**CHAPTER 14: DIGESTION**

Review Questions

1. What happens to the surface area: volume ratio as cells get larger? How is the problem solved by organ systems in multicellular organisms? (Slide #5)
2. Why do you think the epithelial lining of different parts of the alimentary canal such as the small intestine and stomach are differently organized? (Slide #10)
3. At the end of digestion - mechanical and chemical processing - what is the fate of the food we consume? (Slide #13)
4. What are the various kinds of membrane transport mechanisms that are operative during absorption of nutrients into the small intestine? (Slide #16)
5. What is the hepatic portal system? Why is it necessary? (Slide #16)
6. What nutrients are not transported through blood after absorption? How are they transported?
7. (a) Which part of the gut contains the largest bacterial ecosystem (also called “gut microbiota” or “gut flora”) in the human body?

(b) What is the utility of these bacteria?

(c) Why are people often prescribed to take multivitamin and probiotic supplements when on a course of antibiotics?