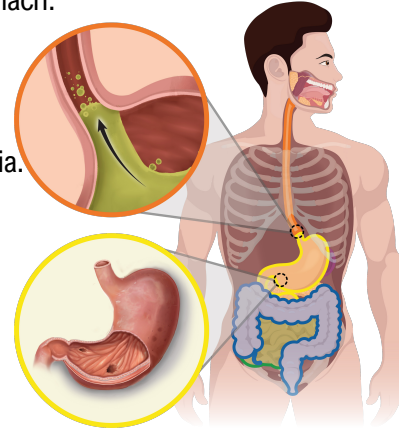


## TOPIC: DISORDERS OF THE DIGESTIVE SYSTEM

### Pathologies of the Stomach and Esophagus

#### ◆ Esophagus:

- *Esophageal sphincter (cardiac sphincter)*: separates esophagus & stomach.
- **Heartburn**: movement of \_\_\_\_\_ acid into the esophagus.
- **Gastroesophageal Reflux Disease (GERD)**: \_\_\_\_\_ heartburn.
  - Risk factors include: obesity, pregnancy, smoking, & diaphragm hernia.

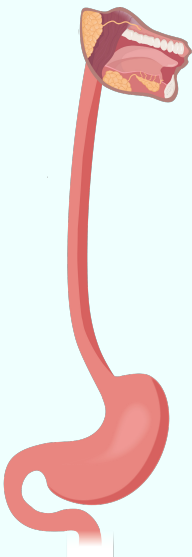


#### ◆ Stomach:

- **Peptic Ulcers**: open \_\_\_\_\_ where stomach acid eroded tissue.
- Caused by *H. pylori* \_\_\_\_\_, nonsteroidal anti-inflammatory drugs, smoking, & alcohol consumption.

### EXAMPLE

On the drawing of the stomach and esophagus below, draw a box around the part of the system that is malfunctioning in cases of heartburn and GERD.



a. Why is this referred to as “heart” burn?

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b. What feature of the stomach prevents this pain inside the stomach?

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c. How is this feature of the stomach related to a peptic ulcer?

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## **TOPIC: DISORDERS OF THE DIGESTIVE SYSTEM**

### **PRACTICE**

Which food or action below is a common trigger for heartburn?

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- a. Sleeping with head of the bed elevated.
- b. Rapid weight loss.
- c. A meal that is especially high in fiber.
- d. Eating too large a meal in a short period.

### **PRACTICE**

What causes peptic ulcers?

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- a) Contaminated water.
- b) *H. Pylori* bacteria.
- c) Inadequate fiber consumption.
- d) Gluten.

## TOPIC: DISORDERS OF THE DIGESTIVE SYSTEM

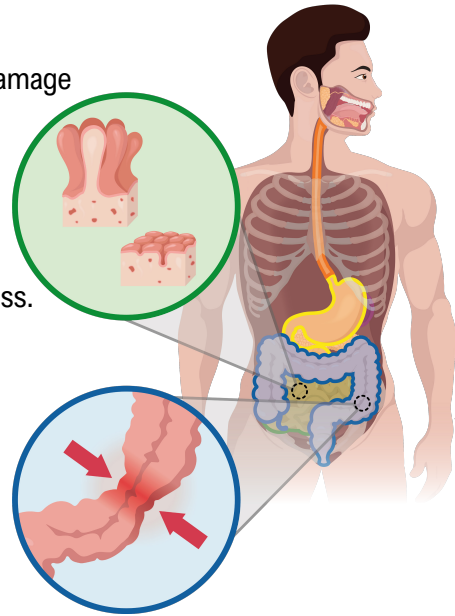
### Pathologies of the Small and Large Intestine

#### ◆ Small Intestine:

- **Celiac Disease:** \_\_\_\_\_ disease where immune cells damage \_\_\_\_\_ of the small intestine after consuming gluten.

#### ◆ Large Intestine:

- **Diarrhea:** \_\_\_\_\_ water in stool → can cause dehydration.
- **Constipation:** \_\_\_\_\_ water in stool → solid feces, hard to pass.
- **Irritable Bowel Syndrome (IBS):** chronic condition marked by abdominal \_\_\_\_\_, bloating, & frequent diarrhea. \_\_\_\_\_ known cause.



### EXAMPLE

For the statements below, write a “T” if they are true and an “F” if they are false.

- Gluten should generally be avoided by most people: \_\_\_\_\_
- Constipation is when there is excess water in the stool: \_\_\_\_\_
- IBS is thought to be caused by an intolerance to gluten: \_\_\_\_\_
- Celiac is an autoimmune disease: \_\_\_\_\_
- Diarrhea can cause dehydration: \_\_\_\_\_
- Celiac is caused by defective amylase enzymes: \_\_\_\_\_

### PRACTICE

What steps can one take to decrease their risk of constipation?

- Eat a diet high in protein.
- Drink plenty of water.
- Eat a diet high in fiber.

- a) I & II.      b) I & III.      c) II & III.      d) I, II, & III.

## TOPIC: DISORDERS OF THE DIGESTIVE SYSTEM

### Cancer

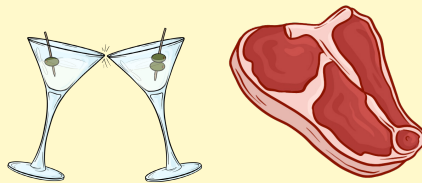
- ◆ Cancer can happen \_\_\_\_\_ along the GI tract.
  - \_\_\_\_\_ is the \_\_\_\_\_ most common & \_\_\_\_\_ most deadly type of cancer.

#### Symptoms

- ◆ Persistent \_\_\_\_\_ in bowel habits.
- ◆ \_\_\_\_\_ in stool.
- ◆ Abdominal pain.

#### Risk Factors

- ◆ Obesity
- ◆ Sedentary lifestyle
- ◆ Smoking
- ◆ Alcohol consumption
- ◆ Red meat consumption



#### Prevention

- ◆ Diets high in \_\_\_\_\_.
- ◆ Colonoscopy to remove \_\_\_\_\_.



### PRACTICE

Which nutrient or food component is most important for prevention of colorectal cancer?

- a) Protein.                      b) Omega-3 fatty acids.                      c) Antioxidants.                      d) Fiber.