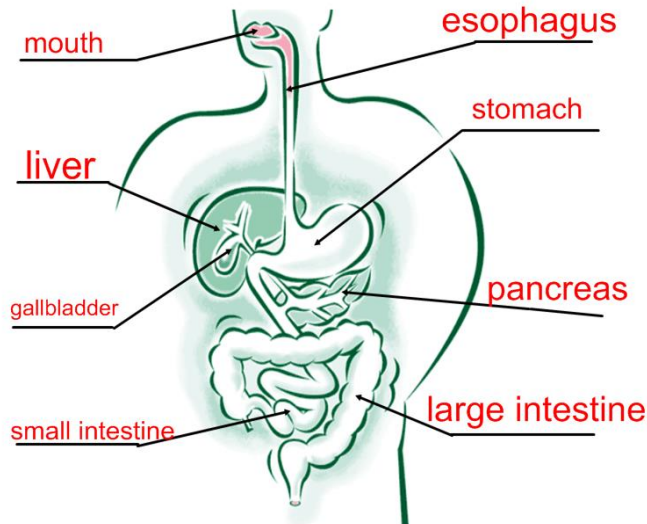# Answers Human Physiology 110: Exam Review Unit 2: Digestion

Part A: Label the following diagram:

List the organs of digestion shown on the diagram which are not part of the alimentary (digestive) canal)
Liver, gallbladder, pancreas

Part B: Fill in the word that would fit in the blank:

1. The _esophagus___ is a long muscular tube the connects the mouth to the stomach

2. Bile is produced in the _liver___

3. Food enters the digestive system through the _mouth_____

4. _tooth decay_____ is the most common digestive problem

5. Heart burn_____ causes juices from the stomach to go up into the esophagus

6. _diarhea_____ effect is watery wastes.

7. _jaudice_____ can be caused when there are too many salts in your body. It can cause your skin to appear a yellow color.

8. When the protective digestive lining of the stomach is broken down these can form __ulcers____.

9. _vomitting_ is the expulsion of your stomach contents through the mouth.

10. An intolerance to gluten which over time can destroy the lining of the small intestine is caused by a disease called __celiac_____.

Part C: Answer each of the following questions in sentence form.

1. How does food move through the digestive system?
Food moves through the digestive system from the mouth through the pharynx then by the process of peristalsis (involuntary muscle movements) through the esophagus to the stomach. Once in the stomach the bolus mixes with digestive enzymes and stomach acids and turns into chyme. The chyme leaves the stomach via the small intestine and then to the large intestine. In the large intestine excess water is removed and the wastes can them be passed through the rectum and anus and out of the body. In the large intestine the minerals/vitamins also get absorbed into the blood stream.

2. Where is bile produced? Where is it stored?
Bile is produced in the liver and stored in the gallbladder.

3. What prevents food from entering the windpipe when you swallow?
The epiglottis prevents food from entering the windpipe when you swallow.

4. In what organ does food get absorbed into the blood stream?
small intestine

5. Describe the function of saliva. Where is it produced?
Saliva is produced in the mouth and its function is to soften and moisten food for easier digestion.

6. What is the difference between mechanical and chemical digestion?

The difference between mechanical and chemical digestion is the way they break down food particles in the digestive system. Mechanical digestion is the physical breakdown of food through chewing or grinding etc this occurs in the mouth and the stomach. Chemical digestion on the other hand occurs when enzymes break down the food such as the salivary amylase in the mouth. There are various enzymes located throughout the digestive system which chemically breakdown the food particles.

7. What is the primary function of the large intestine? How is this different than the function of the small intestine?

The primary function of the large intestine is the final absorption of the water from the wastes before it exits the body as feces. This is different than the function of the small intestine because the small intestine is responsible for the absorption of all the nutrients into the bloodstream.

Part D: Identify the word or term that does not belong and explain why it does not belong

Please note your answers may vary here as long as your explanation makes sense it could be a valid answer.

1. Alimentary canal, mouth, ==liver==

Because it is not part of the alimentary canal the mouth however is part of the canal.

2. Enzymes, ==mechanical digestion,== chemical digestion

Because this is the chewing and grinding of food. Chemical digestion requires enzymes to help break down the food.

3. espophagus, peristalsis, ==mouth==

Because peristalsis occurs in the stomach

   Or

   espophagus, ==peristalsis==, mouth

The other two are organs of digestion and peristalsis is a movement that occurs in the esophagus and stomach

4. ==gallbladder,== saliva, mouth, enzymes.

Because saliva and enzymes are both produced in the mouth.