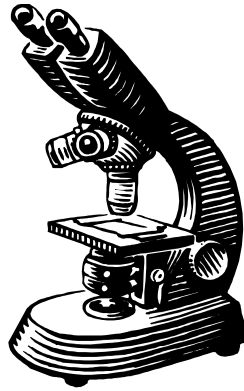


Bio& 242, Human A&P 2: Unit 1/Lab 2 and 4

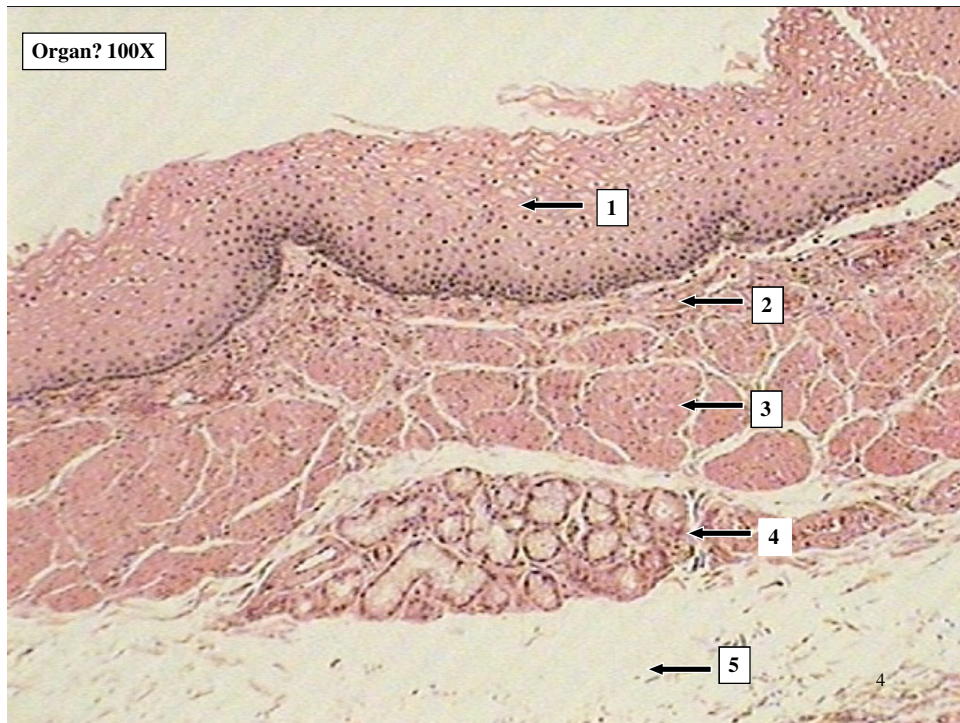
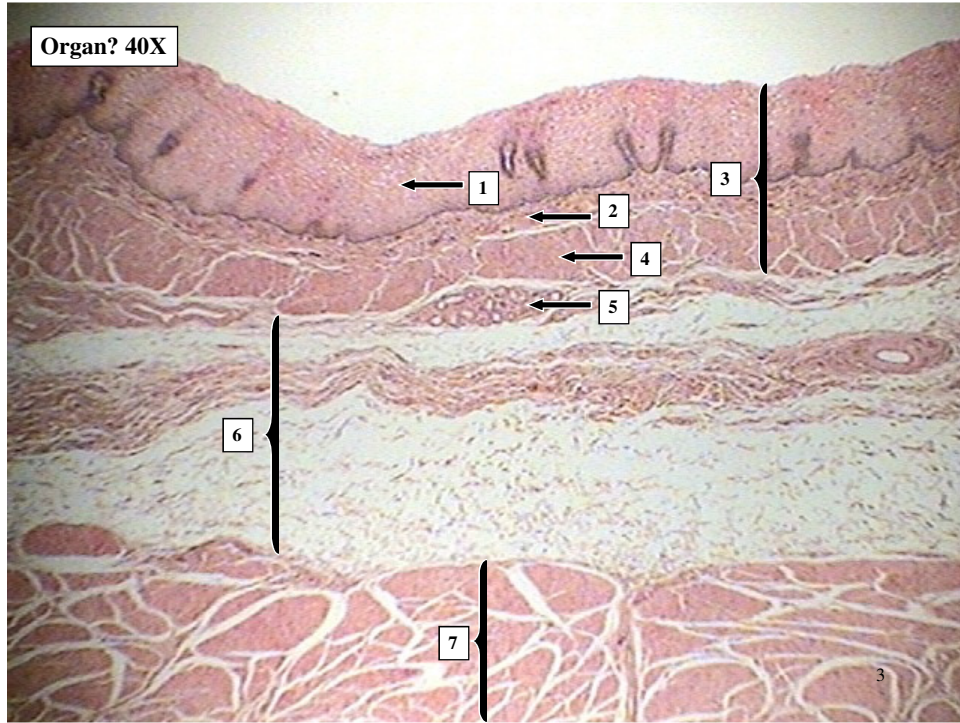


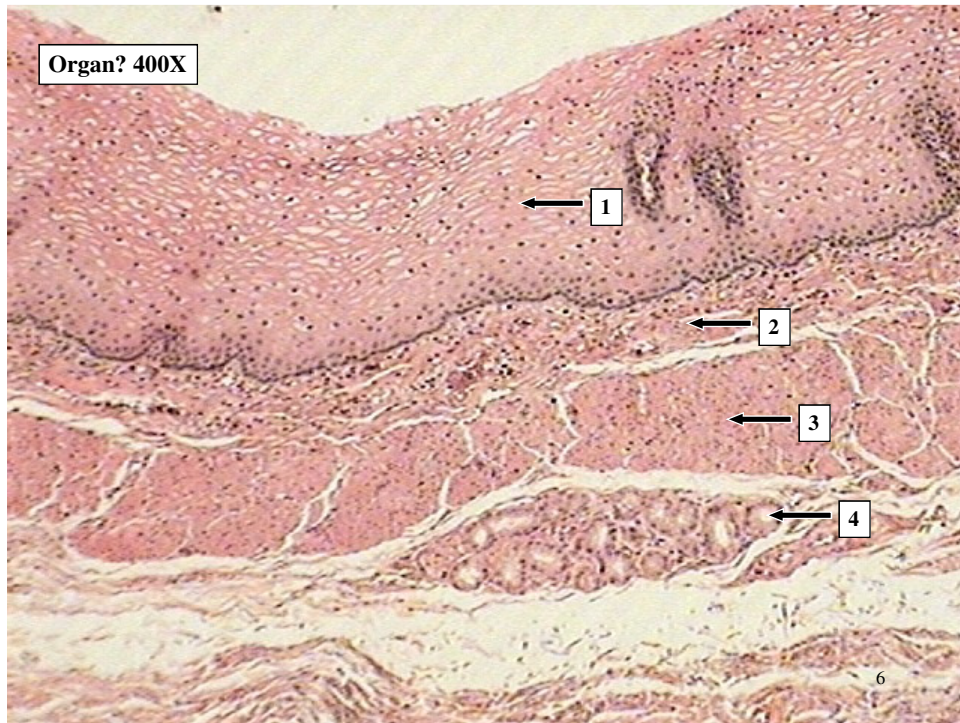
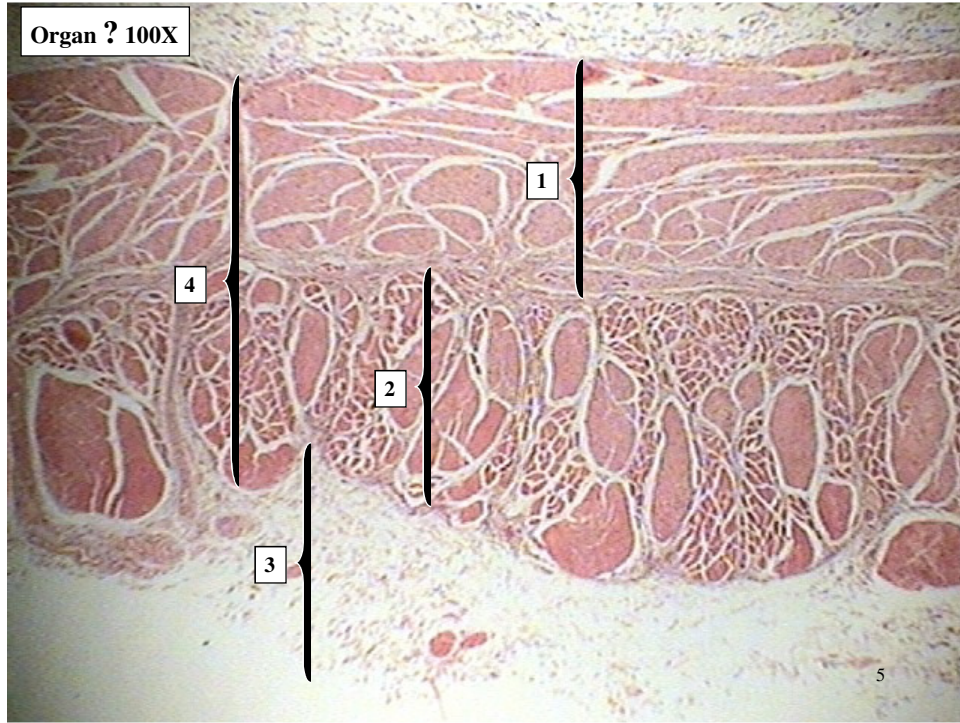
1

Histology Slides for the GI Tract

- **Slides are presented in order of magnification**
- **As you view the following slides make sure you can accomplish these goals:**
 1. **Can you identify the organ from which the tissue sample was taken?**
 2. **Can you identify the specific structures or layers indicated by the numbered arrows or brackets?**
- **At the end of a sequence you will find the answers to the above for each organ.**

2





Tissue from Esophagus slides 3-6

Slide # 3

- 1. Nonkeratinized Stratified Squamous**
- 2. Lamina Propria**
- 3. General layer called the Mucosa**
- 4. Muscularis Mucosae**
- 5. Submucosal Mucous Gland**
- 6. Submucosa**
- 7. Circular smooth muscle layer**

Slide # 4

- 1. Nonkeratinized Stratified Squamous**
- 2. Lamina Propria**
- 3. Muscularis Mucosae**
- 4. Submucosal Mucous Gland**
- 5. Submucosa**

7

Tissue from Esophagus slides 3-6

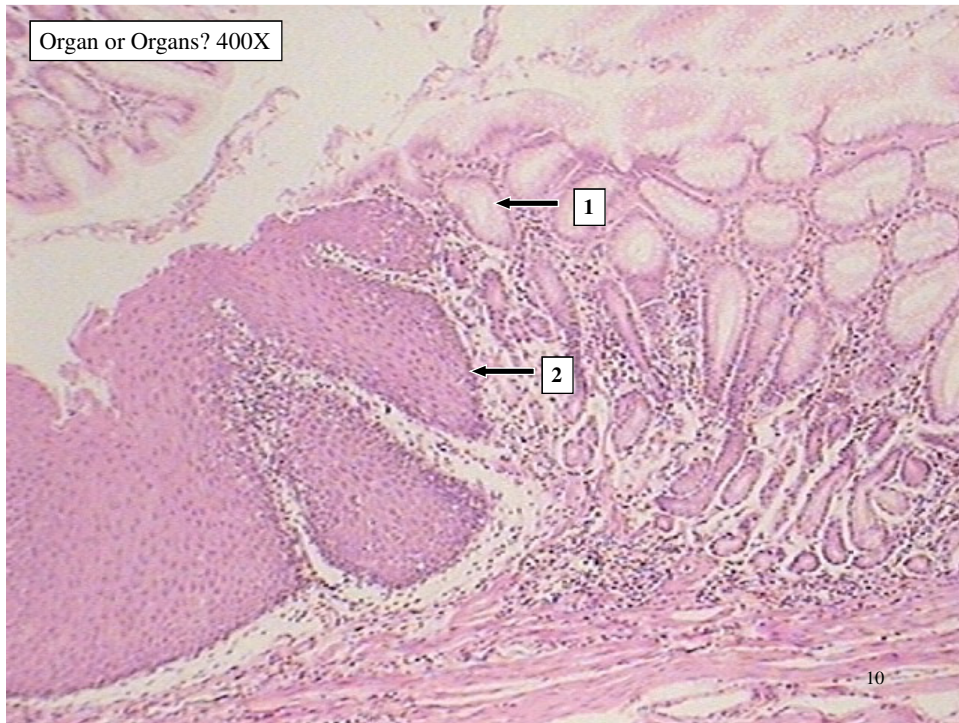
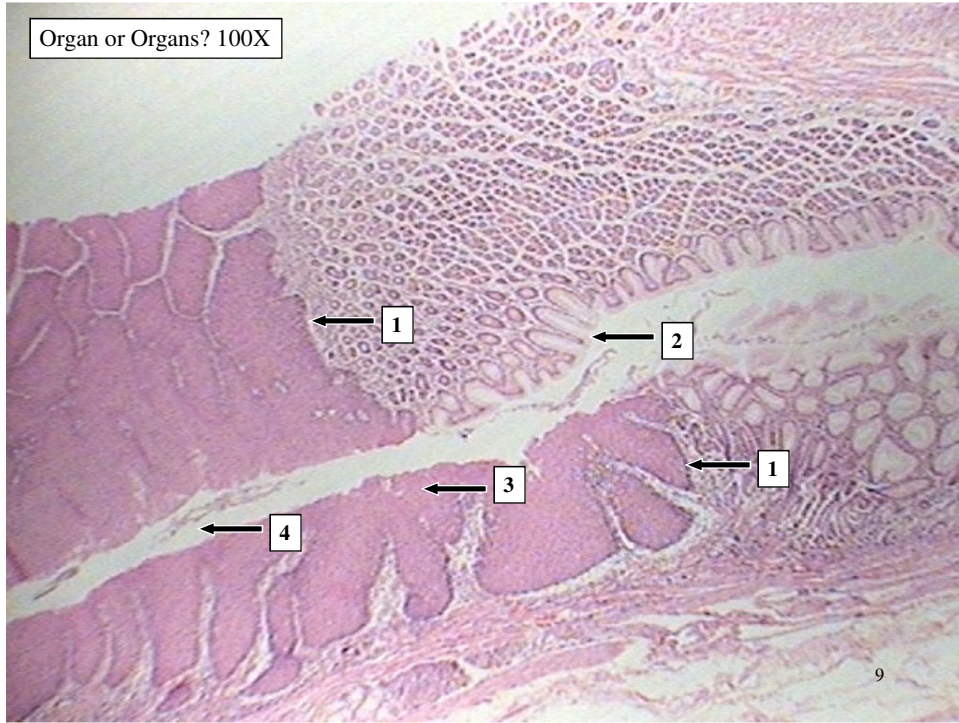
Slide # 5

- 1. Circular smooth muscle layer**
- 2. Longitudinal smooth muscle layer**
- 3. Adventitia**
- 4. Mucularis Externa**

Slide # 6

- 1. Nonkeratinized Stratified Squamous**
- 2. Lamina Propria**
- 3. Muscularis Mucosae**
- 4. Submucosal Mucous Gland**

8



Slides 9-10 Esophageal-Gastric Junction

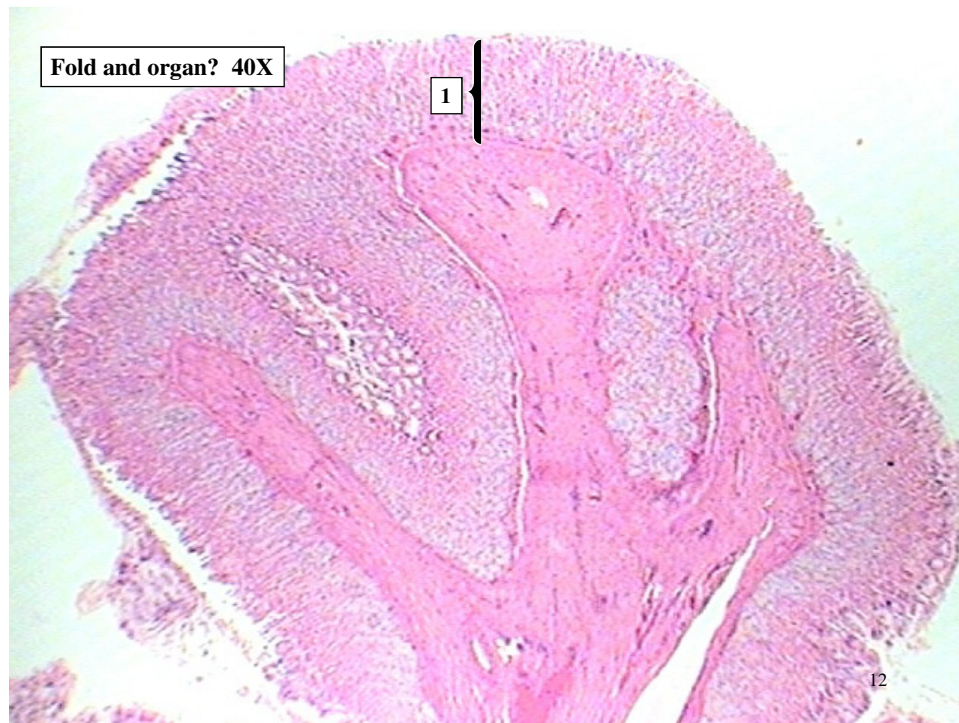
Slide # 9

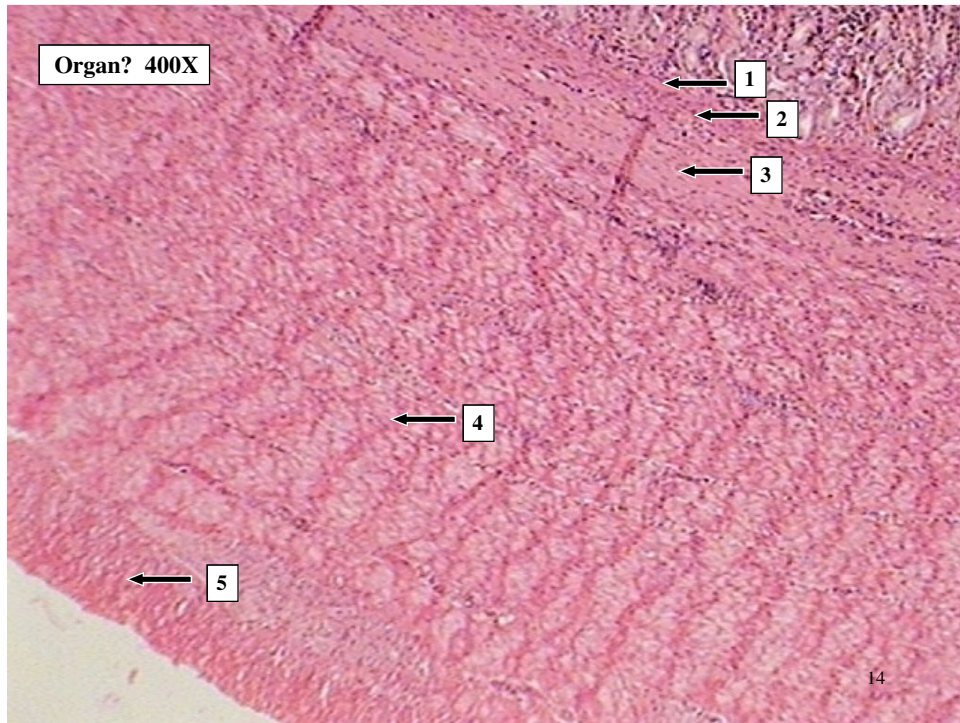
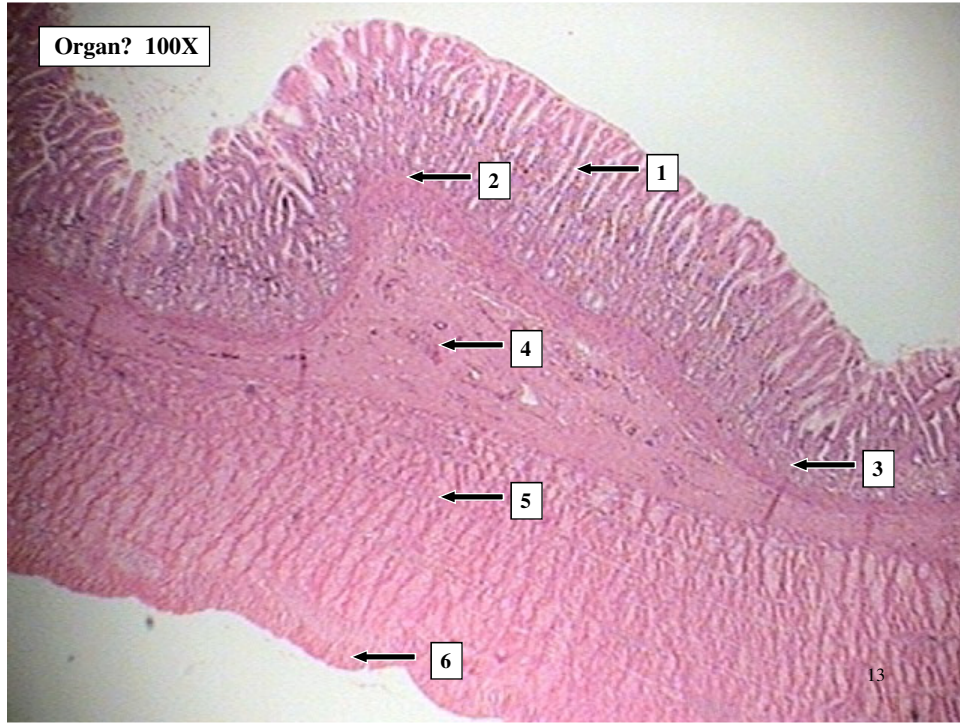
1. Junction where epithelia changes from nonkeratinized stratified squamous to simple columnar.
2. Simple columnar
3. Nonkeratinized stratified squamous
4. Lumen

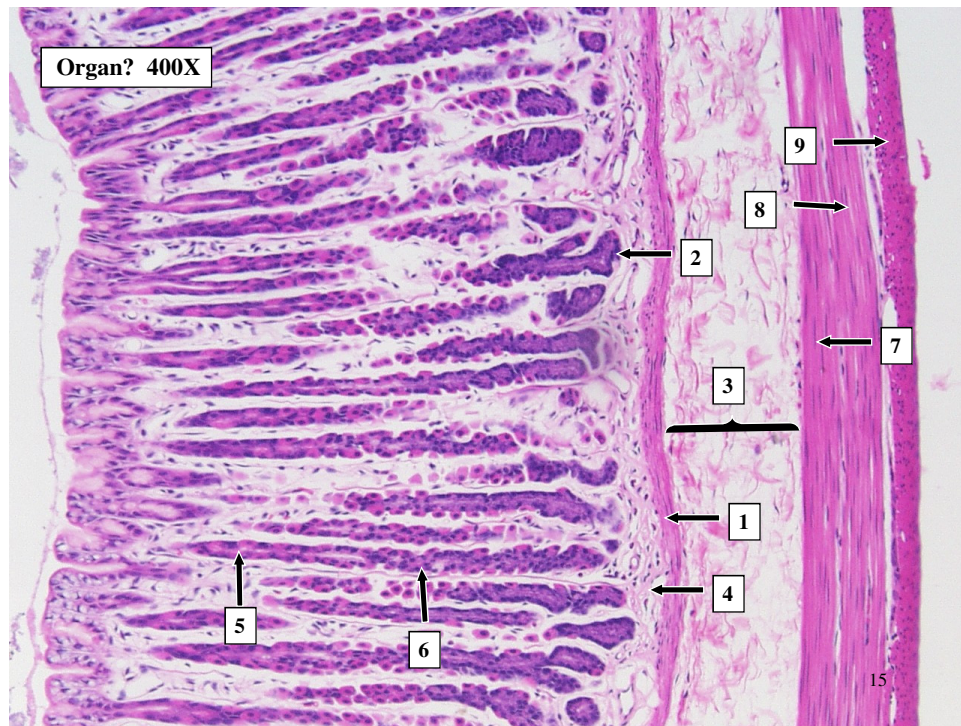
Slide # 10

1. Simple columnar lining a gastric pit
2. Junction where epithelia changes from nonkeratinized stratified squamous to simple columnar

11







Slides 12-15 Stomach

Slide # 12

Large fold is a Rugae

- Gastric Mucosa

Slide # 13

1. Simple columnar lining a gastric pit
2. Muscularis Mucosae
3. Lamina Propria
4. Oblique smooth muscle layer
5. Circular smooth muscle layer
6. Longitudinal smooth muscle layer

Slides 12-15 Stomach

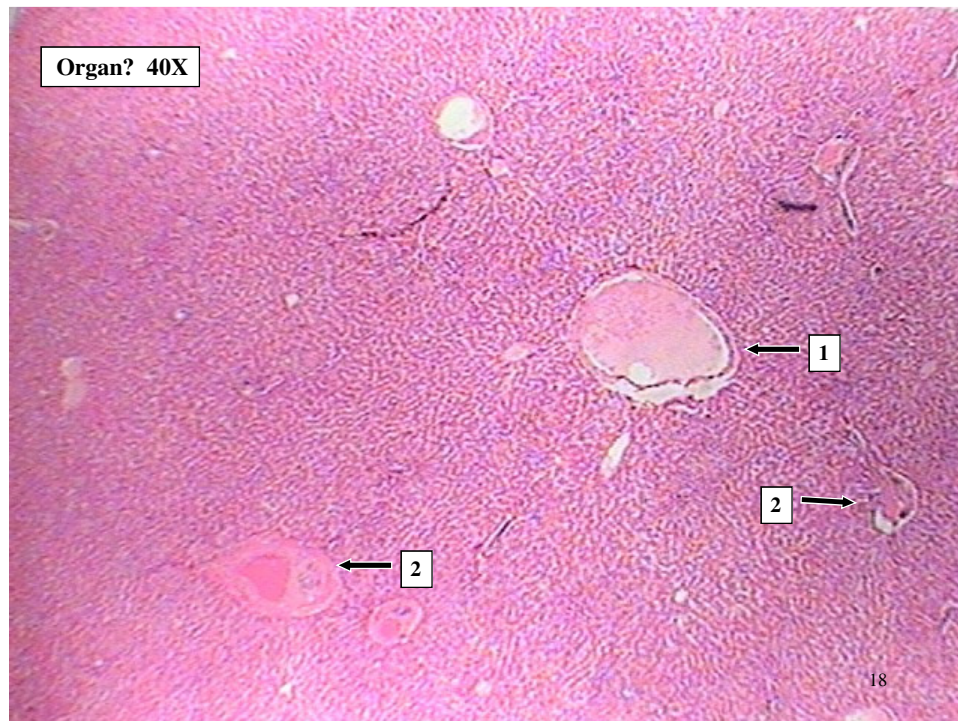
Slide # 14

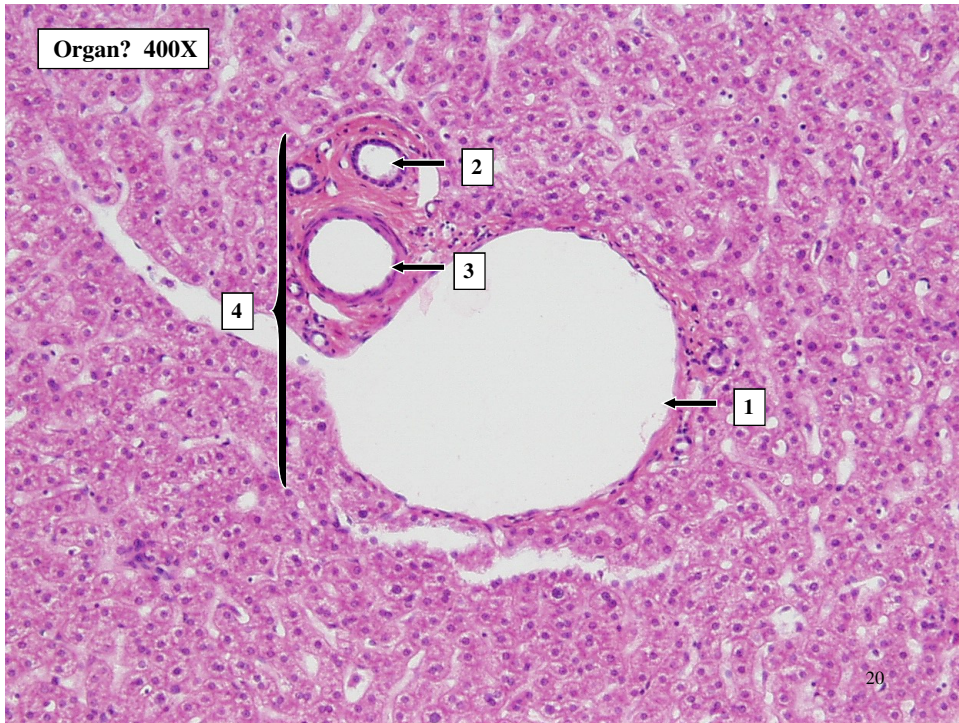
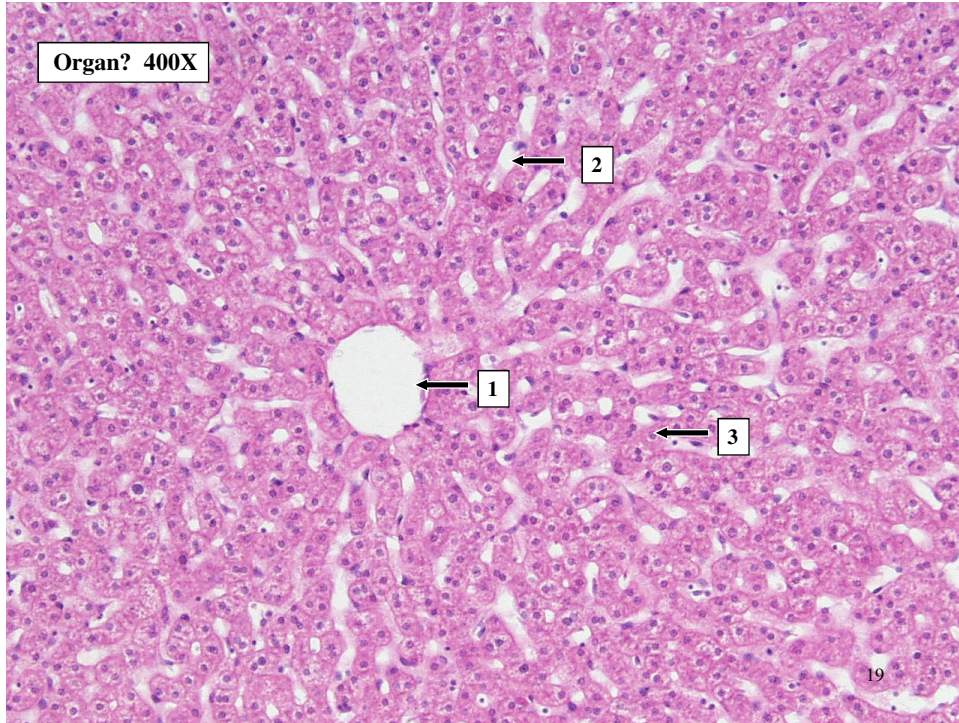
1. Muscularis Mucosae
2. Submucosa
3. Oblique smooth muscle layer
4. Circular smooth muscle layer
5. Longitudinal smooth muscle layer

Slide # 15

1. Muscularis Mucosae
2. G-cells at the bottom of a gastric pit
3. Submucosa
4. Lamina Propria
5. Parietal cells in a gastric pit
6. Chief cells in a gastric pit
7. Oblique smooth muscle layer
8. Circular smooth muscle layer
9. Longitudinal smooth muscle layer

17





Slides 18-20 Liver Tissue

Slide # 18

1. Central Vein
2. Portal triads demonstrating the boundary of the lobule

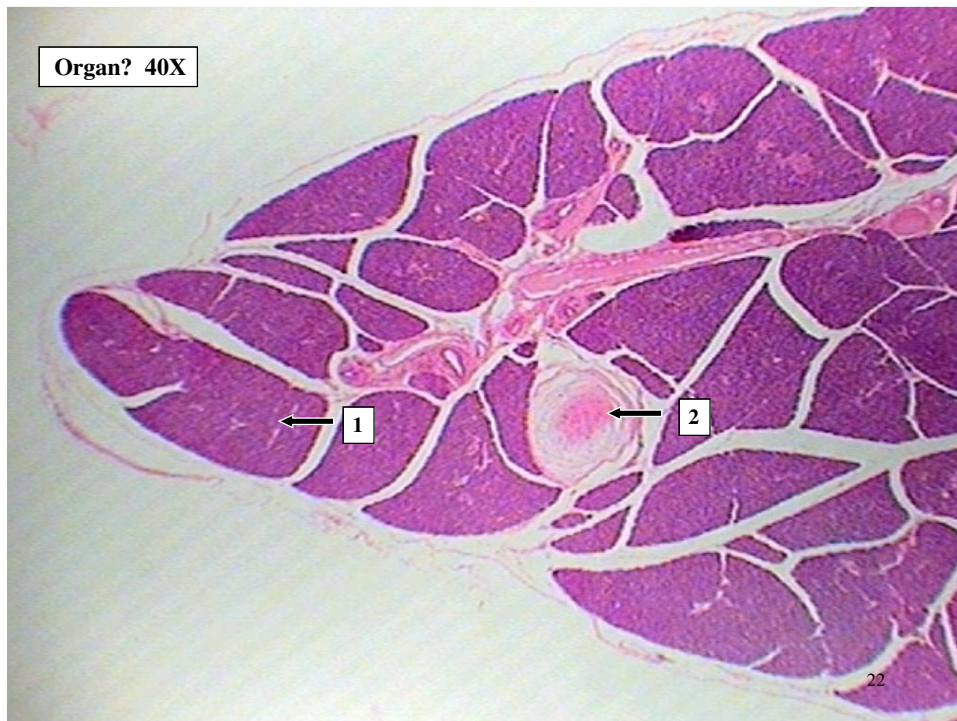
Slide # 19

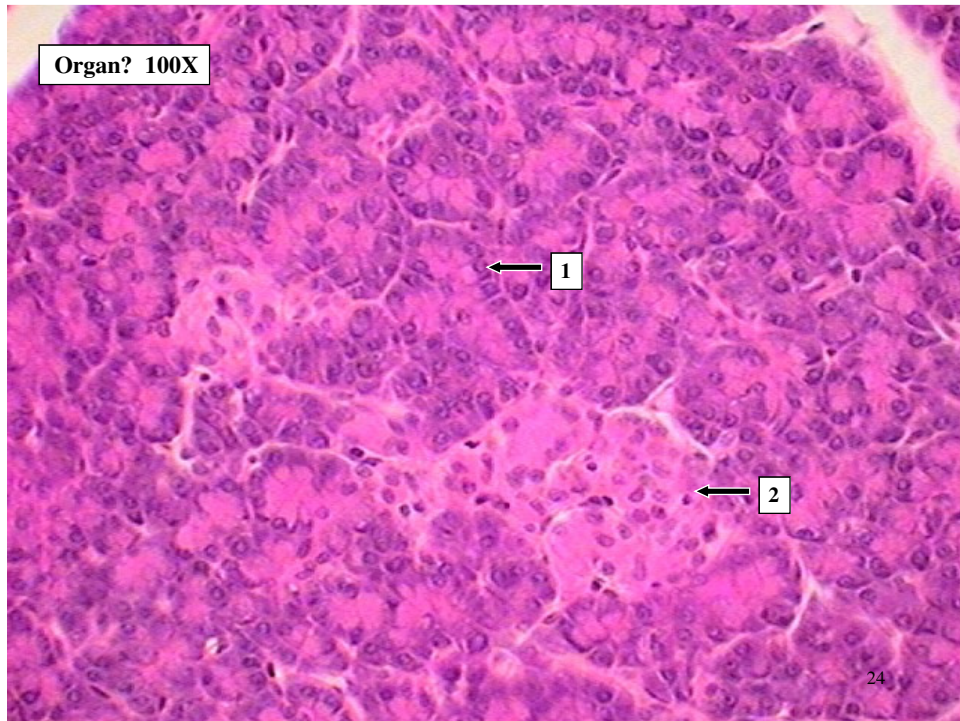
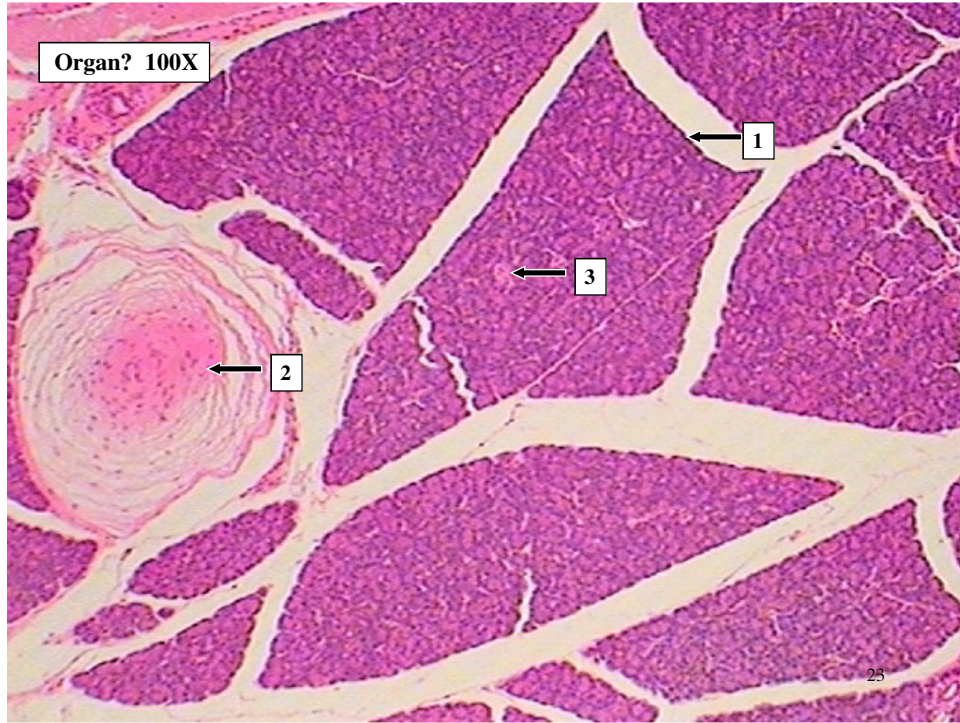
1. Central Vein
2. Sinusoids
3. Hepatocyte

Slide # 20

1. Branch of the Hepatic Portal Vein
2. Bile duct
3. Branch of the Hepatic Artery
4. Portal Triad

21





Slides 22-24 Pancreas Tissue

Slide # 22

1. Block of acinar cells called an acini
2. Pacinian Corpuscle

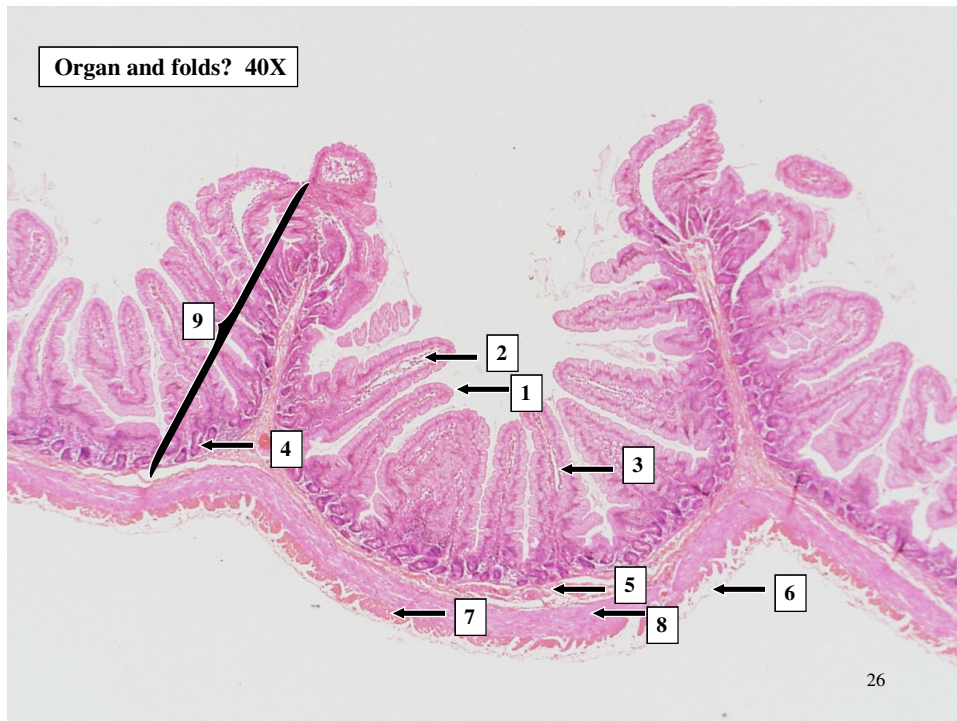
Slide # 23

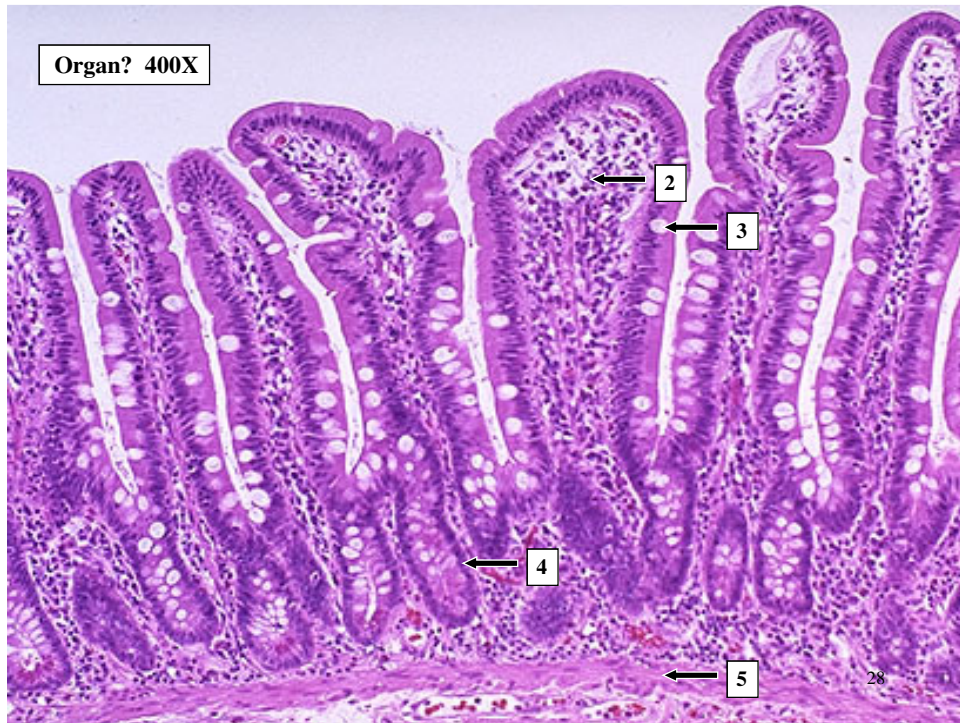
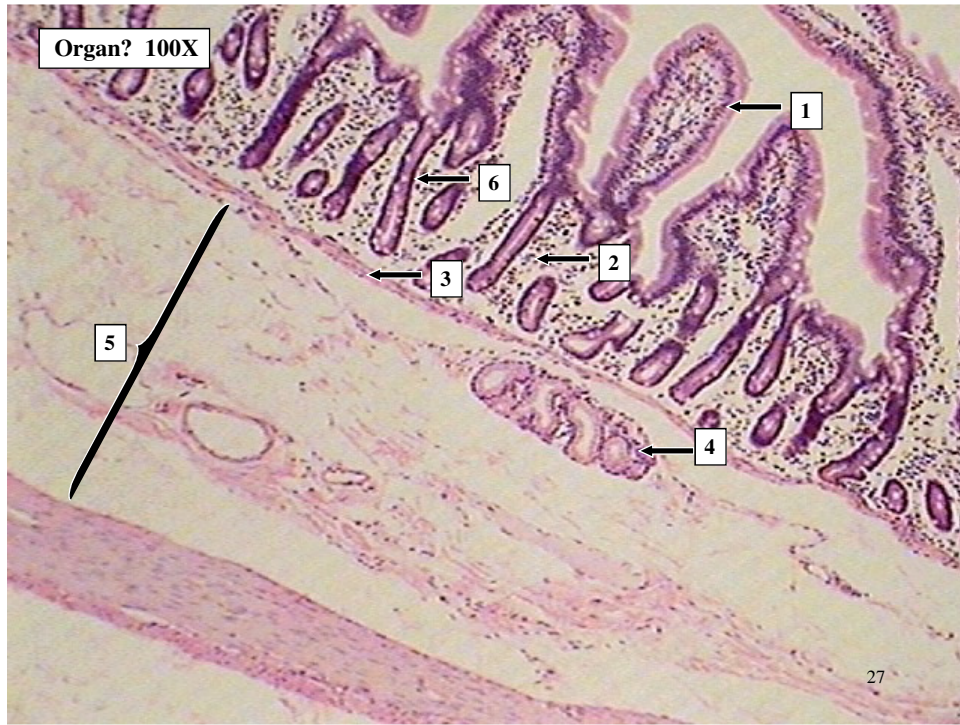
1. Block of acinar cells called an acini
2. Pacinian Corpuscle
3. Islet of Langerhans

Slide # 24

1. Acinar Cell
2. Islet of Langerhans

25





Slides 26-28 Small Intestine - Duodenum

Slide # 26

1. Villus
2. Lamina Propria
3. Lacteal
4. Crypt of Lieberkuhn
5. Submucosa
6. Visceral Peritoneum
7. Longitudinal smooth muscle layer
8. Circular smooth muscle layer
9. Plicae Circularis

29

Slides 26-28 Small Intestine - Duodenum

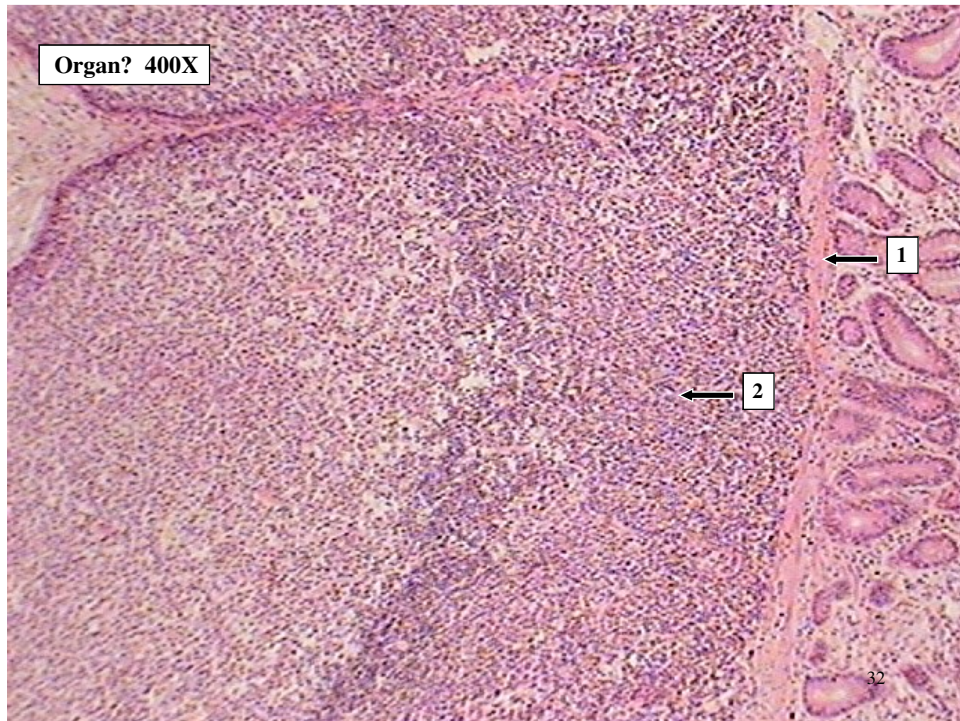
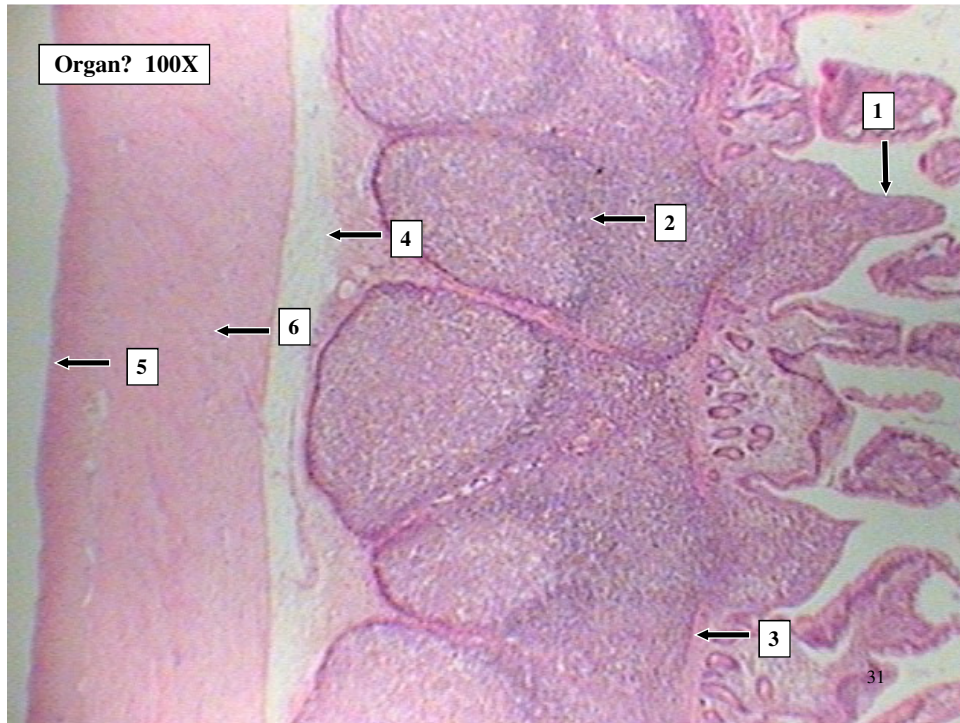
Slide # 27

1. Villus
2. Lamina Propria
3. Muscularis Mucosae
4. Brunner's gland
5. Submucosa
6. Crypt of Lieberkuhn

Slide # 28

1. Villus
2. Lamina Propria
3. Goblet cells with mucous drop
4. Crypt of Lieberkuhn
5. Muscularis Mucosae

30



Slides 31-32 Small Intestine - Ileum

Slide # 31

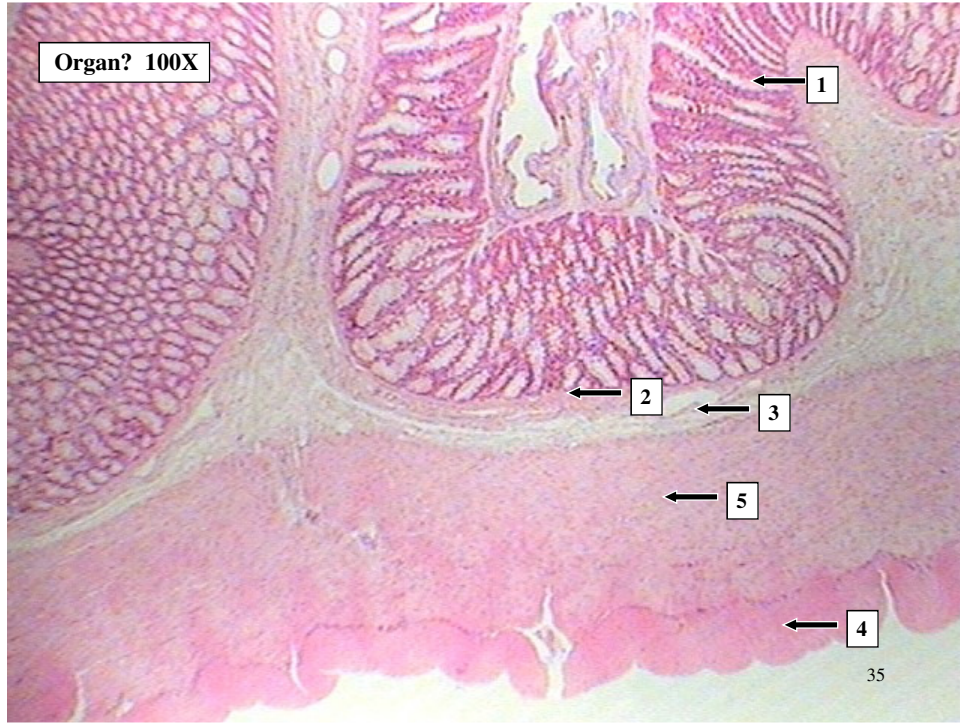
1. Villus
2. Peyer's Patch
3. Muscularis Mucosae
4. Submucosa
5. Longitudinal smooth muscle layer
6. Circular smooth muscle layer

Slide # 32

1. Muscularis Mucosae
2. Peyer's Patch

33





Slides 34-36 Large Intestine

Slide # 34

1. Intestinal Mucosa with intestinal pits or gland
2. Muscularis Mucosae
3. Submucosa
4. Longitudinal smooth muscle layer
5. Circular smooth muscle layer
6. Lymph node

Slide # 35

1. Intestinal pit or gland
2. Muscularis Mucosae
3. Submucosa
4. Longitudinal smooth muscle layer
5. Circular smooth muscle layer

37

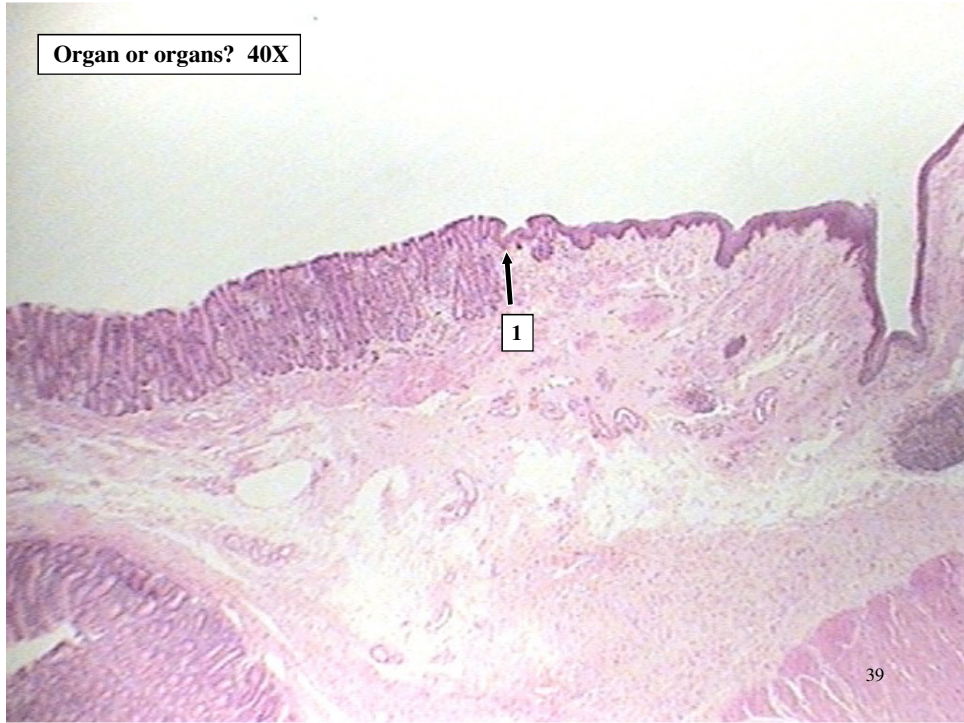
Slides 34-36 Large Intestine

Slide # 36

1. Intestinal pits with goblet cells
2. Lamina Propria
3. Muscularis Mucosae
4. Lumen of an intestinal pit or gland

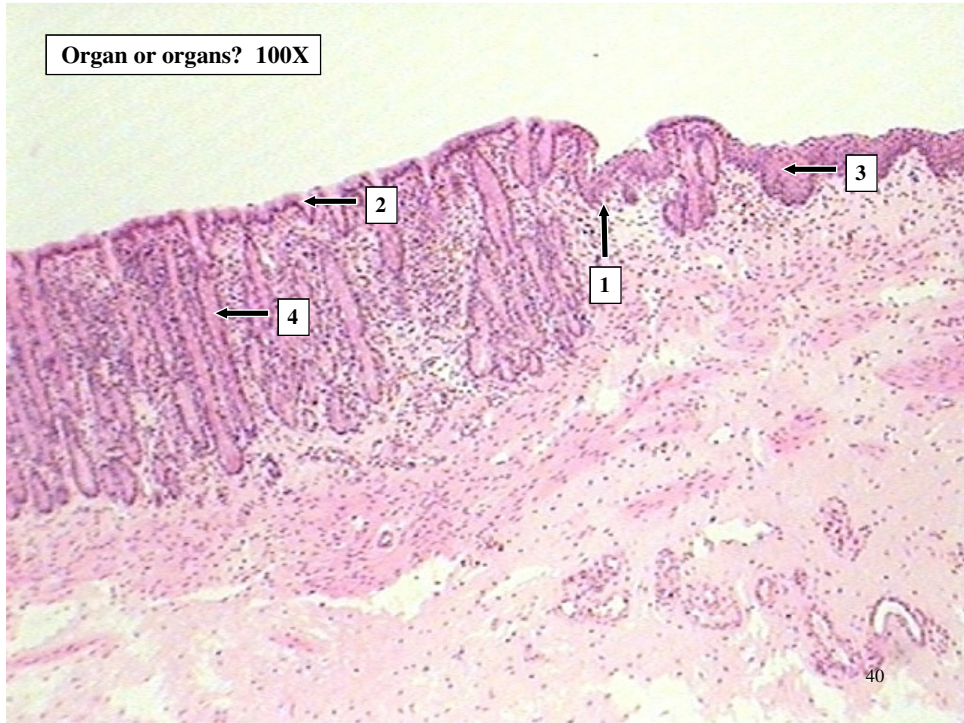
38

Organ or organs? 40X



39

Organ or organs? 100X



40



Slides 39-41 Ano-rectal junction

Slide # 39

1. Junction of the Rectum and Anus

Slide # 40

1. Junction of the Rectum and Anus
2. Simple Columnar cells of the Rectum
3. Nonkeratinized stratified squamous of the Anus
4. Intestinal pit or gland

Slide # 41

1. Simple Columnar cells of the Rectum
2. Nonkeratinized stratified squamous of the Anus