

## **Mastery Series: Pancreas, the Liver, and the Duodenum Work Together**

1. What are the 3 segments of the small intestine?
2. Which segment is 1 foot long but does most of the work?
3. Where is Vitamin B12 absorbed?
4. Where are bile salts absorbed?
5. What pH are pancreatic enzymes active at?
6. What is the pH of chyme first entering the duodenum?
7. How is this pH of the chyme raised to 8 in the duodenum?
8. What are the three main nutrients?
9. What are the "building blocks" of these three nutrients?
10. What enzymes did I mention chemically digests each of these nutrients?
11. What is the role of segmentation in the small intestine with regard to digestion and absorption?
12. Most absorbed nutrients (except fat) enter the \_\_\_\_\_ vein and go to the \_\_\_\_\_ for processing.
13. What's the purpose of the ileocecal valve?
14. Describe the path of a carbohydrate from mouth to your brain for thinking!

## **Mastery Series: Pancreas, the Liver, and the Duodenum Work Together**

1. duodenum, jejunum, ileum
2. duodenum
3. ileum
4. ileum
5. 8
6. 2
7. bicarbonate from pancreas
8. carbohydrates, proteins, fats
9. simple sugars (glucose), amino acids, fatty acids and glycerol
10. amylase; pepsin/proteases; lipase
11. increases time the nutrients have to be digested and absorbed
12. hepatic portal vein; liver
13. regulates speed that undigested waste enters colon and prevents backflow of feces into small intestine
14. amylase in mouth starts chemical digestion; stomach acidifies and mixed into chyme; duodenum receives more amylase; glucose molecules are absorbed in the capillaries of the submucosa and enter the liver via the hepatic portal vein. The liver allows appropriate amounts of glucose into bloodstream. Glucose travels via blood to the brain.