#### SECTION SUMMARY

# Cardiovascular Health

#### Guide for Reading

What behaviors can help maintain cardiovascular health? Cis the leading cause of death in the United States. However, people can practice behaviors that decrease their risks of developing cardiovascular problems.

Atherosclerosis is a condition in which an artery wall thickens due to the buildup of fatty materials. One of these materials is a waxy, fatlike substance called **cholesterol**. Atherosclerosis restricts the flow of blood in the arteries.

If atherosclerosis develops in the coronary arteries that supply the heart, the heart muscle receives less blood. This condition may lead to a heart attack. A heart attack occurs when the blood flow to part of the heart muscle is blocked. Cells die in the part of the heart that does not receive blood. This permanently damages the heart.

Treatment for mild atherosclerosis usually includes a low-fat diet and a moderate exercise program. Medication that lowers the levels of cholesterol and fats in the blood may be prescribed. People with severe atherosclerosis may need surgery or other procedures to unclog blocked arteries.

Hypertension is a disorder in which a person's blood pressure is consistently higher than normal. Hypertension makes the heart work harder. It also may damage the walls of the blood vessels over time. Hypertension is sometimes called the "silent killer," because people with hypertension often have no obvious symptoms to warn them.

Hypertension is closely related to atherosclerosis. As the arteries narrow, blood pressure increases. Other factors that increase the risk of hypertension are being overweight and failing to get enough exercise.

For mild hypertension, treatment usually includes regular exercise and careful food choices. People with hypertension need to limit their intake of sodium, which can increase their blood pressure. Sodium is found in salt and in processed foods such as soups and packaged snack foods. For some people, medication is needed to reduce their blood pressure.

To help maintain cardiovascular health, people should exercise regularly; eat a balanced diet that is low in fat, cholesterol, and sodium; and avoid smoking. Exercise strengthens your heart muscle and also helps prevent atherosclerosis. Avoid eating high-fat or high-cholesterol foods. These can cause fatty deposits on artery walls, and also may lead to excessive weight gain. Smokers are more than twice as likely to have a heart attack than are nonsmokers. If smokers quit, their risk of death from cardiovascular disease decreases.

### SECTION 17-4

# REVIEW AND REINFORCE

# Cardiovascular Health

# Understanding Main Ideas

Write each of the given behaviors in the appropriate column on the chart.

**Behaviors:** eating foods high in fat, running, smoking, eating low-sodium foods, playing basketball, eating salty foods, eating foods low in cholesterol, being overweight

Behavior	's That Affect Your Heart
Healthy	Harmful
l.	5.
2.	6.
3.	7.
4.	8.

Answer the following questions on a separate sheet of paper.

- 9. Why is atherosclerosis dangerous?
- 10. Describe how hypertension affects your heart and blood vessels. Why is it called the "silent killer"?
- 11. Explain why hypertension is related to atherosclerosis.

# Building Vocabulary

Write a definition for each of the following terms on the lines below.

- 12. atherosclerosis
- 13. cholesterol
- 14. heart attack
- 15. hypertension

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