

What are 3 segments of the SI?

- 1) Duodenum
- 2) Jejunum
- 3) Ileum

Where is the Duodenum the primary secretion site?

- Gall Bladder and Pancreas

What does the Duodenum secrete that breaks down proteins?

- Trypsin

What 3 enzymes do the Jejunum and Ileum secrete?

- 1) Maltase
- 2) Lactase
- 3) Sucrase

What Part(s) of the SI is the major site of nutrient absorption?

- Jejunum and Ileum

The folds of the SI have what function:

- Increase surface area to increase absorption

What are Enterocytes:

- Mature absorptive cell responsible for uptaking nutrients
- Absorptive/ Epithelial cell on the villi

Enterocyte and microvilli help increase what?

- Absorption

What are Enteroendocrine cells?

- SI cell that secret hormones

What are Goblet cells?

- SI cell that secretes mucus

Fill in the blank:

In the Small Intestine, After food is broken down into ____ Smaller Components ____.
____ Carbohydrates & Amino Acids _____ enter circulation via the _____ portal system and go directly to the liver.

Lipids enter the _____ Lymphatic____ system and are released into general circulation via the thoracic duct.

The Pancreas has many _____ digestive and Regulatory_____ secretions.

Endocrine functions to: Maintain blood glucose level (insulin and glucagon)

Exocrine functions to: neutralize acids (bicarbonate), break down macromolecules (enzymes)
- pancreatic enzymes + bicarbonate which helps increase pH

What are the 2 Digestive enzymes?

- Pepsin and Amylase

What do they break down? Where?

- Pepsin breaks protein (in the stomach)
- Amylase breaks starch (in the SI)

Pancreatic & Intestinal enzyme chart

Pancreatic & Intestinal Enzymes		
Enzyme	Substrate	Product
Amylase	Starch	Maltose
Maltase	Maltose	Glucose
Lipase	Triglycerides	FFA + glycerol
Trypsin	Proteins	small peptides
Chymotrypsin	Proteins	small peptides

What does the Gallbladder store?

- Bile

Which aids in ?

- Fat digestion

Cholesterol metabolism is:

- the fat breakdown and use within the body

What organ produces bile?

- Liver

What is the junction of the SI and LI?

- The Cecum

What are the functions of the Colon

- 1) Water absorption
- 2) Bacterial fermentation of high fiber ingredients
- 3) Some B vitamin and Vitamin K synthesis
- 4) Formation and Storage of Feces