GI study questions
Biology 350------Summer 2005

1. Build the GI summary sheet
   a. Label each part of the tube
   b. What is the anatomy in each part of the tube and how does this anatomy
      reflect its function?
   c. What is the transit time through each part of the tube
      i. What determines how long it takes for food/chyme to pass through
         any region of the gut?
   d. Fill in the chart below the picture
      i. What is going on in each part of the tube
      ii. What is regulating this activity
      iii. How could rate of this activity be increased? Decrease?

2. Draw a graph showing how changes in a stimulus affect rates of release of the
   hormone

3. Draw a graph showing how rates of release of a hormone alter rates of a response
   a. ex. how changing gastrin levels affects gastric acid level

4. Draw a time line that starts at 6am and goes for 24 hrs.
   a. Breakfast is at 8
   b. Lunch at 12
   c. Dinner at 7
   Now show how gastrin levels change over this time period

5. What enters the Large Intestine (concept)

6. What is so special about olestra?

7. Know where receptors for all the hormones are found.

8. How does Zantac work?

9. What increases motility of the gut? What would an animal eat to do this? What is
   the consequence of this increased motility?

Always ask yourself
“What determines (causes) this activity”?
“How can the rate of this activity be increased, decreased, stopped?”
“What is the consequence of this activity to the physiology of the animal”