

Chapter 02

1. A nutrient or other substance must pass through the cells of the digestive tract wall before it actually enters the body.
- True
 - False

ANSWER: True

POINTS: 1

DIFFICULTY: Bloom's: Remember

REFERENCES: 5.1

QUESTION TYPE: True / False

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:07 AM

DATE MODIFIED: 3/11/2015 4:11 AM

2. Digestion is completed in the large intestine.

- True
- False

ANSWER: False

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: True / False

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:12 AM

DATE MODIFIED: 3/11/2015 4:13 AM

3. Segmentation propels or pushes food through the GI tract, while peristalsis mixes the food, with a more gradual pushing motion.

- True
- False

ANSWER: False

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: True / False

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:14 AM

DATE MODIFIED: 3/11/2015 4:16 AM

4. The mouth initiates the liquefying process to reduce the food to a coarse mash suitable for swallowing.

- True

Chapter 02

b. False

ANSWER: True

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: True / False

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:17 AM

DATE MODIFIED: 3/11/2015 4:18 AM

5. Of all the organs in the GI tract, the small intestine has the thickest walls and strongest muscles.

a. True

b. False

ANSWER: False

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: True / False

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:20 AM

DATE MODIFIED: 3/11/2015 4:21 AM

6. Saliva protects tooth surfaces and the linings of the mouth, esophagus, and stomach from attack by molecules that might be harmful.

a. True

b. False

ANSWER: True

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: True / False

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 4:21 AM

DATE MODIFIED: 3/11/2015 4:27 AM

7. Pepsin cannot function in the strong acidic environment of the stomach.

a. True

b. False

ANSWER: False

Chapter 02

POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: True / False
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 4:23 AM
DATE MODIFIED: 3/11/2015 4:28 AM

8. Drinking plenty of water in conjunction with eating foods high in fiber supplies fluid for the fiber to take up, thus relieving constipation.

- a. True
- b. False

ANSWER: True
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: True / False
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 4:25 AM
DATE MODIFIED: 3/11/2015 4:26 AM

9. Some partially digested nutrients can be caught in the microvilli, but they cannot be further digested.

- a. True
- b. False

ANSWER: False
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.3
QUESTION TYPE: True / False
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.
DATE CREATED: 3/11/2015 4:29 AM
DATE MODIFIED: 3/11/2015 4:30 AM

10. People should not eat certain food combinations at the same meal because the digestive system cannot handle more than one task at a time.

- a. True
- b. False

ANSWER: False
POINTS: 1

Chapter 02

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.3

QUESTION TYPE: True / False

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.

DATE CREATED: 3/11/2015 4:31 AM

DATE MODIFIED: 3/11/2015 4:32 AM

11. Another name for the digestive tract is the:

- a. urinary tract.
- b. exocrine system.
- c. gastrointestinal tract.
- d. muscular system.
- e. bolus reduction system.

ANSWER: c

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:33 AM

DATE MODIFIED: 9/30/2018 5:04 PM

12. The digestive tract begins at the ____ and ends at the ____.

- a. stomach; large intestine
- b. pharynx; rectum
- c. lower esophageal sphincter; rectum
- d. mouth; anus
- e. tongue; renal glands

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:35 AM

DATE MODIFIED: 3/11/2015 4:41 AM

13. A bolus is a(n):

- a. sphincter muscle separating the stomach from the small intestine.

Chapter 02

- b. portion of food swallowed at one time.
- c. enzyme that hydrolyzes starch.
- d. portion of partially digested food expelled by the stomach into the duodenum.
- e. small, indigestible portion of food that can get stuck in the large intestine.

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.
DATE CREATED: 3/11/2015 4:42 AM
DATE MODIFIED: 9/30/2018 5:04 PM

14. The ____ is formed in the mouth.

- a. bile
- b. bolus
- c. chyme
- d. villus
- e. sphincter

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.
DATE CREATED: 3/11/2015 4:44 AM
DATE MODIFIED: 3/11/2015 4:47 AM

15. The ____ prevents food from entering the lungs.

- a. lower esophageal sphincter
- b. pharynx
- c. ileocecal valve
- d. epiglottis
- e. esophagus

ANSWER: d
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False

Chapter 02

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:50 AM

DATE MODIFIED: 3/11/2015 4:53 AM

16. The stomach empties into the:

- a. ileum.
- b. cecum.
- c. jejunum.
- d. duodenum.
- e. gallbladder.

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:53 AM

DATE MODIFIED: 9/30/2018 5:05 PM

17. Chyme is a(n):

- a. semiliquid mass of partially digested food.
- b. portion of food swallowed at one time.
- c. enzyme in the stomach needed for the digestion of protein.
- d. esophageal secretion.
- e. digesting liquid, similar to pepsin.

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.1

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 3/11/2015 4:55 AM

DATE MODIFIED: 9/30/2018 5:05 PM

18. Two organs that secrete digestive juices into the small intestine are the ____ and the ____.

- a. gallbladder; pancreas
- b. pancreas; liver
- c. gallbladder; liver
- d. duodenum; pancreas
- e. appendix; prostate

Chapter 02

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.
DATE CREATED: 3/11/2015 4:58 AM
DATE MODIFIED: 3/11/2015 5:00 AM

19. The movement of chyme from the stomach into the small intestine is regulated by the:
- a. pancreas.
 - b. pyloric sphincter.
 - c. ileocecal valve.
 - d. duodenum.
 - e. epiglottis.

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.
DATE CREATED: 3/11/2015 5:00 AM
DATE MODIFIED: 9/30/2018 5:05 PM

20. Immediately before passing into the large intestine, the food mass must pass through the:
- a. pyloric sphincter.
 - b. lower esophageal sphincter.
 - c. ileocecal valve.
 - d. bolus.
 - e. pancreas.

ANSWER: c
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.
DATE CREATED: 3/11/2015 5:04 AM
DATE MODIFIED: 9/30/2018 5:05 PM

Chapter 02

21. "Peristalsis" is a term that refers to the:
- circulation of blood in the blood vessels.
 - absorption of food in the intestines.
 - mixing and moving of food through the lymphatic system.
 - action of the involuntary muscles of the digestive tract.
 - breakdown of food in the stomach.

ANSWER: d
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.
DATE CREATED: 3/11/2015 5:07 AM
DATE MODIFIED: 9/30/2018 5:06 PM

22. Involuntary muscle contractions move food through the intestinal tract. The movement that forces the contents back a few inches before pushing it forward again is called:
- segmentation.
 - rotation.
 - peristalsis.
 - liquefaction.
 - digestion.

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.1
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.
DATE CREATED: 3/11/2015 5:14 AM
DATE MODIFIED: 9/30/2018 5:06 PM

23. Enzymes:
- facilitate chemical reactions.
 - draw water into the small intestine.
 - are present in all parts of the GI tract.
 - encourage bacterial growth.
 - discourage water removal by the duodenum.

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand

Chapter 02

REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 5:24 AM
DATE MODIFIED: 9/30/2018 5:07 PM

24. Which enzyme breaks down starch in the mouth?

- a. carbohydrase
- b. lipase
- c. salivary amylase
- d. gastric protease
- e. salivary chymylase

ANSWER: c
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 5:33 AM
DATE MODIFIED: 3/11/2015 5:36 AM

25. The products of amylase digestion in the mouth are:

- a. proteins.
- b. monosaccharides and lactose.
- c. polysaccharides and maltose.
- d. polysaccharides and sucrose.
- e. lipids and proteins.

ANSWER: c
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 6:31 AM
DATE MODIFIED: 9/30/2018 5:07 PM

26. Which substance is not found in gastric juice?

- a. water
- b. lipase

Chapter 02

- c. chylomicrons
- d. hydrochloric acid
- e. pepsin

ANSWER: c
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 6:34 AM
DATE MODIFIED: 3/11/2015 6:36 AM

27. The normal pH of the stomach is:
- a. very acidic.
 - b. slightly acidic.
 - c. neutral.
 - d. slightly alkaline.
 - e. strongly alkaline.

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 6:36 AM
DATE MODIFIED: 9/30/2018 5:07 PM

28. Which organ contributes juices to the GI tract during digestion?
- a. mesenchyme
 - b. colon
 - c. renal glands
 - d. pancreas
 - e. esophagus

ANSWER: d
POINTS: 1
DIFFICULTY: Bloom's: Analyze
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive

Chapter 02

secretions.

DATE CREATED: 3/11/2015 6:38 AM

DATE MODIFIED: 3/11/2015 6:40 AM

29. The function of mucus in the stomach is to:

- a. neutralize stomach acid.
- b. activate pepsinogen to pepsin.
- c. protect stomach cells from gastric juices.
- d. emulsify fats.
- e. denature proteins.

ANSWER: c

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 6:40 AM

DATE MODIFIED: 9/30/2018 5:08 PM

30. The major digestive work in the stomach is the initial breakdown of:

- a. starch.
- b. proteins.
- c. fat.
- d. vitamins.
- e. minerals.

ANSWER: b

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 6:43 AM

DATE MODIFIED: 9/30/2018 5:08 PM

31. In addition to hydrochloric acid, the stomach cells also secrete:

- a. mucus.
- b. bile.
- c. amylase.
- d. lipoproteins.
- e. lactase.

Chapter 02

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 6:46 AM
DATE MODIFIED: 9/30/2018 5:08 PM

32. The major digestive enzyme secreted by the stomach is:
- a. amylase.
 - b. lipase.
 - c. pepsin.
 - d. disaccharidase.
 - e. sucrase.

ANSWER: c
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 6:49 AM
DATE MODIFIED: 9/30/2018 5:08 PM

33. The nutrients that are digested in the small intestine are ____.
- a. carbohydrate, fat, and protein
 - b. fat, water, and fiber
 - c. protein, vitamins, and fiber
 - d. water, fiber, and minerals
 - e. carbohydrate, fiber, and minerals

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 6:53 AM
DATE MODIFIED: 3/11/2015 6:56 AM

Chapter 02

34. The digestion of proteins begins in the ____ and ends in the ____.
- a. stomach; pancreas
 - b. pancreas; small intestine
 - c. stomach; small intestine
 - d. small intestine; liver
 - e. mouth; liver

ANSWER: c

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 6:56 AM

DATE MODIFIED: 3/11/2015 6:59 AM

35. Which organ is the primary source of digestive enzymes?
- a. pancreas
 - b. gallbladder
 - c. small intestine
 - d. liver
 - e. spleen

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 7:12 AM

DATE MODIFIED: 3/11/2015 7:14 AM

36. After the pancreatic juices have mixed with chyme in the intestine, the resulting mixture is:
- a. very acidic.
 - b. slightly acidic.
 - c. strongly alkaline.
 - d. slightly alkaline.
 - e. very basic.

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

Chapter 02

QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:14 AM
DATE MODIFIED: 9/30/2018 5:09 PM

37. The liver:
- a. reabsorbs water and salts.
 - b. makes bile.
 - c. churns food to chyme.
 - d. performs enzymatic digestion.
 - e. shunts bloods away from the stomach during digestion.

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:17 AM
DATE MODIFIED: 9/30/2018 5:09 PM

38. The main function of bile is to:
- a. emulsify fats.
 - b. stimulate the activity of protein digestive enzymes.
 - c. neutralize the intestinal contents.
 - d. decrease the acidity of the contents of the stomach.
 - e. increase the acidity of the contents of the stomach.

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:19 AM
DATE MODIFIED: 9/30/2018 5:09 PM

39. If the gallbladder becomes diseased, the digestion of ____ can become compromised.
- a. fat
 - b. protein
 - c. carbohydrate

Chapter 02

- d. fiber
- e. minerals

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Apply
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:21 AM
DATE MODIFIED: 3/11/2015 7:23 AM

40. The gallbladder:
- a. reabsorbs water and salts.
 - b. churns food to chyme.
 - c. performs enzymatic digestion.
 - d. stores bile.
 - e. produces gall stones that aid in the digestion of fiber.

ANSWER: d
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:24 AM
DATE MODIFIED: 9/30/2018 5:10 PM

41. A component of pancreatic juice that functions to neutralize acidic chyme as it enters the small intestine is called:
- a. bile.
 - b. a bolus.
 - c. an emulsifier.
 - d. intestinal flora.
 - e. bicarbonate.

ANSWER: e
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

Chapter 02

DATE CREATED: 3/11/2015 7:27 AM

DATE MODIFIED: 9/30/2018 5:10 PM

42. Which substance contains no digestive enzymes?

- a. saliva
- b. gastric juice
- c. intestinal juice
- d. bile
- e. pancreatic juice

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 7:31 AM

DATE MODIFIED: 3/11/2015 7:33 AM

43. Which nutrient takes the longest to digest?

- a. fat
- b. sugar
- c. vitamin C
- d. iron
- e. magnesium

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Apply

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 7:34 AM

DATE MODIFIED: 3/11/2015 7:36 AM

44. Fats present in the GI tract:

- a. slow down the process of digestion and absorption.
- b. cause difficulty in digestion.
- c. stimulate and hasten digestion and absorption.
- d. are carriers of thiamin, riboflavin, and niacin.
- e. stimulate the absorption of minerals.

ANSWER: a

Chapter 02

POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:38 AM
DATE MODIFIED: 9/30/2018 5:10 PM

45. Which food would be digested the slowest?
- a. a piece of toast with strawberry jam
 - b. a grilled steak
 - c. a green salad with low-fat salad dressing
 - d. a cup of green beans
 - e. a cup of yams

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Apply
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:41 AM
DATE MODIFIED: 3/11/2015 7:43 AM

46. Which food would be digested most quickly?
- a. sugar cookies
 - b. peanut butter sandwich and milk
 - c. stew and cornbread
 - d. hamburger
 - e. milkshake

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Apply
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 7:45 AM
DATE MODIFIED: 3/11/2015 7:46 AM

47. Which food would be digested most quickly?

Chapter 02

- a. a scoop of lemon sherbet
- b. an apple
- c. a baked potato with sour cream
- d. a piece of cheese on a cracker
- e. peanut butter on celery

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Apply

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 7:51 AM

DATE MODIFIED: 3/11/2015 7:52 AM

48. Which nutrients must be broken down in order to be absorbed?

- a. vitamins, minerals, and water
- b. carbohydrate, vitamins, and minerals
- c. fat, protein, and minerals
- d. carbohydrate, protein, and fat
- e. carbohydrate, protein, and vitamins

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 7:53 AM

DATE MODIFIED: 3/11/2015 7:55 AM

49. In the GI tract, bacteria produce:

- a. amylase.
- b. pepsin.
- c. mucus.
- d. vitamin K.
- e. bile.

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

Chapter 02

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 7:56 AM

DATE MODIFIED: 9/30/2018 5:11 PM

50. Fiber functions to:

- a. aid in the absorption of vitamins.
- b. produce bacteria in the small intestine.
- c. stimulate the GI tract muscles.
- d. stimulate the absorption of nutrients.
- e. produce chyme.

ANSWER: c

POINTS: 1

DIFFICULTY: Bloom's: Remember

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 7:59 AM

DATE MODIFIED: 9/30/2018 5:18 PM

51. A benefit of fiber is that it:

- a. promotes mineral absorption.
- b. aids in keeping stools soft.
- c. inhibits peristalsis.
- d. keeps individual foods from getting mixed together.
- e. speeds excretion of toxins.

ANSWER: b

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.2

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.

DATE CREATED: 3/11/2015 8:06 AM

DATE MODIFIED: 9/30/2018 5:21 PM

52. Once the digestive process is complete, the colon retrieves _____, which the body must recycle.

- a. water and dissolved salts
- b. iron and water
- c. protein and sodium
- d. water and fiber

Chapter 02

e. urea and bile

ANSWER: a
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.2
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/11/2015 8:12 AM
DATE MODIFIED: 3/11/2015 8:14 AM

53. The primary site of nutrient absorption is the:

- a. stomach.
- b. pancreas.
- c. small intestine.
- d. large intestine.
- e. liver.

ANSWER: c
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.3
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.
DATE CREATED: 3/11/2015 8:14 AM
DATE MODIFIED: 9/30/2018 5:21 PM

54. Villi are found in the:

- a. esophagus.
- b. stomach.
- c. small intestine.
- d. large intestine.
- e. colon.

ANSWER: c
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.3
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.
DATE CREATED: 3/11/2015 8:16 AM

Chapter 02

DATE MODIFIED: 9/30/2018 5:21 PM

55. The microscopic hairs that cover the surface of each cell lining the small intestine are called:

- a. intestinal folds.
- b. villi.
- c. microvilli.
- d. lymphatics.
- e. microcilia.

ANSWER: c

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.3

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.

DATE CREATED: 3/11/2015 8:26 AM

DATE MODIFIED: 9/30/2018 5:22 PM

56. Which nutrient(s) is/are absorbed into the lymphatic system?

- a. fat-soluble vitamins
- b. water
- c. amino acids
- d. glucose
- e. glucosamine

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.3

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.

DATE CREATED: 3/11/2015 8:29 AM

DATE MODIFIED: 3/11/2015 8:30 AM

57. After absorption, the water-soluble nutrients are released directly into the:

- a. bloodstream.
- b. kidneys.
- c. liver.
- d. lymph.
- e. nephrons.

ANSWER: a

POINTS: 1

Chapter 02

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.3

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.

DATE CREATED: 3/11/2015 8:30 AM

DATE MODIFIED: 9/30/2018 5:22 PM

58. After absorption, the larger fats and fat-soluble vitamins are first released into the ____ transport system.

- a. excretory
- b. mesentery
- c. vascular
- d. lymphatic
- e. digestible

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.3

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.3 - Describe the anatomical details of the GI tract and the features and activities of intestinal cells that facilitate nutrient absorption.

DATE CREATED: 3/11/2015 8:32 AM

DATE MODIFIED: 3/11/2015 8:34 AM

59. After digestion, lipids are packaged for transport as lipoproteins known as:

- a. HDL.
- b. VLDL.
- c. LDL.
- d. chylomicrons.
- e. triglycerides.

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.4

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.

DATE CREATED: 3/11/2015 8:35 AM

DATE MODIFIED: 9/30/2018 5:22 PM

60. Which substance is not found in a chylomicron?

- a. phospholipid

Chapter 02

- b. protein
- c. triglyceride
- d. water-soluble vitamins
- e. cholesterol

ANSWER: d
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.4
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.
DATE CREATED: 3/11/2015 8:37 AM
DATE MODIFIED: 3/11/2015 8:39 AM

61. The lymphatic system:
- a. contains fluid with the same composition as blood.
 - b. eventually drains into the blood circulatory system.
 - c. carries chylomicrons to the intestines.
 - d. is where metabolism of nutrients takes place.
 - e. drains directly into the appendix.

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.4
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.
DATE CREATED: 3/11/2015 8:39 AM
DATE MODIFIED: 9/30/2018 5:23 PM

62. When nutrients enter the blood vessels from the small intestine, they are first transported to the:
- a. kidney.
 - b. liver.
 - c. cells throughout the body.
 - d. thoracic duct.
 - e. spleen.

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.4
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False

Chapter 02

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.

DATE CREATED: 3/11/2015 8:41 AM

DATE MODIFIED: 9/30/2018 5:24 PM

63. The ____ is the body's major metabolic organ, serving as a large chemistry lab and creating substances necessary for life.

- a. pancreas
- b. small intestine
- c. gallbladder
- d. liver
- e. thyroid

ANSWER: d

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.4

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.

DATE CREATED: 3/11/2015 8:43 AM

DATE MODIFIED: 8/12/2018 2:33 PM

64. Elevated LDL concentrations are associated with a high risk of heart disease because they:

- a. transport cholesterol and triglycerides from the liver to the tissues.
- b. carry excessive amounts of fat that is deposited around the heart.
- c. encourage high levels of iron in the blood.
- d. take excess cholesterol back to the liver, which increases the production of cholesterol.
- e. transport cholesterol and triglycerides away from the liver.

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.4

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.

DATE CREATED: 3/11/2015 8:45 AM

DATE MODIFIED: 9/30/2018 5:24 PM

65. Elevated HDL concentrations are associated with a low risk of heart disease because they:

- a. transport newly absorbed lipids from intestinal cells to the rest of the body.
- b. carry cholesterol and triglycerides from the liver to the rest of the body.
- c. carry lipids around in the blood more than LDL.
- d. take excess cholesterol and phospholipids from the tissues and return them to the liver.

Chapter 02

e. take excess cholesterol and phospholipids to the tissues and away from the liver.

ANSWER: d
POINTS: 1
DIFFICULTY: Bloom's: Apply
REFERENCES: 5.4
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.
DATE CREATED: 3/11/2015 8:48 AM
DATE MODIFIED: 9/30/2018 5:25 PM

66. The lipoprotein that contains the greatest proportion of triglycerides is the:

- a. HDL.
- b. LDL.
- c. VLDL.
- d. chylomicron.
- e. lymph.

ANSWER: d
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.4
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.
DATE CREATED: 3/11/2015 8:50 AM
DATE MODIFIED: 9/30/2018 5:25 PM

67. Which factor is most instrumental to the optimal health and performance of the digestive system?

- a. bicarbonate
- b. adequate sleep
- c. the glycemic index
- d. hepatic shunting
- e. enzyme supplements

ANSWER: b
POINTS: 1
DIFFICULTY: Bloom's: Understand
REFERENCES: 5.4
QUESTION TYPE: Multiple Choice
HAS VARIABLES: False
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.
DATE CREATED: 3/11/2015 8:52 AM

Chapter 02

DATE MODIFIED: 3/11/2015 8:54 AM

68. Which item(s) can cause a foodborne infection?

- a. foods containing toxin-producing microbes
- b. *Clostridium botulinum*
- c. *Campylobacter*
- d. *Staphylococcus aureus*
- e. too much magnesium

ANSWER: c

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.5

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED: 3/11/2015 8:55 AM

DATE MODIFIED: 8/12/2018 2:38 PM

69. To prevent bacterial growth, cooked foods should be kept at ____° F or higher until served.

- a. 40
- b. 140
- c. 165
- d. 200
- e. 100

ANSWER: b

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.5

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED: 3/11/2015 8:58 AM

DATE MODIFIED: 3/11/2015 9:01 AM

70. Which recommendation is appropriate for preventing foodborne illnesses?

- a. Fresh produce should be washed before it is eaten.
- b. Only new sponges and towels should be used in the kitchen.
- c. Leftovers can safely be covered and left at room temperature until the next meal.
- d. Meats should be marinated at room temperature.
- e. Vegetables should be cooked and never eaten raw.

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Apply

REFERENCES: 5.5

Chapter 02

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED: 3/11/2015 9:01 AM

DATE MODIFIED: 3/11/2015 9:03 AM

71. Cold food should be stored at ____ or less.

- a. 40° F
- b. 55° F
- c. 80° F
- d. 140° F
- e. 100° F

ANSWER: a

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.5

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED: 3/11/2015 9:04 AM

DATE MODIFIED: 3/11/2015 9:06 AM

72. Leftovers should be eaten within ____ days.

- a. 5-7
- b. 3-4
- c. 2-3
- d. 1-2
- e. 8-10

ANSWER: b

POINTS: 1

DIFFICULTY: Bloom's: Understand

REFERENCES: 5.5

QUESTION TYPE: Multiple Choice

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED: 3/11/2015 9:06 AM

DATE MODIFIED: 3/11/2015 9:08 AM

Match each nutrition term with the appropriate definition.

- a. the oral cavity containing the tongue and teeth
- b. the passageway leading from the nose and mouth to the larynx and esophagus, respectively
- c. a cartilage structure in the throat that prevents fluid or food from entering the trachea when a person swallows
- d. the passageway from the mouth and nose to the lungs
- e. the conduit from the mouth to the stomach

Chapter 02

- f. the sphincter muscle at the junction between the esophagus and the stomach
- g. the sphincter muscle separating the stomach from the small intestine
- h. the organ that stores and concentrates bile
- i. a gland that secretes enzymes and digestive juices into the duodenum
- j. a 10-foot length of small-diameter (1-inch diameter) intestine that is the major site of digestion of food and absorption of nutrients
- k. the top portion of the small intestine
- l. the first two-fifths of the small intestine beyond the duodenum
- m. the last segment of the small intestine
- n. the sphincter muscle separating the small and large intestines
- o. the last portion of the intestine, which absorbs water
- p. a narrow blind sac extending from the beginning of the large intestine; stores lymphocytes
- q. the muscular terminal part of the GI tract extending from the sigmoid colon to the anus
- r. the terminal sphincter muscle of the GI tract

DIFFICULTY: Bloom's: Remember

REFERENCES: 5.1

QUESTION TYPE: Matching

HAS VARIABLES: False

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED: 10/7/2015 4:05 AM

DATE MODIFIED: 2/4/2019 4:42 PM

73. anus

ANSWER: r

POINTS: 1

74. appendix

ANSWER: p

POINTS: 1

75. duodenum

ANSWER: k

POINTS: 1

76. epiglottis

ANSWER: c

POINTS: 1

77. esophagus

ANSWER: e

POINTS: 1

78. gallbladder

ANSWER: h

POINTS: 1

Chapter 02

79. ileocecal valve

ANSWER: n

POINTS: 1

80. ileum

ANSWER: m

POINTS: 1

81. jejunum

ANSWER: l

POINTS: 1

82. large intestine

ANSWER: o

POINTS: 1

83. lower esophageal sphincter

ANSWER: f

POINTS: 1

84. mouth

ANSWER: a

POINTS: 1

85. pancreas

ANSWER: i

POINTS: 1

86. pharynx

ANSWER: b

POINTS: 1

87. pyloric sphincter

ANSWER: g

POINTS: 1

88. rectum

ANSWER: q

POINTS: 1

89. small intestine

ANSWER: j

POINTS: 1

90. trachea

ANSWER: d

Chapter 02

POINTS: 1

91. Outline and trace the path food follows through the digestive tract from one end to the other.

ANSWER:

(For this question, a list of the structures and their functions - i.e., an outline - is sufficient. Food travels through the digestive tract in this order: mouth, esophagus, lower esophageal sphincter (or cardiac sphincter), stomach, pyloric sphincter, duodenum (common bile duct enters here), jejunum, ileum, ileocecal valve, large intestine (colon), rectum, and anus.).

The process of digestion begins in the mouth. As you chew, your teeth crush and soften the food, while saliva mixes with the food mass and moistens it for comfortable swallowing. Saliva also helps dissolve the food so that you can taste it; only particles in solution can react with taste buds.

When you swallow a mouthful of food, it passes through the pharynx.

The esophagus has a sphincter muscle at each end. During a swallow, the upper esophageal sphincter opens. The bolus then slides down the esophagus, which conducts it through the diaphragm to the stomach. The lower esophageal sphincter closes behind the bolus so that it cannot slip back. The stomach retains the bolus for a while, adds juices to it, and transforms it into a semiliquid mass called chyme. Then, bit by bit, the stomach releases the chyme through another sphincter, the pyloric sphincter, which opens into the small intestine and then closes after the chyme passes through.

At the beginning of the small intestine, the chyme passes by an opening from the common bile duct, which secretes digestive fluids into the small intestine from two organs outside the GI tract—the gallbladder and the pancreas. The chyme travels on down the small intestine through its three segments—the duodenum, the jejunum, and the ileum. Digestion is completed within the small intestine.

Having traveled the length of the small intestine, what remains of the intestinal contents passes through another sphincter, the ileocecal valve, into the beginning of the large intestine (colon). The contents travel up the right-hand side of the abdomen, across the front to the left-hand side, down to the lower left-hand side, and finally below the other folds of the intestines to the back side of the body above the rectum.

As the intestinal contents pass to the rectum, the colon withdraws water, leaving semisolid waste. The strong muscles of the rectum hold back this waste until it is time to defecate. Then the rectal muscles relax, and the last sphincter in the system, the anus, opens to allow the wastes to pass.

POINTS:

1

DIFFICULTY:

Bloom's: Analyze

REFERENCES:

5.1

QUESTION TYPE:

Essay

HAS VARIABLES:

False

STUDENT ENTRY MODE:

Basic

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.1 - Identify the path that food takes during digestion and describe the muscular actions of digestion.

DATE CREATED:

3/12/2015 2:59 AM

DATE MODIFIED:

3/12/2015 3:00 AM

92. Describe the role of the stomach in the process of digestion.

ANSWER:

Gastric juice, secreted by the gastric glands, is composed of water, enzymes, and

Chapter 02

hydrochloric acid. The acid is so strong that it burns the throat if it happens to reflux into the upper esophagus and mouth. The major digestive event in the stomach is the initial breakdown of proteins. Other than being crushed and mixed with saliva in the mouth, nothing happens to protein until it comes in contact with the gastric juices in the stomach. There, the acid helps to uncoil (denature) the protein's tangled strands so that the stomach enzymes can attack the bonds. Both the enzyme pepsin and the stomach acid itself act as catalysts in the process. Minor events are the digestion of some fat by a gastric lipase, the digestion of sucrose (to a very small extent) by the stomach acid, and the attachment of a protein carrier to vitamin B12. The stomach enzymes work most efficiently in the stomach's strong acid, but salivary amylase, which is swallowed with food, does not work in acid this strong. Consequently, the digestion of starch gradually ceases as the acid penetrates the bolus. In fact, salivary amylase becomes just another protein to be digested. The amino acids in amylase end up being absorbed and recycled into other body proteins.

POINTS: 1
DIFFICULTY: Bloom's: Apply
REFERENCES: 5.2
QUESTION TYPE: Essay
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/12/2015 3:01 AM
DATE MODIFIED: 3/12/2015 3:02 AM

93. Should antacids be taken to decrease the strong acidity of the stomach? Explain your answer.

ANSWER: No, because the stomach's strong acidity naturally prevents bacterial growth and kills most bacteria that enter the body along with food. You might expect that the stomach's acid would attack the stomach itself, but the cells of the stomach wall secrete mucus, a thick, slimy, white polysaccharide that coats and protects the stomach's lining. However, some people may need to take antacids if they have excess stomach acid, which can cause problems such as heartburn and indigestion.

POINTS: 1
DIFFICULTY: Bloom's: Apply
REFERENCES: 5.2
QUESTION TYPE: Essay
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/12/2015 3:03 AM
DATE MODIFIED: 2/8/2016 4:18 PM

94. Explain what determines the rate of digestion of the energy nutrients.

ANSWER: The rate of digestion of the energy nutrients depends on the meal contents. If the meal is high in simple sugars, digestion proceeds fairly rapidly. On the other hand, if it is rich in fat, digestion is slower.

POINTS: 1
DIFFICULTY: Bloom's: Apply

Chapter 02

REFERENCES: 5.2
QUESTION TYPE: Essay
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/12/2015 3:04 AM
DATE MODIFIED: 3/12/2015 3:06 AM

95. Explain the benefits of intestinal flora to health.

ANSWER: GI bacteria protect people from infections. Provided that the normal intestinal flora are thriving, infectious bacteria have a hard time getting established and launching an attack on the system. In addition, the small intestine and the entire GI tract manufacture and maintain a strong arsenal of defenses against foreign invaders. Several different types of defending cells are present in the GI tract, and they confer specific immunity against intestinal diseases.

POINTS: 1
DIFFICULTY: Bloom's: Apply
REFERENCES: 5.2
QUESTION TYPE: Essay
HAS VARIABLES: False
STUDENT ENTRY MODE: Basic
LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.2 - Describe the actions and origins of the digestive secretions.
DATE CREATED: 3/12/2015 3:06 AM
DATE MODIFIED: 3/12/2015 3:07 AM

96. Describe the difference between low-density lipoproteins (LDL) and high-density lipoproteins (HDL). What is the relationship between blood levels of these lipoproteins and risk of heart disease?

ANSWER: When necessary, the liver can assemble different lipoproteins, which are known as very-low-density lipoproteins (VLDL). As the body's cells remove triglycerides from the VLDL, the proportions of their lipid and protein contents shift. As this occurs, VLDL become cholesterol-rich low-density lipoproteins (LDL). Cholesterol returning to the liver from other parts of the body for metabolism or excretion is packaged in lipoproteins known as high-density lipoproteins (HDL). HDL are synthesized primarily in the liver. The density of lipoproteins varies according to the proportion of lipids and protein they contain. The more lipids in the lipoprotein molecule, the lower the density; the more protein, the higher the density. Both LDL and HDL carry lipids around in the blood, but LDL are larger, lighter, and filled with more lipid; HDL are smaller, denser, and packaged with more protein. LDL deliver cholesterol and triglycerides from the liver to the tissues; HDL scavenge excess cholesterol from the tissues and return it to the liver for metabolism or disposal. These different functions explain why some people refer to LDL as "bad" cholesterol and HDL as "good" cholesterol. Keep in mind, though, that there is only one kind of cholesterol molecule; the differences between LDL and HDL reflect proportions of lipids and proteins within them—not the type of cholesterol. The distinction between LDL and HDL has implications for the health of the heart and blood vessels. High concentrations of LDL in the blood are associated with an increased risk of heart disease, as are low concentrations of HDL.

POINTS: 1

Chapter 02

DIFFICULTY: Bloom's: Apply

REFERENCES: 5.4

QUESTION TYPE: Essay

HAS VARIABLES: False

STUDENT ENTRY MODE: Basic

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.

DATE CREATED: 3/12/2015 3:08 AM

DATE MODIFIED: 3/12/2015 3:09 AM

97. Describe the route of blood in the vascular system in relation to digestion.

ANSWER: The vascular or blood circulatory system is a closed system of vessels through which blood flows continuously in a figure eight, with the heart serving as a pump at the crossover point. On each loop of the figure eight, blood travels a simple route: heart to arteries to capillaries to veins to heart. The routing of blood through the digestive system is different, however. Blood is carried to the digestive system (as it is to all organs) by way of an artery, which (as in all organs) branches into capillaries to reach every cell. Blood leaving the digestive system goes by way of a vein. The hepatic portal vein, however, directs blood not back to the heart but to another organ—the liver. This vein again branches into a network of small blood vessels (sinusoids) so that every cell of the liver has access to the newly absorbed nutrients that the blood is carrying. Blood leaving the liver then again collects into a vein, called the hepatic vein, which returns the blood to the heart. The route is thus heart to arteries to capillaries (in intestines) to hepatic portal vein to sinusoids (in liver) to hepatic vein to heart.

POINTS: 1

DIFFICULTY: Bloom's: Apply

REFERENCES: 5.4

QUESTION TYPE: Essay

HAS VARIABLES: False

STUDENT ENTRY MODE: Basic

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.4 - Explain how nutrients are delivered from the GI tract to body cells by the vascular system and describe the different types of lipoproteins.

DATE CREATED: 3/12/2015 3:10 AM

DATE MODIFIED: 3/12/2015 3:11 AM

98. What is norovirus and how is it linked to personal hygiene?

ANSWER: Norovirus illustrates the importance of personal hygiene. Norovirus is passed in the stool and vomit of infected people. Thus, infected people who do not wash their hands adequately can pass the virus directly to other people, or they can pass it indirectly by way of contaminated food or water. Outbreaks in the United States are often linked to food touched by infected food handlers or to person-to-person contact in day care centers, in nursing homes, and on cruise ships. People can also be infected with norovirus by eating raw shellfish such as oysters and clams that are grown in sewage-contaminated waters.

POINTS: 1

DIFFICULTY: Bloom's: Apply

REFERENCES: 5.5

QUESTION TYPE: Essay

HAS VARIABLES: False

Chapter 02

STUDENT ENTRY MODE: Basic

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED: 3/12/2015 3:11 AM

DATE MODIFIED: 3/12/2015 3:12 AM

99. Is eating raw seafood, like fish and oysters, ever safe?

ANSWER:

Most seafood available in the United States and Canada is safe, but eating it undercooked or raw can cause severe illnesses- hepatitis, worms, parasites, viral intestinal disorders, and other diseases. Rumor has it that freezing fish will make it safe to eat raw, but this is only partly true. Commercial freezing will kill mature parasitic worms, but only cooking can kill all worm eggs and other microorganisms that can cause illness. For safety's sake, all seafood should be cooked until it is opaque. Even sushi can be safe to eat when chefs combine cooked seafood and other ingredients into delicacies.

Eating raw oysters can be dangerous for anyone, but people with liver disease and weakened immune systems are most vulnerable. At least 10 species of bacteria found in raw oysters can cause serious illness and even death. Raw oysters may also carry the hepatitis A virus, which can cause liver disease. Some hot sauces can kill many of these bacteria but not the virus; alcohol may also protect some people against some oyster-borne illnesses but not enough to guarantee protection (or to recommend drinking alcohol). Pasteurization of raw oysters-holding them at a specified temperature for a specified time-holds promise for killing bacteria without cooking the oyster or altering its texture or flavor.

POINTS: 1

DIFFICULTY: Bloom's: Apply

REFERENCES: 5.5

QUESTION TYPE: Essay

HAS VARIABLES: False

STUDENT ENTRY MODE: Basic

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED: 3/12/2015 3:13 AM

DATE MODIFIED: 3/12/2015 3:14 AM

100. Describe how the US government is working to help keep foods safe.

ANSWER:

To improve the safety of the U.S. food supply, the Food Safety Modernization Act (FSMA) was signed into law in 2011. It has been called "historic" because it shifts the focus of FDA activities from reacting after people become ill to preventing foodborne illness in the first place. The new law stresses prevention at food processing facilities; provides the FDA with greater enforcement, inspection, and recall authorities; and affords the FDA greater oversight of imported foods. In addition, the U.S. Department of Agriculture (USDA), the FDA, and the food processing industries have developed and implemented programs to control foodborne illness. For example, USDA inspectors examine meat-processing plants every day to ensure that these facilities meet government standards. Seafood, egg, produce, and processed food facilities are inspected less often, but all food producers must use a Hazard Analysis Critical Control Points (HACCP) plan to help prevent foodborne illnesses at their source. Each slaughterhouse, packer, distributor, and transporter of susceptible foods must identify "critical control points" that pose a risk of contamination and implement verifiable procedures to eliminate or minimize the risk. The HACCP system has proved a remarkable success for domestic products, but such

Chapter 02

programs do not apply to imported foods.

POINTS:

1

DIFFICULTY:

Bloom's: Apply

REFERENCES:

5.5

QUESTION TYPE:

Essay

HAS VARIABLES:

False

STUDENT ENTRY MODE: Basic

LEARNING OBJECTIVES: NUTR.DEBR.16.05.5.5 - Describe how foodborne illnesses can be prevented.

DATE CREATED:

3/12/2015 3:14 AM

DATE MODIFIED:

3/12/2015 3:16 AM