

## Lab 8 - Part 1

# Gastrointestinal System Histology

---

### Slide 2-6-7 Gastroesophageal Junction

- **Esophagus**
    - Lined with **Non-Keratinized Stratified Squamous Epithelium**
  - **Stomach**
    - Lined with **Simple Columnar Epithelium**
- 

### Slide 2-7-5 Duodenum & Pancreas (Slide 2-7-4 is just the Duodenum)

- **Duodenum**
    - Lined with **Simple Columnar Epithelium** (with Goblet Cells)
  - **Pancreas**
    - **Pancreatic Acinar Cells**
    - **Islet of Langerhans** (Pancreatic Islet)
      - **alpha-cells**
        - makes **Glucagon** (which raises your blood glucose levels)
      - **beta-cells**
        - makes **Insulin** (which lowers your blood glucose levels)
- 

### Slide 2-7-6 Jejunum

- **Jejunum**
    - Lined with **Simple Columnar Epithelium** (with Goblet Cells)
    - has very long (tall) **Plicae Circulares** (“Circular folds”)
    - near absence of Peyer’s Patches
- 

### Slide 2-7-7 Ileum

- **Ileum**
    - Lined with **Simple Columnar Epithelium** (with Goblet Cells)
    - has very short (small) **Plicae Circulares** (“Circular folds”)
    - lots of **Peyer’s Patches** (more found distally)
-

---

Slide 2-8-3 **Recto-Anal Junction**

- **Rectum**
  - Lined with **Simple Columnar Epithelium** (with Goblet Cells)
- **Anus**
  - Lined with **Keratinized Stratified Squamous Epithelium**
- **Internal Anal Sphincter**
  - **Smooth Muscle** (continuous with rectum muscle wall), Involuntary Control
- **External Anal Sphincter**
  - **Skeletal Muscle**, Voluntary Control

---

Slide 2-8-4 **Liver**

- **Liver**
  - **Hepatocytes**
  - **Central Vein**
  - **Portal Triad**

---

Slide 2-8-6 **Pancreas** (by itself)

- **Pancreas**
  - **Pancreatic Acinar Cells**
  - **Islet of Langerhans** (Pancreatic Islet)
    - **alpha-cells**
      - makes **Glucagon** (which raises your blood glucose levels)
    - **beta-cells**
      - makes **Insulin** (which lowers your blood glucose levels)