

How Nutrients Become You

3

Food Breakdown

Activity A

Chapter 3

Name _____

Date _____ Period _____

Trace the steps in the process of digestion as food is broken down into simpler substances that can be used by the body. For each step, fill in the blanks with the correct word or words.

Step I: In the Mouth

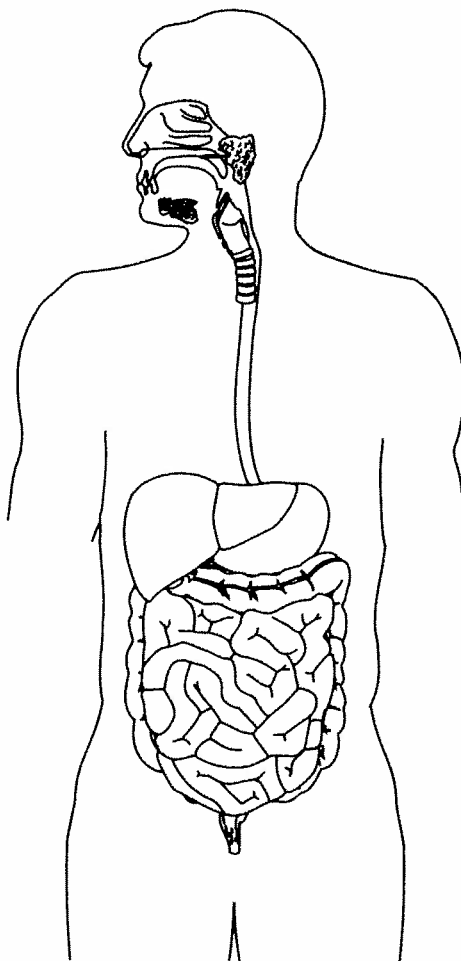
1. Another word for chewing is _____.
2. Good food odors and the thought of food trigger the secretion of _____.
3. The chemical _____ helps break down food starches.

Step III: In the Stomach

7. The stomach produces _____ juices to help digest food.
8. When these juices combine with chewed and swallowed food, the result is _____.
9. The gastric enzyme that begins to digest protein is _____.

Step V: In the Large Intestine

13. Another name for the large intestine is the _____.
14. The main function of the large intestine is to reabsorb _____.
15. Solid wastes that result from digestion are called _____.



Step II: In the Esophagus

4. As you swallow, food passes from the _____ to the _____.
5. The _____ prevents swallowed food from entering the windpipe.
6. The squeezing actions of muscles help move food through the esophagus. This squeezing is known as _____.

Step IV: In the Small Intestine

10. The small intestine has three parts—the _____, the _____, and the _____.
Here, about 95 percent of digestion occurs.
11. The pancreas produces digestive _____ that break down fats, carbohydrates, and proteins.
12. The liver produces a digestive juice called _____ which aids digestion of fats.

What Could Be Wrong?

Activity B

Chapter 3

Name _____

Date _____ Period _____

In each of the cases below, someone has a gastrointestinal problem. For each case, check each factor that could be affecting digestion and absorption and answer the questions.

Ruth phoned the doctor when her baby, Erica, began vomiting and developed diarrhea. The doctor asked if she had noticed any other symptoms. Then Ruth remembered the skin rash she had seen earlier when she bathed Erica. The doctor asked if Ruth had introduced any new foods into Erica's diet recently. Ruth told the doctor she had fed Erica creamed spinach for the first time that day.

1. _____ Eating habits _____ Emotions _____ Food allergy/intolerance _____ Physical activity
2. What could be wrong? _____

3. What should she do? _____

Charla was worried about her calculus grade. She procrastinated about studying for the next test. The night before the test, she studied until 3:00 a.m. She awoke at 7:15 a.m., grabbed a doughnut on the run, and barely made it to class by 8:00. About 45 minutes and four pages of problems later, her stomach twinges had turned into severe pains.

4. _____ Eating habits _____ Emotions _____ Food allergy/intolerance _____ Physical activity
5. What could be wrong? _____

6. What should she do? _____

Since he had broken his leg, Derrick hadn't been able to run or play basketball. He was also suffering from chronic indigestion. Derrick couldn't figure out what was causing it. He was eating basically the same amounts of the same foods as before.

7. _____ Eating habits _____ Emotions _____ Food allergy/intolerance _____ Physical activity
8. What could be wrong? _____

9. What should he do? _____

Lucas had been eating out a lot lately. Every day for a week, he had a hamburger, fries, and a milkshake for lunch. He rushed to eat so he could get back to school before sixth period. After each of these meals, Lucas felt stuffed and his stomach was upset.

10. _____ Eating habits _____ Emotions _____ Food allergy/intolerance _____ Physical activity
11. What could be wrong? _____

12. What should he do? _____
