

Human Digestive System

1. What is the primary function of the human digestive system?
 - A. Transporting oxygen
 - B. Producing white blood cells
 - C. Breaking down food
 - D. Storing vitamins
 - E. Protecting against infections
2. Where does most chemical digestion occur in the human digestive system?
 - A. Stomach
 - B. Small intestine
 - C. Large intestine
 - D. Mouth
 - E. Esophagus
3. What enzyme in saliva helps break down carbohydrates?
 - A. Pepsin
 - B. Lipase
 - C. Trypsin
 - D. Amylase
 - E. Lactase
4. Which organ produces bile to aid in fat digestion?
 - A. Stomach
 - B. Gallbladder
 - C. Liver
 - D. Pancreas
 - E. Small intestine
5. The main site of water absorption in the digestive system is:
 - A. Small intestine
 - B. Large intestine
 - C. Stomach
 - D. Liver
 - E. Esophagus

6. In which part of the digestive system does protein digestion begin?
- A. Mouth
 - B. Esophagus
 - C. Stomach
 - D. Small intestine
 - E. Large intestine
7. Which of the following is not a function of the liver?
- A. Producing bile
 - B. Detoxifying chemicals
 - C. Storing glucose
 - D. Breaking down proteins
 - E. Filtering blood
8. The enzyme pepsin functions optimally in the stomach due to the:
- A. High pH
 - B. Presence of mucus
 - C. Low pH
 - D. Absence of bile
 - E. Neutral pH
9. Which part of the digestive system connects the mouth to the stomach?
- A. Small intestine
 - B. Large intestine
 - C. Trachea
 - D. Esophagus
 - E. Pharynx
10. What is the primary function of the villi in the small intestine?
- A. Move food through the intestines
 - B. Increase surface area for absorption
 - C. Release digestive enzymes
 - D. Absorb water
 - E. Produce hormones

11. What is the primary role of the gallbladder?

- A. Producing bile
- B. Storing bile
- C. Filtering blood
- D. Absorbing nutrients
- E. Digesting carbohydrates

12. The first part of the small intestine where most chemical digestion takes place is the:

- A. Jejunum
- B. Ileum
- C. Duodenum
- D. Colon
- E. Rectum

13. What structure prevents food from entering the trachea during swallowing?

- A. Esophagus
- B. Epiglottis
- C. Larynx
- D. Uvula
- E. Pharynx

14. Which substance in the stomach helps to kill bacteria in food?

- A. Mucus
- B. Bile
- C. Hydrochloric acid
- D. Amylase
- E. Bicarbonate

15. Where are the enzymes lipase and trypsin primarily secreted?

- A. Stomach
- B. Small intestine
- C. Liver
- D. Pancreas
- E. Large intestine

16. Which section of the small intestine is primarily responsible for nutrient absorption?

- A. Duodenum
- B. Ileum
- C. Colon
- D. Rectum
- E. Pancreas

17. Which of the following structures releases bicarbonate to neutralize stomach acid in the small intestine?

- A. Liver
- B. Gallbladder
- C. Stomach
- D. Pancreas
- E. Large intestine

18. What is the main function of hydrochloric acid in the stomach?

- A. Breaking down proteins
- B. Neutralizing acids
- C. Lubricating food
- D. Emulsifying fats
- E. Absorbing nutrients

19. The rhythmic contraction of muscles to propel food through the digestive system is called:

- A. Segmentation
- B. Peristalsis
- C. Assimilation
- D. Diffusion
- E. Emulsification

20. The enzyme responsible for initiating protein digestion in the stomach is:

- A. Amylase
- B. Lipase
- C. Pepsin
- D. Trypsin
- E. Lactase

21. Which part of the digestive system contains a large population of bacteria that aids in the breakdown of undigested material?
- A. Stomach
 - B. Small intestine
 - C. Liver
 - D. Large intestine
 - E. Esophagus
22. In which part of the digestive system does the absorption of vitamin B12 primarily occur?
- A. Mouth
 - B. Stomach
 - C. Ileum
 - D. Colon
 - E. Duodenum
23. Which of the following structures increases the surface area of the small intestine for nutrient absorption?
- A. Rugae
 - B. Villi
 - C. Microvilli
 - D. Lacteals
 - E. Epiglottis
24. What is the function of bile salts in digestion?
- A. To break down proteins
 - B. To emulsify fats
 - C. To neutralize stomach acid
 - D. To absorb sugars
 - E. To digest starch
25. Where is the majority of fat digestion completed in the digestive system?
- A. Mouth
 - B. Stomach
 - C. Large intestine
 - D. Small intestine
 - E. Esophagus

26. Which of the following vitamins requires fat for its absorption?

- A. Vitamin B12
- B. Vitamin C
- C. Vitamin D
- D. Folic acid
- E. Vitamin B6

27. Which hormone is released in response to acidic chyme entering the small intestine and stimulates the release of bicarbonate?

- A. Gastrin
- B. Secretin
- C. Pepsinogen
- D. Insulin
- E. Amylase

28. Which layer of the digestive tract is responsible for producing mucus that protects the lining of the stomach?

- A. Serosa
- B. Muscularis
- C. Submucosa
- D. Mucosa
- E. Lumen

29. What is the primary function of lacteals in the villi of the small intestine?

- A. Absorbing water
- B. Absorbing fats
- C. Producing mucus
- D. Absorbing glucose
- E. Producing digestive enzymes

30. Which of the following substances is absorbed directly into the bloodstream from the stomach?

- A. Proteins
- B. Carbohydrates
- C. Lipids
- D. Alcohol
- E. Fiber

31. What part of the brain controls the involuntary swallowing reflex?

- A. Cerebrum
- B. Cerebellum
- C. Hypothalamus
- D. Medulla oblongata
- E. Hippocampus

32. The pH of the stomach is typically:

- A. Around 2
- B. Around 5
- C. Around 7
- D. Around 8
- E. Around 10

33. Which hormone stimulates the production of stomach acid?

- A. Gastrin
- B. Secretin
- C. CCK (Cholecystokinin)
- D. Glucagon
- E. Insulin

34. What part of the digestive system is primarily responsible for absorbing water and electrolytes?

- A. Mouth
- B. Stomach
- C. Large intestine
- D. Small intestine
- E. Pancreas

35. The process by which nutrients move from the intestines into the blood or lymph is known as:

- A. Digestion
- B. Absorption
- C. Secretion
- D. Peristalsis
- E. Defecation

36. Which enzyme is necessary for digesting lactose, the sugar found in milk?

- ☐ A. Amylase
- ☐ B. Lipase
- ☐ C. Maltase
- ☐ D. Lactase
- ☐ E. Sucrase

37. The innermost layer of the gastrointestinal tract, which comes into direct contact with food, is called:

- ☐ A. Serosa
- ☐ B. Muscularis
- ☐ C. Submucosa
- ☐ D. Mucosa
- ☐ E. Adventitia

38. Which enzyme is secreted by the pancreas and breaks down fats?

- ☐ A. Amylase
- ☐ B. Trypsin
- ☐ C. Lipase
- ☐ D. Pepsin
- ☐ E. Sucrase

39. Which structure of the digestive system is primarily responsible for the fermentation of undigested food?

- ☐ A. Stomach
- ☐ B. Small intestine
- ☐ C. Large intestine
- ☐ D. Pancreas
- ☐ E. Esophagus

40. Which part of the digestive system stores bile produced by the liver?

- ☐ A. Stomach
- ☐ B. Duodenum
- ☐ C. Large intestine
- ☐ D. Gallbladder
- ☐ E. Pancreas

41. What is the primary function of gastrin in the digestive system?

- A. Stimulating bile production
- B. Releasing digestive enzymes
- C. Stimulating stomach acid secretion
- D. Neutralizing stomach acids
- E. Absorbing nutrients

42. Which of the following is the longest part of the small intestine?

- A. Duodenum
- B. Ileum
- C. Jejunum
- D. Colon
- E. Rectum

43. What type of cells in the stomach lining release hydrochloric acid?

- A. Chief cells
- B. Parietal cells
- C. Goblet cells
- D. Acinar cells
- E. Enterocytes

44. Which of the following structures does not directly produce digestive enzymes?

- A. Pancreas
- B. Stomach
- C. Liver
- D. Small intestine
- E. Salivary glands

45. The term “chyme” refers to:

- A. Food broken down in the mouth
- B. A mixture of partially digested food and gastric juices
- C. The muscular action of the stomach
- D. The bile produced by the liver
- E. The undigested material in the large intestine

46. Which nutrient type begins digestion in the mouth?

- ☐ A. Proteins
- ☐ B. Fats
- ☐ C. Starches
- ☐ D. Fiber
- ☐ E. Vitamins

47. What is the role of the hormone cholecystokinin (CCK) in digestion?

- ☐ A. Increasing stomach acid
- ☐ B. Stimulating bile release from the gallbladder
- ☐ C. Absorbing vitamins
- ☐ D. Neutralizing stomach acid
- ☐ E. Breaking down proteins

48. Which of the following is the correct sequence of regions in the large intestine?

- ☐ A. Ileum, colon, rectum
- ☐ B. Cecum, colon, rectum
- ☐ C. Rectum, colon, cecum
- ☐ D. Duodenum, colon, anus
- ☐ E. Jejunum, ileum, colon

49. Where does the digestion of proteins primarily take place?

- ☐ A. Mouth
- ☐ B. Esophagus
- ☐ C. Stomach
- ☐ D. Colon
- ☐ E. Rectum

50. Which of the following vitamins is synthesized by bacteria in the large intestine?

- ☐ A. Vitamin C
- ☐ B. Vitamin B6
- ☐ C. Vitamin D
- ☐ D. Vitamin B12
- ☐ E. Vitamin K

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