

## The Digestive System: Control of the Digestive System

1. List the primary two mechanisms that control the motility and secretion of the digestive system.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
2. List the three phases of digestive system processes
  - a. \_\_\_\_\_.
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
3. The \_\_\_\_\_ nerve triggers the responses during the cephalic phase of digestion.
4. The stimulation of \_\_\_\_\_ receptors triggers the gastric phase of digestion.
5. List the 4 main responses during the intestinal phase of digestion
  - a. \_\_\_\_\_.
  - b. \_\_\_\_\_.
  - c. \_\_\_\_\_.
  - d. \_\_\_\_\_.
6. The small intestine typically\_\_\_\_\_.
  - a. slows gastric emptying
  - b. accelerates gastric emptying
  - c. has no effect on gastric emptying
7. The \_\_\_\_\_ and \_\_\_\_\_ \_\_\_\_\_ nerves carry parasympathetic impulses to the enteric nervous system.
8. Sympathetic NS innervation of the digestive tract is via\_\_\_\_\_ fibers.
  - c. preganglionic
  - d. postganglionic
9. The \_\_\_\_\_ and \_\_\_\_\_ plexuses are the two components of the enteric nervous system.
10. Digestive system reflexes that involve the brain are called \_\_\_\_\_ .

11. A meal consisting largely of fatty foods will take \_\_\_\_\_ to digest than a meal consisting of mainly of starchy foods.

- a. a longer time
- b. a shorter time
- c. the same time

12. All preganglionic ANS fibers release \_\_\_\_\_ while only postganglionic fibers of the sympathetic division release \_\_\_\_\_.

13. Which of the following neurotransmitters stimulates smooth muscle contraction in the digestive tract?

- a. VIP
- b. norepinephrine
- c. NO
- d. ACh

14. \_\_\_\_\_ slow intestinal motility and cause the pyloric sphincter to contract.

15. List 5 peptide hormones of the GI tract:

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

16. List four functions of duodenal CCK.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

17. Secretin stimulates gastric HCl secretion.

- a. True
- b. False

18. GIP stimulates the pancreas to secrete\_\_\_\_\_.
19. \_\_\_\_\_ stimulates motility of the intestine, thereby moving its contents toward the terminal ileum.
20. \_\_\_\_\_ occurs when the combined action of two hormones is greater than the sum of their individual effects.