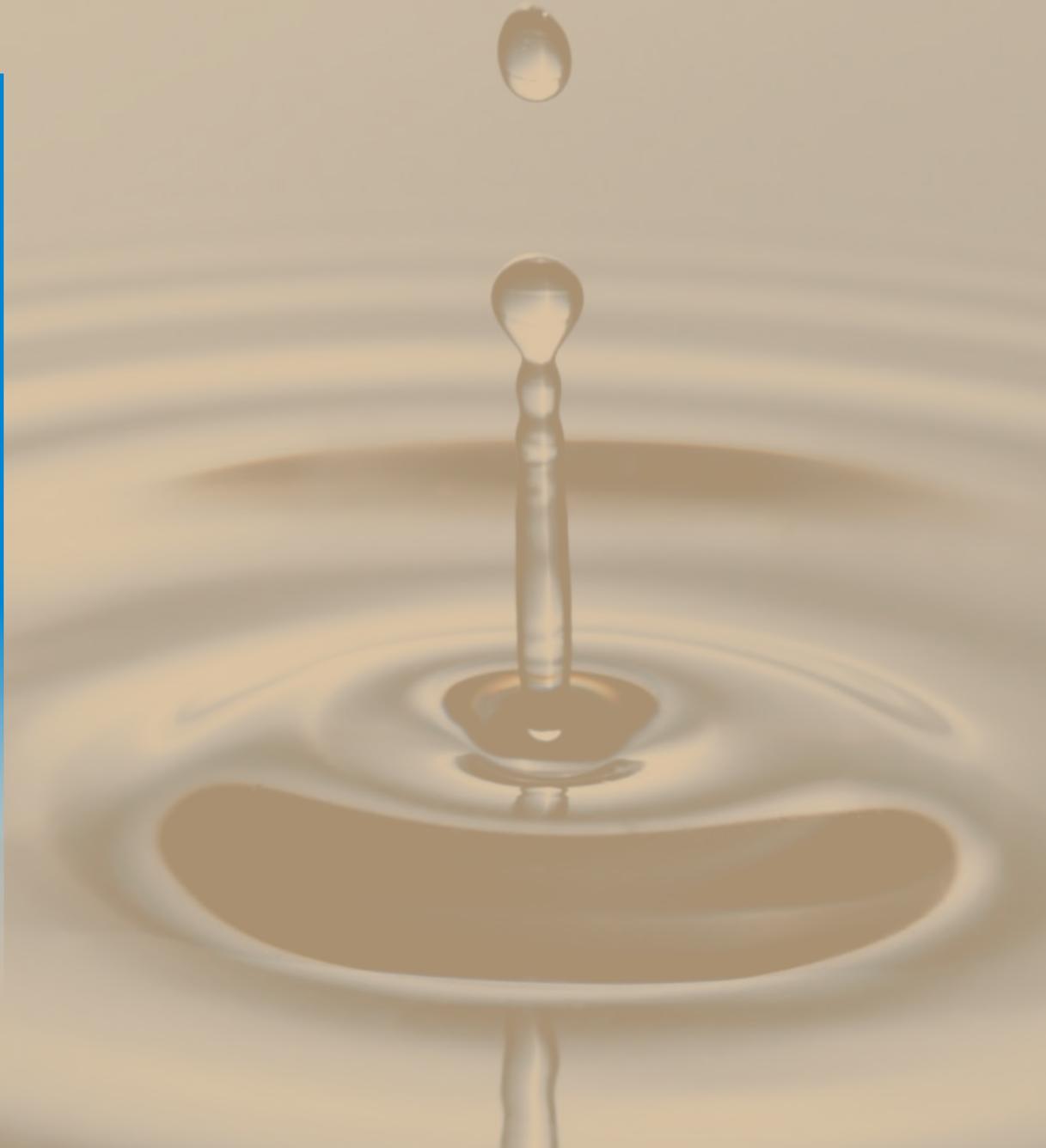




Gross but Cool: Adventures in Gastroenterology

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Who Am I?

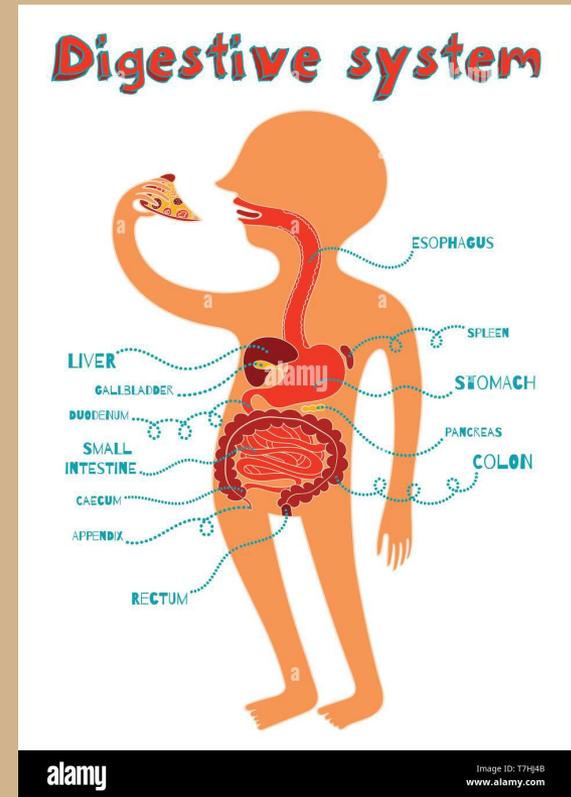
- Nurse Practitioner in Gastroenterology
- Background in nursing & endoscopy
 - Undergraduate Biology/anthropology with a minor in chemistry
 - Nursing school
 - ER nurse for 3 years
 - Endoscopy nurse for 7 years
- Love educating patients and students

Question: What's your favorite food?



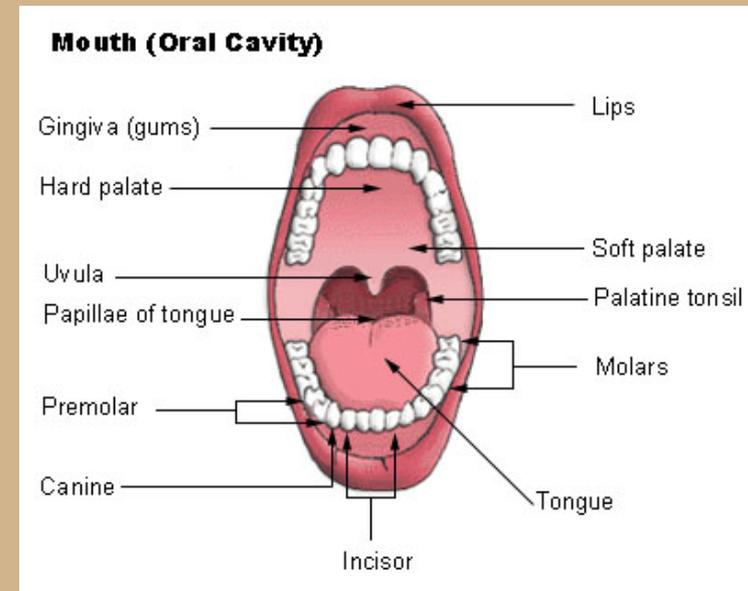
What is Gastroenterology?

- Branch of medicine focused on the digestive system
- Includes stomach, intestines, liver, pancreas, and more
- Fun fact: The digestive system is about 30 feet long!

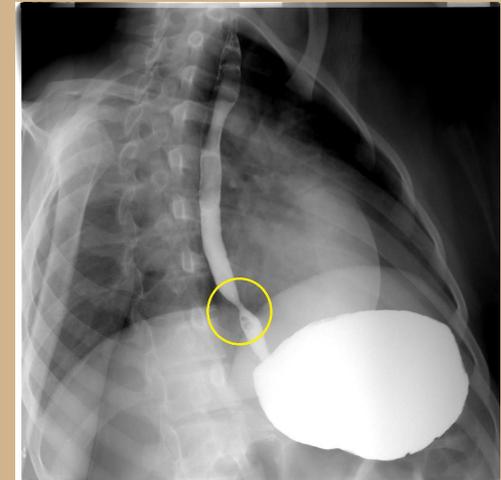
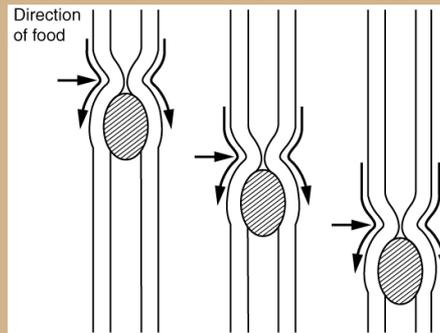
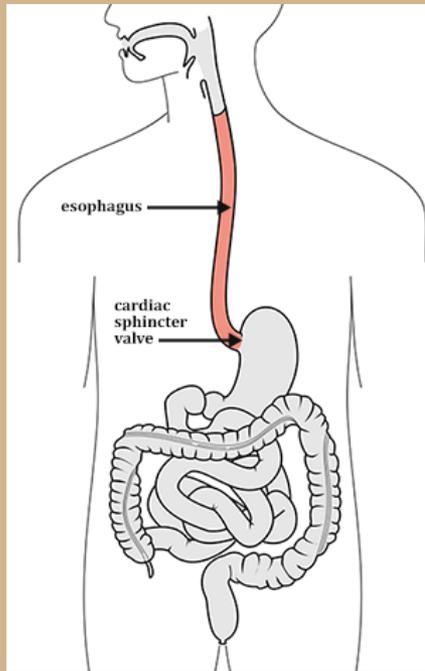


The Mouth

- Chewing and saliva start breaking down food
- Saliva contains enzymes that begin digestion



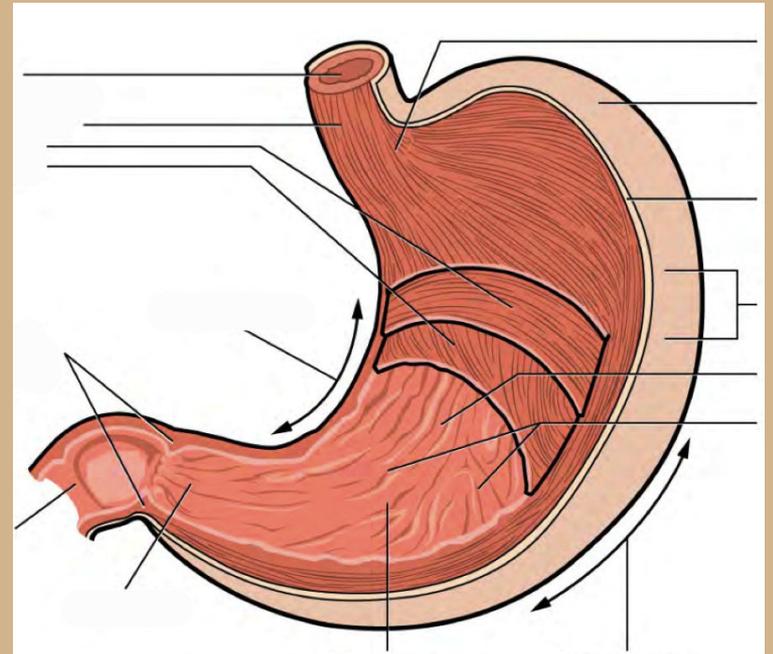
The Esophagus



- The 'food highway' from mouth to stomach
- Muscles push food down in a wave-like motion called peristalsis

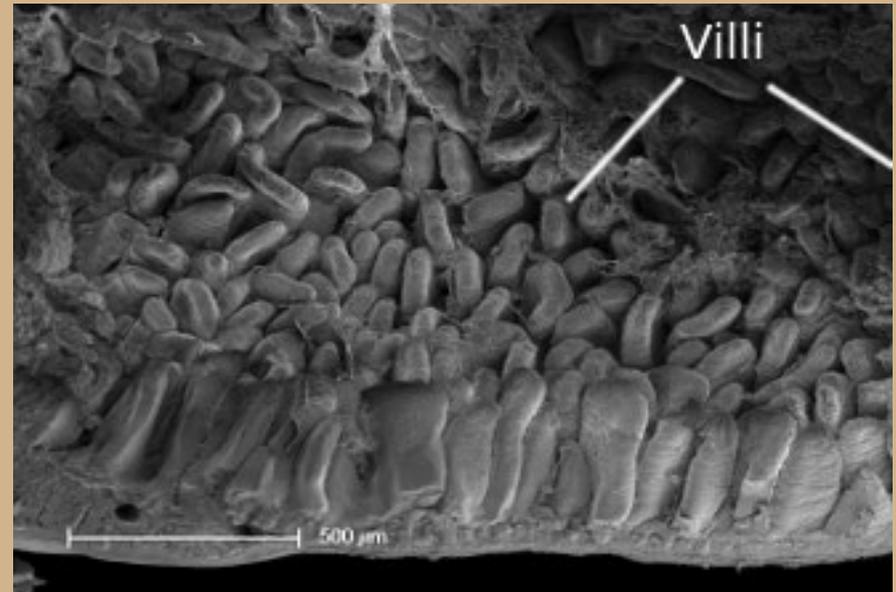
The Stomach

- Acts like a blender + acid tank creating chyme
- Stomach acid is strong enough to dissolve metal!

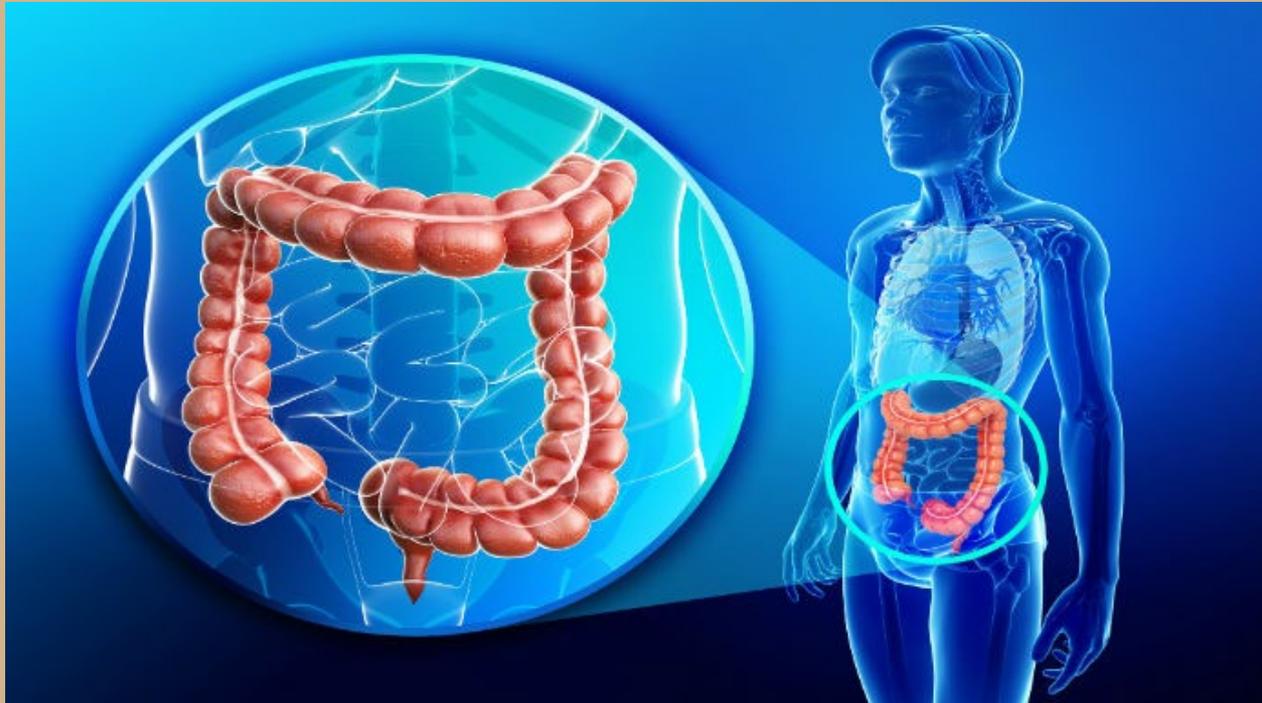


The Small Intestine

- About 20 feet long!
- Absorbs most nutrients like a sponge



The Large Intestine

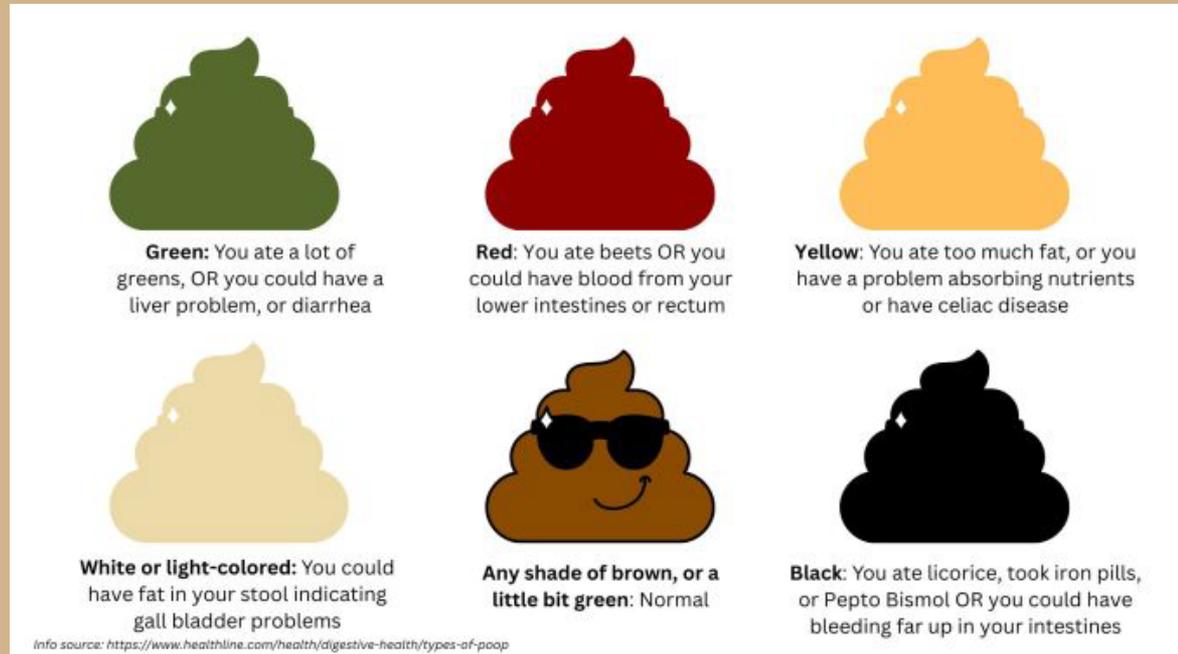


- Absorbs water
- Gut bacteria help digestion and make vitamins
- Forms stool (poop)

The Bristol Stool Form Scale

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces ENTIRELY LIQUID

Fun & Gross Facts



- Gum does NOT stay in your stomach 7 years
- You make 1–2 quarts of saliva every day
- The longest recorded poop was 26 feet long!

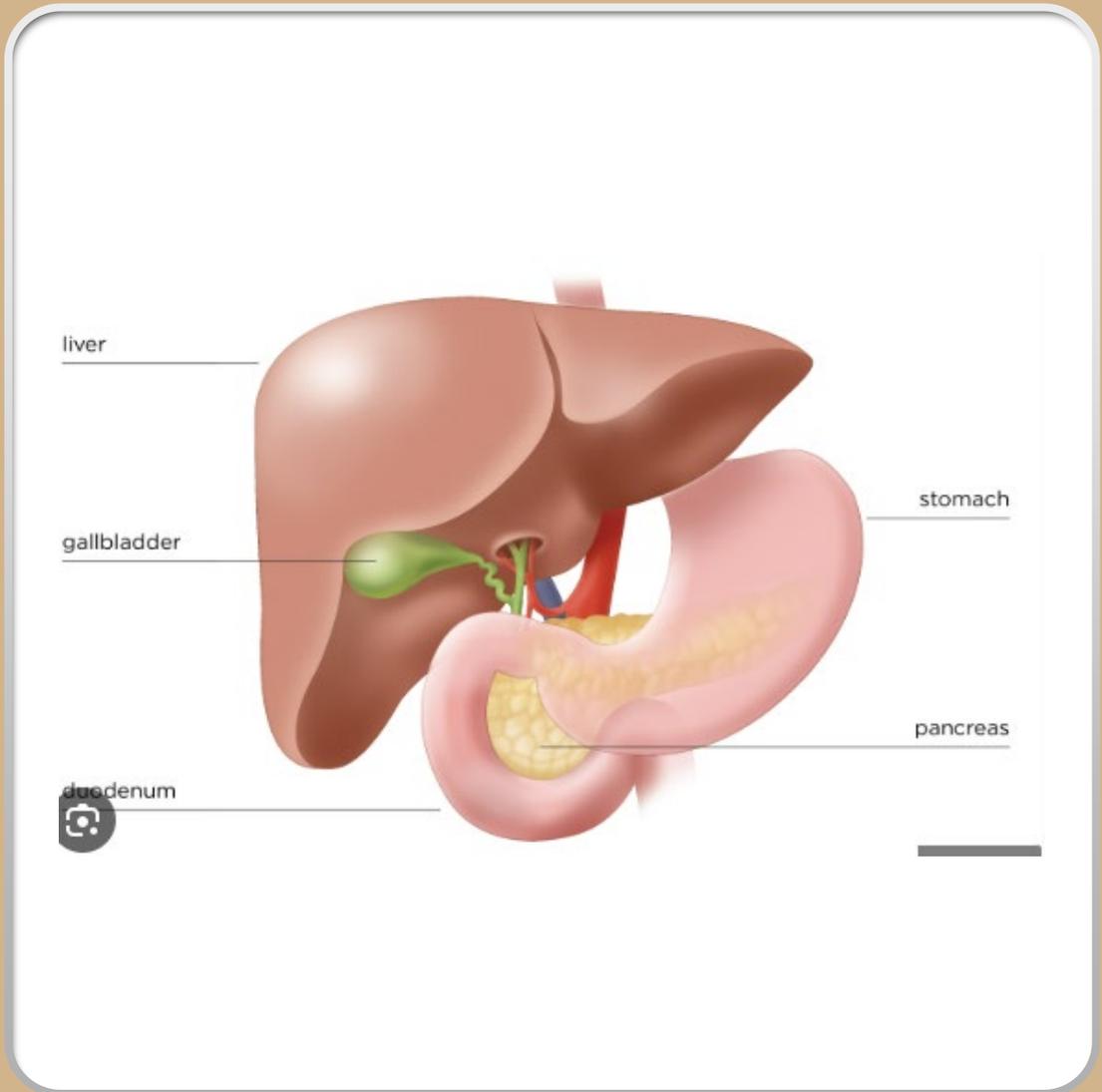
Pancreas

Endocrine Function:

- Embedded in the pancreas are the islets of Langerhans, which secrete into the blood the hormones insulin and glucagon.

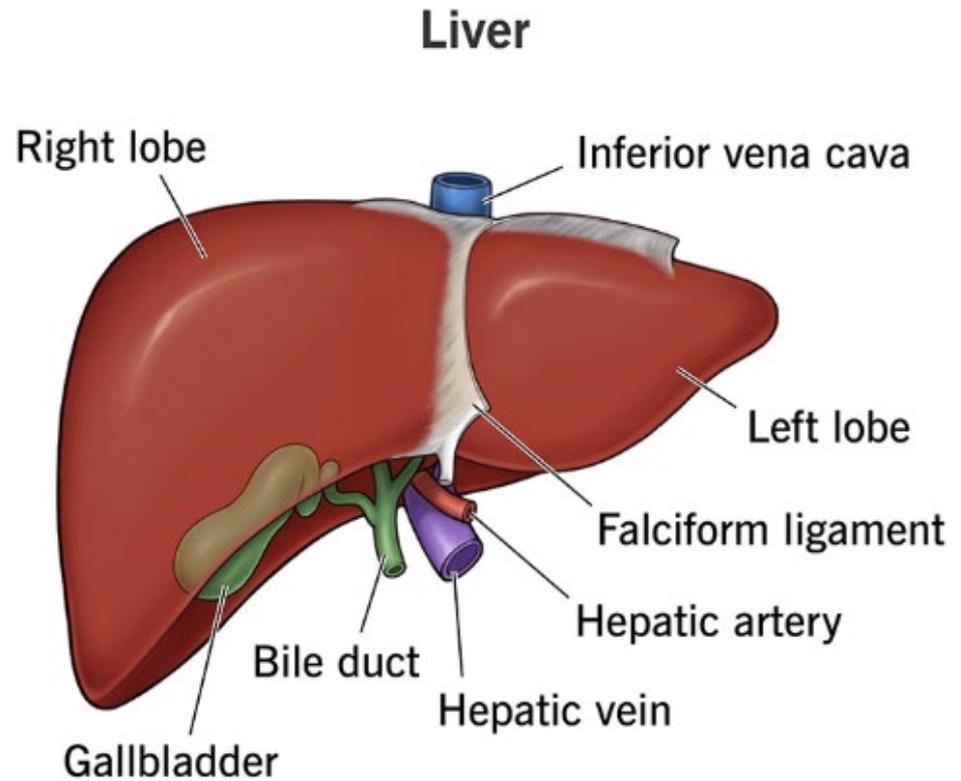
Exocrine function:

- secretes digestive enzymes into the duodenum.



Location and anatomy

- **Location:** In the upper right part of the abdomen, beneath the diaphragm and on top of the stomach.
- **Size and weight:** About the size of a football, weighing around 3 pounds (1.5 kg) in an adult.
- **Appearance:** A reddish-brown, cone or wedge-shaped organ.



Liver Functions

- **Blood filtration and detoxification:**
 - Filters blood from the digestive system, removing toxins and byproducts like alcohol and medications.
- **Nutrient processing:**
 - Processes and stores nutrients from food. It converts excess glucose into glycogen for storage and can convert glycogen back into glucose when needed.
- **Metabolism:**
 - Plays a crucial role in regulating metabolism, including carbohydrate, fat, and protein metabolism.
- **Bile production:**
 - Produces bile, which is essential for the digestion and absorption of fats.
- **Protein synthesis:**
 - Produces proteins necessary for blood clotting and other functions, such as albumin.
- **Waste removal:**
 - Metabolizes waste products like old red blood cells and converts them into a substance called bilirubin, which is then eliminated from the body.
- **Vitamin and mineral storage:**
 - Stores vitamins and minerals needed by the body.

Cool Tools in GI



- Endoscopy: A tiny camera looks inside the stomach
- Colonoscopy: Checks the large intestine for polyps
- Helps doctors prevent and treat disease

Healthy Gut, Healthy You

- Eat fiber-rich foods (fruits, veggies, whole grains)
- Stay hydrated
- Move your body
- Manage stress

- Game: Which food has more fiber?

Careers in Gastroenterology

- Nurse Practitioner (NP)
- Physician (GI Doctor)
- Nurse & Technician
- Dietitian



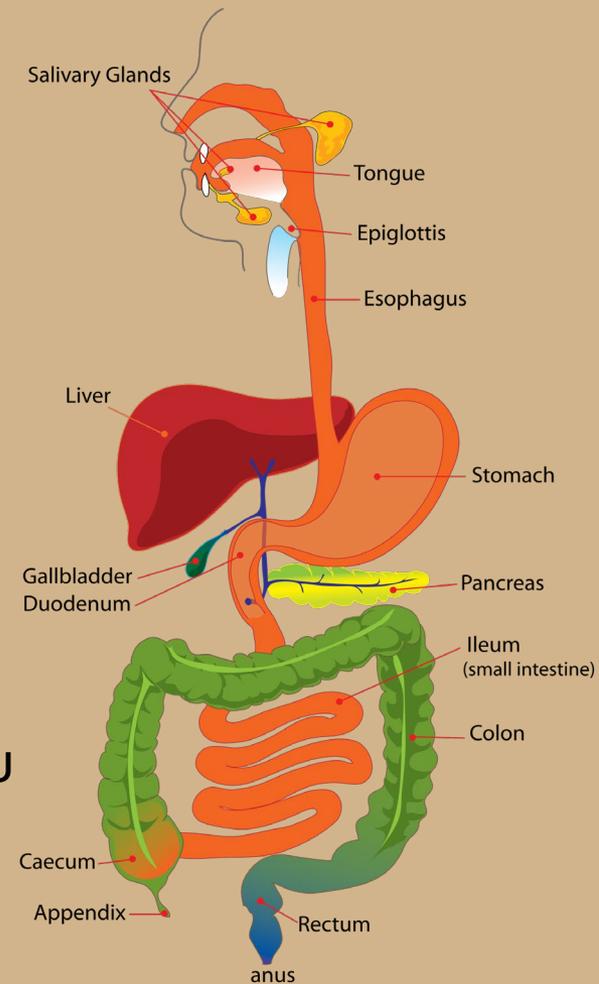
- Teamwork makes it possible to care for patients!

Recap

- From bite → belly → intestines → out!

Key takeaways:

- Your gut is amazing
- Food fuels your body
- Take care of your gut—it takes care of you



Activity: Quick Quiz

- Which organ acts like a blender with acid?
- Where are most nutrients absorbed?
- What tool lets doctors see inside the stomach?

Thank You!

- Every bite goes on an incredible journey— your job is to take care of the road it travels on!

Questions?

- What else do you want to know about the digestive system?