

Regulation of digestion

Read Chapter 20.6

Fill in the blanks

1. The _____ phase of digestion occurs when we see, smell, or anticipate eating food.
2. The _____ phase of digestion occurs when chyme enters the duodenum.
3. Match the hormone to the correct stimulus: **Gastrin, GIP, CCK, Secretin, serotonin**
 - a. Food entering the stomach _____
 - b. Primary when we eat carbs and is also involved in mood _____
 - c. When glucose is detected in the small intestine _____
 - d. When fat is detected in the small intestine _____
 - e. When acid is detected in the small intestine _____
4. Match the hormone to the correct function: **Gastrin, GIP, CCK, Secretin, serotonin, leptin, ghrelin**
 - a. Stimulates the release of insulin _____
 - b. Stimulates the stomach to “growl” and start secretions _____
 - c. Stimulates the release of bile _____
 - d. Stimulates release of HCl and pepsinogen in the stomach _____
 - e. Made by fat cells after a meal and signals hypothalamus satiety center, making you feel full _____
 - f. Stimulates the release of pancreatic digestive enzymes and bicarbonate _____
 - g. Slows gastric secretions and muscles contractions, dilates intestinal blood vessels _____
5. State if the following increase or decrease appetite:
 - a. Serotonin _____
 - b. Chronic stress _____

- c. CCK _____
- d. Low blood sugar _____
- e. Leptin _____
- f. Ghrelin _____

6. Why can't we take leptin as a drug to reduce appetite to help people lose weight?
