Most teens want to look and feel their best. Every person's natural size is different. There is no one size that is better than another. You may, however, want to achieve a weight that is healthier for you. This may not require gaining or losing weight, but simply changing habits. A healthy weight results when you balance healthful food choices with regular physical activity.

Calories

Energy is the capacity for doing work. The energy you get from food enables you to stay alive, work, play, grow, and be healthy. Calories are units of energy provided by proteins, carbohydrates, and fats. For instance, an orange supplies your body with around 60 calories.

The food choices you make to supply your body with energy are very important. Your body needs many nutrients as well as calories to function properly. When you select nutrient-dense foods, you are ensuring that your body receives essential nutrients along with the calories. Your MyPlate food plan tells you how many calories you need. More importantly, it recommends amounts of nutrient-dense foods you should eat to supply those calories.

Become aware of the amounts of calories and nutrients in the foods you eat by reading food labels. Compare the serving size you eat with the serving size on the label.



- 1. Why might you and your friends have different calorie needs?
- How can you find out how many calories are in your favorite foods?

Energy Balance

If you are neither gaining nor losing weight, you are in energy balance. **Energy balance** occurs when the number of calories you take into your body

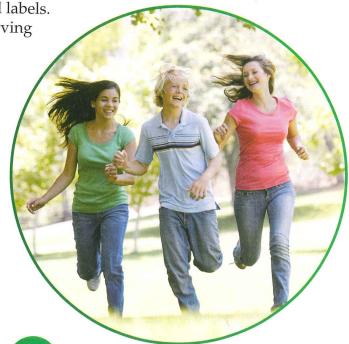
Health Link

Healthful Eating Routines

Maintaining healthy weight involves eating a variety of nutrient-dense foods. The common advice for losing weight is to eat these foods in smaller portions. To gain weight, eating bigger portions and more calories is not the right answer if a lean body is desired. Because muscle tissue must be added with fat tissue, regular exercise is a must. Before trying to change your body weight, be sure to talk with a health professional.

Vocabulary

What is the relationship between calories, energy, and a person's weight? Suggest ways this information can be explained to other family members.



Your body needs more calories to run than it does to watch TV.

Discuss

Can you depend on your appetite to guide you in choosing the kinds of foods you need for good health? for deciding on a second serving? equals the number of calories you use. In other words, calorie input equals calorie output.

When your body uses fewer calories than you take in, you gain weight. The extra calories are turned into fat and stored by your body. When you take in fewer calories than your body needs, you lose weight.

Energy imbalance and weight gain are often the result of eating portions that are too large and foods that provide many calories, but few nutrients. To avoid weight gain, a good rule to follow is *cut down*, *not out*. You can still eat many of the foods you like, but in smaller amounts. Avoid choosing foods high in solid fat and added sugar, which can contribute to energy imbalance. Choose more nutrient-dense foods from the fruits, vegetables, and grains groups, especially whole grains. Be mindful about the foods you eat.

Do not try *fad diets*, which claim you will lose a lot of weight fast. They usually do not include enough of the right kinds of food. They can be harmful to your health. Children and teens are still growing. Restricting calories to lose weight may stunt growth and development.

Your **appetite**, or desire to eat, may not be a good guide to how much food you need. Your appetite is often influenced by your mood and may not guide you to choose nutrient-dense foods. Hunger is your physical need for food. Using hunger as your cue to eat may help you avoid energy imbalance.

To gain weight, you need to take in more calories than your body uses. Eat more nutrient-dense foods from each of the food groups. Try eating several small meals throughout the day. Also, be sure to get plenty of rest.

If you want to change your weight, talk to a dietitian, doctor, or school nurse. Follow the advice you are given. They may suggest you change your eating habits and activity level.



Think Green

Physical Activity Choices

When you develop a physical activity program, think of different ways you can *go green*. For instance, before you decide to join the local gym, consider the type of equipment available and how much electricity it uses. Also, consider the gas you will use to drive to the gym. Going for a walk or a bike ride saves electricity and gas, but still helps you burn calories. What other *green* ideas can you add into your physical activity program?



- 1. Describe what happens when energy intake does not equal energy output.
- **2.** What are fad diets?

Physical Activity

Physical activity affects your energy balance by increasing calorie output. Daily physical activity is important for managing your weight. Walking, bicycling, swimming, and basketball are all good forms of physical activity. You lose weight when you use more calories through physical activity than calories consumed. See 7-10.

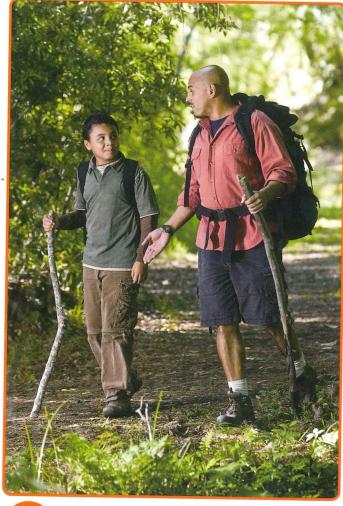
Physical activity can also help you build well-toned muscles. This helps your appearance and makes you feel energetic.

Being active improves how you feel about yourself, reduces stress, and provides a sense of accomplishment. When you feel positive about yourself, you are less likely to make poor food choices.

When you start a new physical activity, begin slowly. Otherwise, you may damage your muscles. Give your muscles time to get used to the new activity. Nutritionists, doctors, or school nurses can help you plan a diet and physical activity program.



- 1. How can regular physical activity help you manage your weight?
- 2. Why should you start slowly when you begin a new physical activity?



Physical activities such as hiking can help families have fun and manage their weight.

Eating Disorders

Some teens, mostly girls, can develop abnormal, unhealthy eating patterns known as eating disorders. Eating disorders are often linked to the mistaken belief that people must look a certain way to be happy. Not everyone can, or should, look like very tall and too-thin models. All body build types can be attractive.

The most common eating disorders are anorexia nervosa, bulimia, and binge eating. Anorexia nervosa is an eating disorder in which the fear of weight gain leads to poor eating patterns, malnutrition, and excessive weight loss. Sometimes exercising too much for the amount of food eaten is part of the disorder. A person with anorexia nervosa often feels overweight even though they really may be underweight for their body build. If anorexia nervosa remains untreated, it can cause severe health problems or even lead to death.

Bulimia is an eating disorder in which people eat large amounts of food and then purge themselves of the food. People with bulimia binge and purge to prevent weight gain. Bingeing means eating large amounts

Note

The percentage of overweight and obese Americans has continued to rise since the 1960's, including young children and teens. The upsurge in obesity increases the risk for diabetes and other chronic diseases, according to the CDC.

Enrich

Invite a physical education teacher or a fitness trainer to share ideas for physical activity that is both fun and healthful.



Writing Link

Recognizing Eating Disorders

In the United States, millions of people struggle with eating disorders. Would you notice if your best friend developed an eating disorder? What would you say to your friend? How could you try to help him or her? Could you talk with one of your friend's parents? Research one of three eating disorders for ideas about how to help people you care about with an eating disorder. Write a one-page narrative describing what your options might be to help your friend.

of food in a short time. *Purging* means ridding the body of food by self-induced vomiting or taking too many laxatives. People with bulimia may often have frequent changes in their weight. Like anorexia nervosa, bulimia can lead to severe health problems and death.

Binge-eating disorder is the frequent out-of-control eating of huge amounts of food with no effort made to prevent weight gain. These people rapidly eat until they are uncomfortable and often develop overweight problems. This eating disorder can also cause heart problems, high blood pressure, or even diabetes.

Eating disorders often develop from emotional stresses and social or physical issues. They are considered diseases, which need unique treatment plans. Early treatment helps improve chances of getting better. A physician, a psychiatrist, and a

dietitian often work together to provide care. The emotional and physical aspects of eating disorders must be treated together.

Discuss

Discuss the following statistics with the class and who adolescents turn to for help. Why do they think the vast majority of those with an eating disorder are female? What does this say about society's expectations? How can girls resist this pressure?

- Anorexia is the third most common chronic illness among adolescents.
- Ninety-five percent of those who have eating disorders are between the ages of twelve and twenty-five.
- Fifty percent of girls between the ages of eleven and thirteen see themselves as overweight.
- Twenty percent of people suffering from anorexia will die prematurely from complications related to their eating disorder, including suicide and heart problems.
- Only one in ten people with eating disorders receive treatment.



- 1. What health problems can develop if eating disorders remain untreated?
- 2. What helps improve chances of recovering from an eating disorder?

Section Summary

- Calories are units of energy in food.
- Energy balance involves consuming and then using the same number of calories. You consume calories from food and beverages and use them to stay healthy and active.
- If you take in more calories than your body needs, you gain weight. If you take in fewer calories than your body needs, you lose weight.
- Eating disorders are life-threatening conditions related to unhealthy eating.
- Nutritionists, doctors, or school nurses can help you plan diet and physical activity programs to manage your weight.

Chapter Summary

Your diet affects how you perform in school, in sports, and at social activities. The food choices you make several times a day are unique and influenced by many factors. Your personal preferences and habits affect your food choices. Your ethnic and cultural heritage influences the foods that are eaten in your home. Your food choices affect your health, fitness, and appearance.

Following the *Dietary Guidelines for Americans* can help you make healthful food choices and decrease your chances of getting certain diseases. The foods and beverages you consume each day provide your body with the nutrients it needs to function. Choose nutrient-dense foods that contain many nutrients and are low in calories. Avoid nutrient-poor foods that provide large amounts of calories, but few nutrients.

MyPlate is based on the *Dietary Guidelines* and can help anyone over the age of two develop a healthful eating plan. MyPlate includes the five basic food groups plus oils, which you should use sparingly. Limit other fats and sweets as well.

Energy balance is key to maintaining a healthy weight. When you consume more calories than you use, you gain weight. When you use more calories through physical activity than you consume, you lose weight.

Choose a type of physical activity you enjoy and will do often. Also, be aware of eating disorders, which can seriously harm your health. Nutritionists, doctors, or school nurses can help you plan healthful diet and physical activity programs.

Note

Reducing the time spent watching television and playing video games is a population-based approach to prevent childhood obesity, according to research studies reported in the Journal of the American Medical Association.

Enrich

Invite a nutritionist or the school nurse to discuss the emotional and physical dangers and repercussions of anorexia nervosa, bulimia, and bingeeating.