading Check: List What are some of the keys to a positive body image and high self-esteem?

Your Appropriate Weight

Many people who have an unhealthy body image complain about their weight. They think they are too fat or too thin. Is there a “right” weight for every person, and if so, how do you find it?

Everyone has an appropriate weight. This is the weight that is best for your body, and is given as a range. For example, the appropriate weight of a 5-foot, 5-inch female is between 117 and 155 pounds. A range is given because height is not the only factor that affects how much a person should weigh. You also need to consider your gender, age, height, and body build or frame. Your frame is the size of your bone structure. Teens must also consider their growth pattern. During adolescence people grow at different rates.

Academic Vocabulary

gender (JEN der) (noun) whether a living creature is male or female. David wanted to know what gender each of Alicia’s kittens were before he picked one for his sister.
Body Mass Index

You can determine if your weight is in an appropriate range for your age by calculating your body mass index (BMI). This is a measurement that allows you to assess your body size, taking your height and weight into account. The Health Skills Activity above shows how to figure out your BMI.

On Your Own
Complete the steps above to find your own BMI. Is your weight in the appropriate range for someone your age? The BMI has its limitations. For example, it doesn’t take a person’s frame size into account. As a result, people with a stockier build may be considered overweight even if they don’t have a lot of body fat.

Finding Your BMI
To determine your BMI, follow these steps:

1. Multiply your weight by 703. If, for example, you weigh 125 pounds, you would get a result of 87,875. Write the result you get on a sheet of paper.
2. Next multiply your height in inches times itself. Write this result down as well.
3. Finally, divide your answer from Step 1 by your answer from Step 2. If you divide 87,875 by 4,225, you get 20.8. This number is your BMI.
4. Find your BMI on the grid for your gender. Remember, however, that this is only an estimate.

Define What is the body mass index? How is it limited?
Weight Problems

Many teens who compute their BMI will find that they fall within the range of appropriate weight. Some teens will find that their BMI falls above the appropriate range. This means they may be overweight or at risk of being overweight. **Overweight** means *weighing more than what is appropriate for your gender, height, age, body frame, and growth pattern.* Other teens may find that their BMI falls below the appropriate range, meaning they may be underweight. **Underweight** is *weighing less than what is appropriate for your gender, height, age, body frame, and growth pattern.*

**Overweight Teens**

The number of young people who are overweight has doubled in the last two to three decades. Currently one child in five is overweight. This increase is in adolescents, of all ages, genders, and ethnicities.

This trend can be traced to lifestyle factors. These include overeating or eating too many empty-calorie foods, and getting too little physical activity. The extra pounds mean added stress on the heart and lungs. They also mean an increased risk of lifestyle-related illnesses. One such illness, type 2 diabetes, has spread rapidly among young people. At one time, type 2 diabetes showed up almost exclusively in adults. Now, adolescents make up 33–45 percent of new Type 2 diabetes cases today. Most of these teen patients are significantly overweight. Those who are overweight are also at risk of developing heart disease, cancer, and stroke later on in life.

**Underweight Teens**

With all the concern about overweight teens, it is easy to overlook the problem of teens who are underweight. Teens who are too thin lack body fat, which insulates the body and is an important source of energy. Underweight teens may also be undernourished. This means their bodies are not getting enough of the nutrients they need to grow and function normally. The absence of some nutrients, including proteins, makes it hard for the body to fight infection. Underweight teens are also at risk of developing anemia. This is a blood condition caused by a lack of iron in the diet. Anemia can make you feel tired and rundown.

▲ Spending too much time in front of a computer can contribute to weight problems. **What are some physical activities you can participate in to maintain a healthy and balanced lifestyle?**

**Reading Check**

**Explain** What are two factors that have caused a rise in the number of overweight teens?
Chapter 11: Your Body Image

Reaching an Appropriate Weight

The secret to reaching or maintaining a healthful weight is to adjust your “energy equation.” This is the balance between “calories in” (from food) and “calories out” (from physical activity and body processes). A pound of weight equals about 3,500 calories. If you are underweight, you need to take in more calories from food than your body burns off. If you are overweight, you need to burn more calories than you take in. If you want to maintain your weight, you should burn as many calories as you take in. Exercise or other physical activities can help you burn some of the calories you take in from food.

The MyPyramid food guidance system recommends that teens get approximately 60 minutes of physical activity on most days. Calorie needs vary by age, gender, and activity level. Females between the ages of 14 and 18 need approximately 1,800 to 2,400 calories each day. Males in the same age group need approximately 2,200 to 3,200.

**Reading Check**

How do you balance caloric intake with physical activity if you want to gain, lose, or maintain weight?

**Beyond the Energy Equation**

Healthy weight management is more than just counting calories. You need to pay attention to the source of the calories you eat. For example, the average chocolate bar provides 250 calories. A turkey breast sandwich on whole wheat bread has the same number of calories. However, the chocolate bar has very few nutrients. The turkey sandwich, by contrast, provides nutrients from at least two different food groups. Make sure that most of the calories you take in provide nutrients your body needs.

Physical activity can help burn some of the calories you take in from food. Why is it important to balance the calories you take in with the calories your body burns off?
The MyPyramid food guidance system, discussed in Chapter 10, can help you develop a personalized eating plan based on your calorie needs.

**Managing Weight in a Healthy Way**

Both the media and your peers can put pressure on you to look a certain way. This kind of pressure is negative because it is not concerned with what is healthy for you. It is only concerned with achieving an unrealistic ideal, no matter how dangerous. People who need to lose weight should do so gradually by slowly increasing physical activity and eating only as many calories as their bodies need. They should not turn to fad diets, diet pills, smoking, or extreme workout programs that promise fast results. Some of these products may be ineffective and even life threatening.

When it comes to managing your weight in a healthy way, there are no shortcuts. If you need to adjust your weight, talk to your health care provider. He or she can recommend a safe, healthy approach that will help you reach your goal in a reasonable amount of time.

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**Lesson 1 Review**

*Review this lesson for new terms, major headings, and Reading Checks.*

**What I Learned**

1. **Vocabulary** What is the meaning of appropriate weight?
2. **Recall** Why is a healthy body image important?
3. **Identify** What are some healthful ways to reach an appropriate weight?
4. **Explain** What are some unhealthful ways to manage weight? Where does the pressure to look a certain way come from?

**Thinking Critically**

5. **Describe** How can eating and physical activity habits affect weight? What can you do to assure your habits are healthy?

6. **Apply** Imagine that a teen takes in 2,000 calories each day and burns 2,300 calories. Over time, what will happen to the teen’s weight? Explain your answer.

**Applying Health Skills**

7. **Practicing Healthful Behaviors** With a small group, brainstorm good health habits that could affect the energy equation. Make a list of these habits and their impact. Be prepared to share your list with other groups.

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Visit glencoe.com and complete the Interactive Study Guide for Lesson 1.
What Are Eating Disorders?

Patricia’s parents were worried about her. She had been eating almost nothing at mealtime for several weeks and had lost a lot of weight. When her mother tried to talk to her about how little she was eating, Patricia got angry. “Why do you keep bugging me about eating?” she shouted. “Can’t you see how fat I am?” Her mother looked at Patricia in disbelief. The last word anyone would use to describe Patricia was fat. If anything, she seemed too thin.

By thinking she was fat and not wanting to eat, Patricia was showing signs of an eating disorder—an extreme and damaging eating behavior that can lead to sickness and even death. She is one of an estimated 24 million people in this country who have an eating disorder. Many of these people suffer from unrealistic and unhealthy body images.

Eating disorders have little to do with physical hunger. Often, these disorders are brought on by mental/emotional problems, such as depression or low self-esteem. Having an eating disorder places a person at risk for developing severe medical problems. The risk is especially great for teens because their bodies are already undergoing dramatic physical changes.
Binge Eating Disorder

A **binge eating disorder**, which is *compulsive overeating*, is the most common eating disorder. A compulsion is something you feel you cannot control. Binge eaters cannot control their desire to eat, so they compulsively overeat. About 25 million Americans suffer from this disorder.

People with this disorder eat even when they are not hungry. They also eat food in amounts large enough to make them physically uncomfortable. They often eat alone so that others do not see the amount of food they eat. They may also hide food for the same reason. Because of the excessive amounts of food they eat, most compulsive eaters have serious weight problems, and many are obese. **Obese** means *weighing more than 20 percent higher than what is appropriate for their height, age, and body frame.*

The guilt and depression that compulsive eaters feel about their problem can contribute to a low self-esteem and poor body image.

**Reading Check**

**Explain** What can a binge eating disorder lead to?

Anorexia Nervosa

Patricia’s symptoms described in the lesson opener are typical of **anorexia nervosa**. This is *an eating disorder characterized by self-starvation leading to extreme weight loss*. Anorexia nervosa means “nervous loss of appetite” in Latin.

Anorexia is most common among female teens between the ages of 14 and 18, though the disorder can occur in males as well. People with anorexia often have low self-esteem and a poor body image. In an effort to gain control over their lives and bodies, they begin to change their diet. This usually means eating less and less food in an effort to lose weight. They may also exercise a lot. Even when a person with anorexia is dangerously thin, he or she may still see themselves as being overweight.

When the body is deprived of adequate food, a number of serious problems can develop. The person may become significantly underweight. Without proper nutrients, the body cannot grow and repair itself.
in normal ways. For example, bones can become thin and brittle from lack of calcium, and body temperature and blood pressure can drop.

If left untreated, a person with anorexia could die from starvation, heart failure, kidney failure, or other medical complications. The depression that often comes with anorexia can sometimes lead to thoughts of suicide.

**Identify** Name two symptoms of anorexia nervosa.

**Bulimia Nervosa**

Bulimia nervosa is another eating disorder that primarily affects female teens. However, one in ten people with bulimia is male. **Bulimia nervosa** is a condition in which a person eats large amounts of food and then secretly purges. Purging means to get rid of or remove something. People with bulimia purge the food they have eaten by vomiting or taking laxatives. They may also exercise too much in an effort to work off the calories they have eaten.

As with anorexia, people with bulimia are very concerned with losing weight and maintaining strict control of their bodies. They do not usually become extremely thin, however. For this reason it can be hard to tell if a person is suffering from bulimia and needs help. The signs of bulimia are subtle. For example, the person might go into a bathroom immediately after eating a large meal and vomit. He or she may run water to cover the sound of vomiting. Another sign is swollen cheeks caused by vomiting.

Although people with bulimia are not usually at risk of starving to death, the disorder can seriously damage their health in other ways. Stomach acids from frequent vomiting eat away at tooth enamel and injure the mouth and throat. Frequent vomiting can also cause a hormone imbalance, dehydration, damage to the kidneys and liver, and loss of important minerals.

**Describe** What are some health risks of bulimia nervosa?

**Help for People with Eating Disorders**

A person with an eating disorder needs help. Treatment can involve working with a counselor, primary care doctor, and nutritionist. These health care providers can help the person rebuild his or her physical and mental/emotional health. When an eating disorder involves serious medical problems or severe depression, a hospital or special treatment facility may be recommended.
Lesson 2 Review

What I Learned

1. **Vocabulary** What is another name for binge eating disorder?

2. **List** What are two health risks associated with anorexia nervosa?

3. **Identify** What are two signs of bulimia nervosa?

4. **Describe** What kinds of help are available to a person with an eating disorder?

Thinking Critically

5. **Evaluate** In what ways are the symptoms of anorexia and bulimia similar? In what ways are the two disorders different?

6. **Apply** Shauna suspects that her friend Jenna has an eating disorder. Lately, Jenna hardly eats anything and is getting thin. What could Shauna do to help? Explain your answer.

Applying Health Skills

7. **Advocacy** With a group, create a documentary titled “The Truth Behind Eating Disorders.” Reveal facts and statistics you think the average teen may not be aware of. If you have access to a video camera, record your documentary. Otherwise, arrange to perform your documentary live for other classes.
What Does Accessing Information Involve?

Accessing information involves finding reliable information to make healthy choices. When looking at a source of information, ask yourself these questions:

- Is it scientific?
- Does it give more than one point of view?
- Does it agree with other sources?
- Is it trying to sell something?

Model

Read how Allyson used the skill of accessing information to find a nutrient supplement.

At a recent medical checkup, Allyson learned she was underweight. The doctor recommended that she take a nutrient supplement.

Allyson took the following steps to find out which product would be best for her.

- **Read product labels.** Allyson looked at the information panel that listed the ingredients.
- **Consult Internet sources.** Allyson used Web sites ending in .gov, .org, and .edu to look up information on the different products.
- **Get advice from an authority.** Allyson later spoke to a pharmacist who said that the extra fat and sugar in some products were not a good choice for her.
Practice

Read how Amelia uses the skill of accessing information to help her sister make an informed decision about losing weight.

Petra told her younger sister, Amelia, that she wants to try a new diet drink to lose weight. Amelia had just learned how to access valid health information in her health class and recommended that Petra use valid sources to check out the claims made by the diet drink company. Together, they checked out government health agency Web sites (.gov). Amelia also suggested that Petra make an appointment with her doctor before starting any diet.

1. What source of information did Amelia suggest?
2. Why did Amelia suggest Web sites that end in .gov?

Apply

Apply what you have learned about accessing information when completing the activity below.

With a small group, find an ad for a weight-loss or weight-gain product. Make a poster showing the front and back label of the product. Circle any claims or information that you believe are questionable. Below the labels, list an online or print resource you found that provides valid information about the product. Share your poster with the other groups and explain why your resource contains valid information.

Self-Check

- Did we show the front and back labels of our product?
- Did we circle any claim or piece of information that was questionable?
- Did we find a valid source of information about this product?
The heat is on young celebrities to look thinner than ever. Unfortunately, some fans will do almost anything to be just like them.

Pressure to be PERFECT

Surrounded by images of young celebrities who are painfully thin, teens can feel lots of pressure to meet the same standard. Trying hard to look like their idols, some can starve themselves and literally make themselves sick.

“Glamorous teen celebrities seem to have it made,” says Dr. Susan Sabin, an expert on body image problems. “It appears that their lives are trouble-free, happy, and constantly entertaining—and the way to get all that is a perfect, skinny body.”

STARS IN THEIR EYES

Even young celebrities themselves are not immune from the pressure. “I’ve been there, trust me,” says one young pop star who has appeared in a few movies. “When I was younger, I tried to be skinny. There is so much pressure in today’s society to look like the girl on the cover of the magazine. But those photos are airbrushed and have special lighting. The model has gone through two hours of hair and makeup. That just sets expectations really high for girls.”

For teens, aspiring to unrealistic standards can lead to self-doubt, depression, extreme dieting—and in some cases, eating disorders. Dr. Sabin notes that many of her patients idolize one young TV star who is extremely thin. Nobody has said the star has an eating disorder, but Dr. Sabin believes that her very thin image is glamorized and admired.

A GROWING PROBLEM

Because many cases go unreported, the statistics vary, but 5 million or more girls and women in America are estimated to suffer from anorexia and other eating disorders. While anorexia is relatively rare—affecting up to 3.7 percent of the female population at some point in their lifetime—it is the most deadly of all mental diseases. About 5 to 10 percent of anorexics die from it or its complications.

LOOK SMART

Here are few ways to keep you—and your friends—on track when it comes to body image.

• Avoid idealizing celebrities whose bodies appear thinner than normal.
• Remember there is no perfect body shape.
• Don’t worry about clothing sizes. Just find clothes that fit you best.
• If you’re worried that a friend might have an eating disorder, talk to an adult.
Lesson 1  Maintaining a Healthy Weight

Main Idea To maintain a healthy weight, you need to adjust your “energy equation.” This means balancing “calories in” from food with “calories out” from physical activity.

- Teens with a healthy body image are more likely to have positive self-esteem. This in turn affects the way they interact with others.
- To build a healthy body image, teens should keep a positive attitude, eat healthy, exercise, get plenty of rest, set realistic goals, and spend time with people who appreciate them.
- You can determine if your weight is in the appropriate range for your age by calculating your body mass index (BMI).
- The rise in overweight teens can be traced to lifestyle factors like overeating, eating too many empty-calorie foods, and not getting enough physical activity.
- Underweight teens lack body fat. They may be undernourished.
- Managing a healthy weight doesn’t just mean counting calories. You also need to pay attention to the sources of the calories that you eat.

Lesson 2  Eating Disorders

Main Idea An eating disorder is an extreme and damaging eating behavior that can lead to sickness and even death.

- People with eating disorders suffer from unrealistic and unhealthy body images.
- Symptoms of binge eating disorder include eating when not hungry, eating beyond the point of feeling comfortably full, and depression. Health risks from binge eating disorder include obesity.
- Signs of bulimia nervosa include vomiting after meals and swollen cheeks caused by vomiting. Health risks include loss of tooth enamel and injury to the mouth and throat from stomach acids, dehydration, loss of important minerals, hormone imbalances, and damage to the kidneys and liver.
- Symptoms of anorexia nervosa include extreme weight loss and depression. Health risks include starvation, heart and kidney failure, and other medical complications.
- Help for a person with an eating disorder includes treatment by a team of health care providers. If the symptoms are extreme, the patient may be sent to a hospital or a treatment facility.
Lesson 1  
Maintaining a Healthy Weight

1. The way you see and feel about your body is your ________.

2. ________ is the weight range that is best for your body.

3. A formula you can use to determine if your weight is appropriate for you is called ________.

4. ________ means weighing more than what is appropriate for gender, height, age, body frame, and growth pattern.

5. ________ is weighing less than what is appropriate for gender, height, age, body frame, and growth pattern.

Lesson 2  Eating Disorders

On a sheet of paper, write the numbers 6–10. After each number, write the letter of the answer that best completes each statement.

6. In this country, anorexia nervosa affects mostly
   a. female teens.  c. male adults.
   b. male teens.  d. female adults.

7. Losing weight to the point of becoming dangerously thin is a sign of
   a. all eating disorders.
   b. anorexia nervosa.
   c. bulimia nervosa.
   d. binge eating disorder.

8. The condition in which a person secretly eats large amounts of food and then tries to purge is called
   a. obesity.
   b. anorexia nervosa.
   c. bulimia nervosa.
   d. compulsive eating.

9. Obesity is a health risk of which of the following conditions?
   a. anorexia  c. compulsive eating
   b. bulimia  d. None of the above

10. Which of the following health care providers usually treats people with eating disorders?
    a. counselor
    b. primary care doctor
    c. nutritionist
    d. All of the above
Thinking Critically

Using complete sentences, answer the following questions on a sheet of paper.

11. **Apply** A number of teens are invited to a swim party. Kim, one of the teens, says she does not want to be seen in a bathing suit. Imagine you are Kim’s best friend. What might you tell her?

12. **Explain** Why is it often difficult to tell if a person has an eating disorder?

Write About It

13. **Expository Writing** Using online or print resources, research alternate formulas for computing BMI. Then develop your findings into an article.

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Reading

Read the passage and then answer the questions.

Dieting is a very popular pastime in America. Everywhere you look you can find advertisements for diets that claim they will help you “Lose Pounds Fast!” Most diets that make this claim focus on helping dieters lose weight by getting rid of excess water rather than fat. Although water is easy to lose, it is also easy to gain. This often leads to what health experts call “seesaw dieting,” “weight cycling,” or “yo-yo dieting” in which a person gains and loses weight rapidly.

Since part of the weight that many people regain is fat, yo-yo dieting can be unhealthier than being overweight. Any teen who needs to lose weight should do so in a healthy way. This means losing the weight gradually by eating smaller portions and exercising under the supervision of a doctor or other health professional.

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**TEST-TAKING TIP**

Make sure you grasp the main idea of the reading passage as a whole. Make sure that you also understand the main point of each paragraph.

1. Which of the following is **not** a name for “rapid ups and downs in weight”?
   A. seesaw dieting
   B. weight cycling
   C. yo-yo dieting
   D. burning calories

2. Which sentence **best** captures the main point of the second paragraph?
   A. Water is replaced by more body fat.
   B. Yo-yo dieting may be less healthy than being slightly overweight.
   C. Body fat is hard to lose.
   D. Losing weight gets harder the more you diet.