

Learning Objectives – Integrating Years 1 and 2

Below are essential concepts to be reviewed and integrated as you progress through the MHD Cardiovascular block.

FHB Gastrointestinal Physiology

There will be 3 questions on the January 30, 2012 MHD II exam developed from the following objectives:

- Describe the major components in saliva and their functions.
- Describe the most important gastrointestinal peptides (neurotransmitter, paracrine, and endocrine) indicating if they are activators or inhibitors of GI function.
- Describe the most important gastric secretions (including hydrochloric acid, pepsin, mucus, intrinsic factor), the cells where they originate from, their locations in the stomach, and their digestive functions.
- Describe the importance of [mucins+bicarbonate].
- Describe the distinct stimuli for the two major pancreatic secretions.
- Describe the major gastrointestinal events stimulated by CCK.
- List the major components of pancreatic mucous secretion and describe their functions.
- Describe the differences between segmentation and peristalsis, and their physiological roles in the small intestine.
- Describe the main function of bile acids.
- Explain the enzyme action on carbohydrates (amylase + brush border enzymes).
- Explain the main functions of the large intestine.
- Describe the significance of bacterial flora in the GI system.
- Define the distinct types of motility in the GI system (basic motility or 'law of intestine', segmentation, and haustration).
- Describe the Portal Circulation and its significance.

- Describe the main components of bile secretion.
- Describe the major steps in the transformation and excretion or absorption of bilirubin.

SHB
Abdomen

There will be 2 questions on the January 30, 2012 MHD II exam developed from the following objectives:

- Describe the terms intraperitoneal and retroperitoneal.
- Describe the functional anatomy of the stomach, its position, portions, sphincters, blood and nerve supply and key relations to other abdominal organs.
- Describe the regions of the small and large intestine, including the anatomy of the Appendix
- Describe the position and form of the pancreas and its relationships to other abdominal organs.
- Describe the position of the liver, the lobes and their key anatomical relations. Summarize the anatomy of the portal vein, the portal venous system and portal-systemic anastomosis and its significance.
- Describe the anatomy of the lymph nodes involved in lymph drainage of abdominal viscera and its significance in relation to spread of malignancy.