

Digestion, Absorption

1. List the layers of intestinal wall.
2. List the types of electrical activity of the smooth muscle of the gastrointestinal tract.
3. Describe the enteric nervous system.
4. Describe the gastrointestinal reflexes.
5. List the gastrointestinal hormones.
6. List the types of movements occurring in the gastrointestinal tract.
7. What is meant by hunger?
8. Why is the grinding the food very important for digestion?
9. List the stages of swallowing.
10. List the motor functions of the stomach.
11. What is meant by chyme?
12. Describe the emptying of the stomach.
13. Describe the movements of the small intestine.
14. List the principal functions of the colon.
15. Describe the movements of the colon.
16. Describe the basic mechanism of alimentary tract secretion.
17. List the important characteristics of the mucus in the gastrointestinal tract.
18. Describe the regulation of salivary secretion.
19. Describe the gastric secretion from the oxyntic glands.
20. Describe the gastric secretion from the pyloric glands.
21. Describe the secretion and activation of pepsinogen.
22. How is the gastric acid secretion stimulated?
23. How is the pepsinogen secretion regulated?
24. List the phases of gastric secretion.
25. What kind of enzymes does pancreatic secretion contain?
26. Why the proteolytic enzymes of pancreas do not digest the pancreas itself?
27. List the basic stimuli which are important in causing pancreatic secretion.
28. List the phases of pancreatic secretion.
29. List the functions of bile secretion.
30. Describe the composition of bile.
31. Describe the emptying of the gallbladder.
32. List the important actions of the bile salts in the intestinal tract.

33. Describe the secretions of the intestine.
34. What is the basic process of digestion?
35. Describe the digestion of carbohydrates.
36. Describe the digestion of proteins.
37. Describe the digestion of fats.
38. What are the end products of fat digestion?
39. How is the absorptive area of intestinal mucosa increased by the folds of Kerckring, the villi and microvilli?
40. List the basic mechanisms of absorption.
41. Describe the absorption of carbohydrates.
42. Describe the absorption of proteins.
43. Describe the absorption of fats.
44. Describe the absorption of waters and ions.
45. Biopsies are taken from the antral and duodenal mucosa of a 65-year-old woman. Which of the gastrointestinal hormones can be found in tissue homogenates from both locations?
46. Which of the substance is released from neurons in the GI tract and produces smooth muscle relaxation?
47. A 54-year-old woman eats a healthy meal. Approximately 20 min later the woman feels the urge to defecate. Which of the following reflexes results in the urge to defecate when the stomach is stretched?
48. The proenzyme pepsinogen is secreted mainly from which of the following structures?
50. Digestion of which of the following occurs almost entirely in the small intestine?
51. Which of the following structures undergoes receptive relaxation when a bolus of food is swallowed?
52. Which of the absorbed nutrients is not normally found in abundance in the portal blood?
53. Which of the GI hormone is the most potent stimulator of pancreatic secretion?
54. Which factor is the most potent stimulator of gastric secretion?
55. In which part of the colon the chyme is fluid?
56. The basic process of digestion involves which of the following chemical reactions?
57. Which is the site of secretion of gastrin?
58. Which is the site of secretion of secretin?
59. Inhibition of vagal function has the greatest effect on which segment of the alimentary tract?
60. Which of the following is the site of secretion of cholecystokinin?
61. The secretion of bile is important for the proper digestion of which substance?
62. Which salivary glands secrete primarily a serous type of substance?