

LABORATORY EXERCISE 47 DIGESTIVE ORGANS

Figure Labels

FIG. 47.1

- | | | | |
|----|-------------|----|-----------------|
| 1. | Lip | 5. | Palatine tonsil |
| 2. | Hard palate | 6. | Tongue |
| 3. | Soft palate | 7. | Vestibule |
| 4. | Uvula | | |

FIG. 47.2

- | | | | |
|----|-----------------|----|---------------------|
| 1. | Parotid gland | 4. | Sublingual gland |
| 2. | Masseter muscle | 5. | Submandibular gland |
| 3. | Tongue | | |

FIG. 47.3

- | | | | |
|----|--------|----|------------|
| 1. | Enamel | 4. | Crown |
| 2. | Dentin | 5. | Gingiva |
| 3. | Root | 6. | Root canal |

FIG. 47.5

- | | | | |
|----|--|----|-----------------|
| 1. | Pharyngeal tonsils (adenoids) | 5. | Oropharynx |
| 2. | Opening of auditory tube (eustachian tube) | 6. | Lingual tonsils |
| 3. | Nasopharynx | 7. | Epiglottis |
| 4. | Palatine tonsils | 8. | Laryngopharynx |

FIG. 47.7

- | | | | |
|----|--|----|----------------|
| 1. | Esophagus | 6. | Fundic region |
| 2. | Rugae | 7. | Cardiac region |
| 3. | Pyloric sphincter | 8. | Body region |
| 4. | Duodenum | 9. | Pyloric region |
| 5. | Lower esophageal sphincter (cardiac sphincter) | | |

FIG. 47.8

- | | |
|---|---|
| 4 | 1 |
| 2 | 3 |
| 5 | 7 |
| 6 | |

FIG. 47.10

- | | | | |
|----|-----------------------|----|--|
| 1. | Cystic duct | 5. | Common bile duct |
| 2. | Gallbladder | 6. | Pancreatic duct |
| 3. | Duodenum | 7. | Hepatopancreatic sphincter (sphincter of Oddi) |
| 4. | Hepatic duct (common) | | |

FIG. 47.11

- | | | | |
|----|---|---|---|
| 10 | 7 | 9 | 4 |
| 1 | 2 | 8 | |
| 3 | 6 | 5 | |



Critical Thinking Application Answer

The small intestine, which is much longer than the large intestine and contains villi, provides more surface area for absorption than the large intestine.

Laboratory Report Answers

PART A

- | | | |
|------|------|-------|
| 1. c | 5. h | 9. l |
| 2. j | 6. k | 10. e |
| 3. f | 7. i | 11. a |
| 4. g | 8. d | 12. b |

PART B

- | | |
|-------------------|--|
| 1. nasopharynx | 4. mucus |
| 2. oropharynx | 5. esophageal hiatus |
| 3. laryngopharynx | 6. The esophagus provides a passageway for food from the pharynx to the stomach. |

PART C

- | | |
|---|---|
| 1. cardiac, fundic, body, and pyloric regions | 6. intrinsic factor |
| 2. pyloric sphincter | 7. gastrin |
| 3. chief cells | 8. chyme |
| 4. parietal cells | 9. The stomach receives food from the esophagus, mixes it with gastric juice, initiates the digestion of protein, does limited amount of absorption, and moves food (chyme) into the small intestine. |
| 5. pepsin | |

PART D

- | | | |
|------|------|------|
| 1. d | 4. a | 7. c |
| 2. b | 5. f | 8. h |
| 3. e | 6. i | 9. g |

PART E

(sketch)

PART F

1. duodenum, jejunum, ileum
2. A mesentery supports and suspends organs. It contains blood vessels, lymphatic vessels, and nerves that supply the organs.
3. lacteal
4. peptidases, sucrase, maltase, lactase, intestinal lipase, enterokinase (only 5 of 6 needed to answer the question)
5. ileocecal sphincter (valve)
6. vermiform appendix
7. The small intestine receives secretions from the pancreas and liver, completes digestion of nutrients, absorbs the products of digestion, and transports the residues to the large intestine.
8. The large intestine absorbs water and electrolytes, and forms and stores feces.