

Chapter 38 Digestive and Excretory Systems

Section 38–1 Food and Nutrition (pages 971–977)

This section identifies the nutrients your body needs and explains why water is such an important nutrient.

Food and Energy (page 971)

1. Cells convert the chemical energy in glucose and other molecules into _____.
2. The energy stored in food is measured in units called _____.
3. Is the following sentence true or false? The energy needs of an average-sized teenager are about 3000 Calories. _____
4. Is the following sentence true or false? Your body can extract energy from almost any type of food. _____
5. Besides supplying fuel, what are other important functions of food? _____

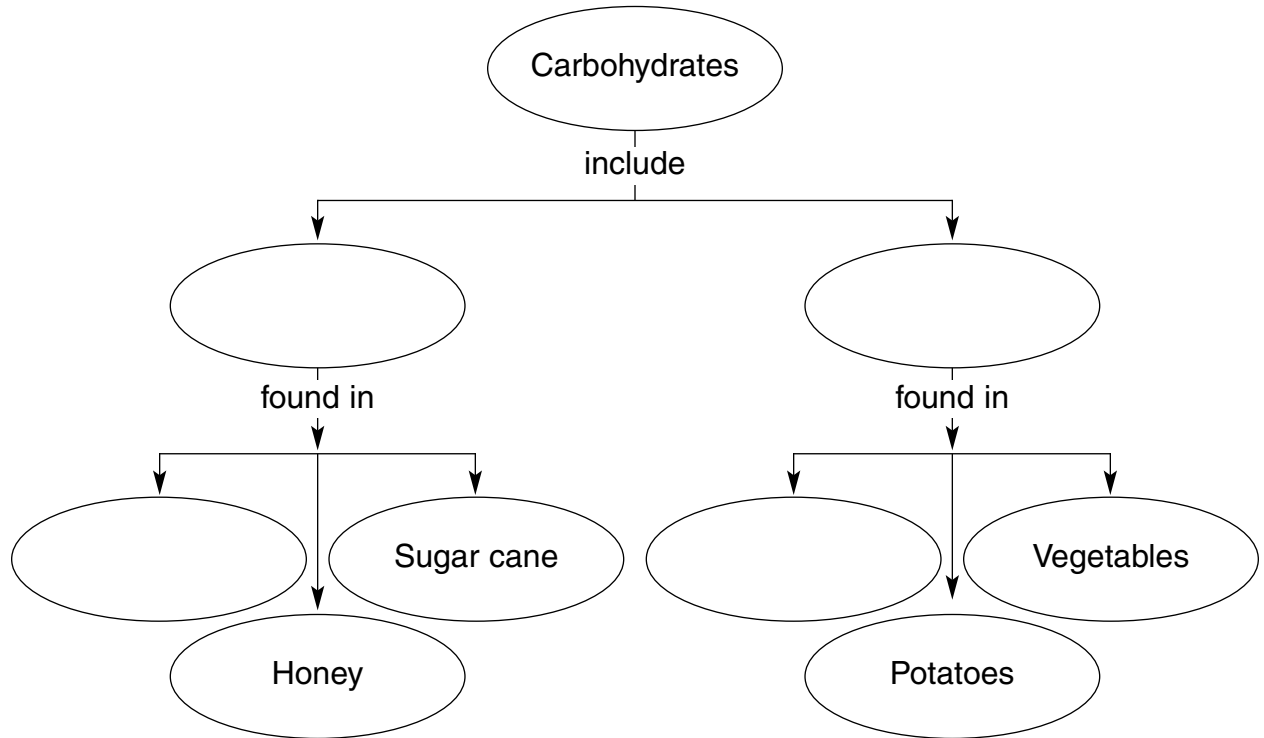
6. What is the science of nutrition? _____

Nutrients (pages 972–975)

7. Substances in food that supply the energy and raw materials your body uses for growth, repair, and maintenance are called _____.
8. List the six nutrients that the body needs.
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____
 - f. _____
9. Circle the letter of each sentence that is true about water as a nutrient.
 - a. Water is the most important of all nutrients.
 - b. Every cell in the human body needs water.
 - c. Many of the body's processes take place in water.
 - d. Water makes up the bulk of bodily fluids including blood.

10. How is water lost from the body? _____

11. If enough water is not taken in to replace what is lost, _____
 can result.
12. Complete the concept map.



13. Why do you need fiber in your diet? _____

14. Circle the letter of each choice that is a function of fat.
- | | |
|---------------------------|------------------------|
| a. Protecting body organs | c. Storing energy |
| b. Insulating the body | d. Transporting oxygen |
15. List four increased health risks associated with a diet high in fat.
- | | |
|----------|----------|
| a. _____ | c. _____ |
| b. _____ | d. _____ |
16. Circle the letter of each choice that is a function of protein.
- | |
|--------------------------------------------------|
| a. Supplying raw materials for growth and repair |
| b. Making up enzymes |
| c. Helping the body absorb certain vitamins |
| d. Producing cell membranes |
17. The eight amino acids that the body is unable to produce are called _____ amino acids.

Match each vitamin with its function.

_____	Vitamin	Function
_____	18. A	a. Preventing cellular damage
_____	19. D	b. Promoting bone growth
_____	20. E	c. Repairing tissues and healing wounds
_____	21. C	d. Promoting growth of skin cells

Match each mineral with a food that supplies it.

_____	Mineral	Food
_____	22. calcium	a. Table salt
_____	23. zinc	b. Dairy products
_____	24. chlorine	c. Eggs
_____	25. iron	d. Seafood

Nutrition and a Balanced Diet (pages 976–977)

26. Label the missing food groups in the Food Guide Pyramid.

