



# The Abdominal Cavity

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The Guts...



# From Mouth to Anus

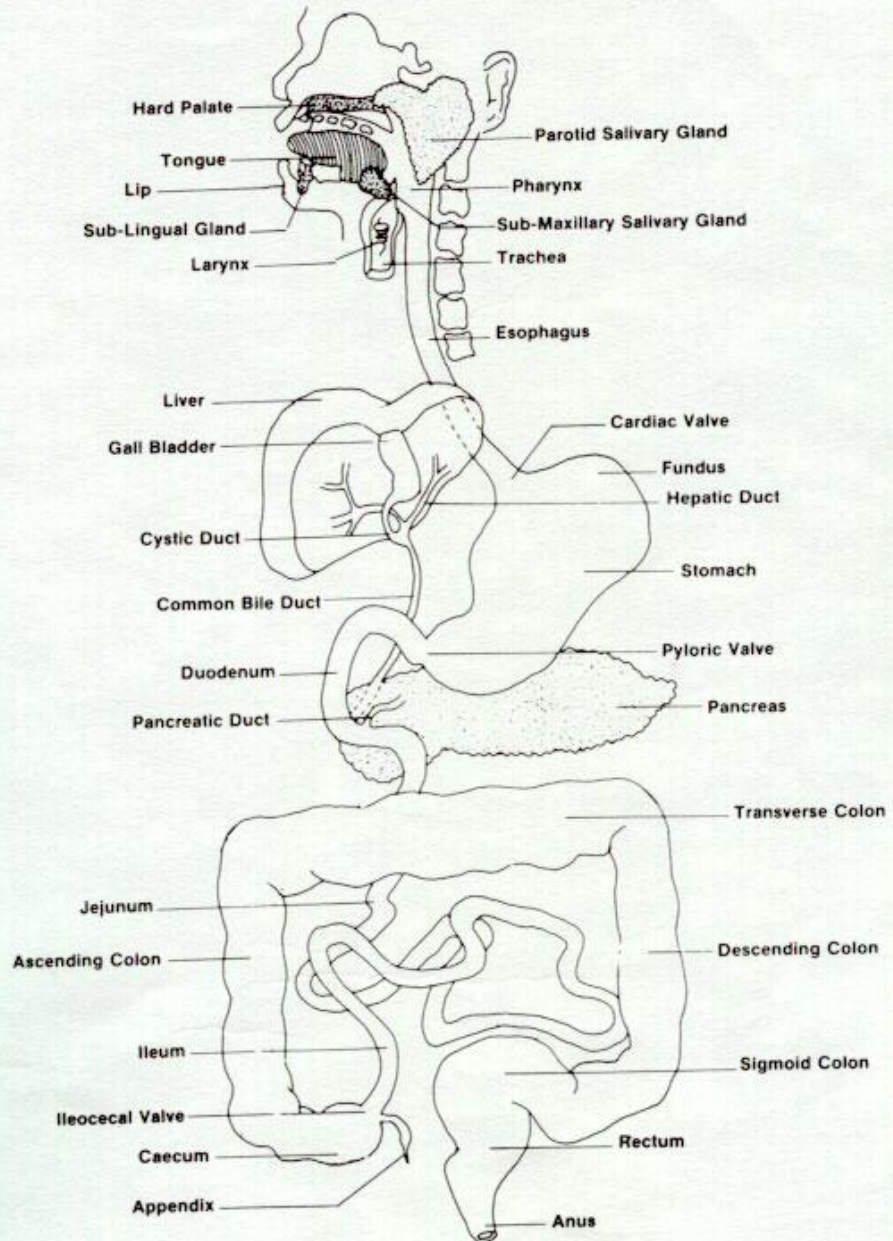
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- Mouth
- Esophagus
- Stomach
- Small intestine
- Large intestine
- anus

## Other Organs Involved or seen:

- Liver
- Gall bladder
- Pancreas
- Spleen \*
- Kidney \*
- Urinary bladder \*

# HUMAN DIGESTIVE SYSTEM





# The Cut...

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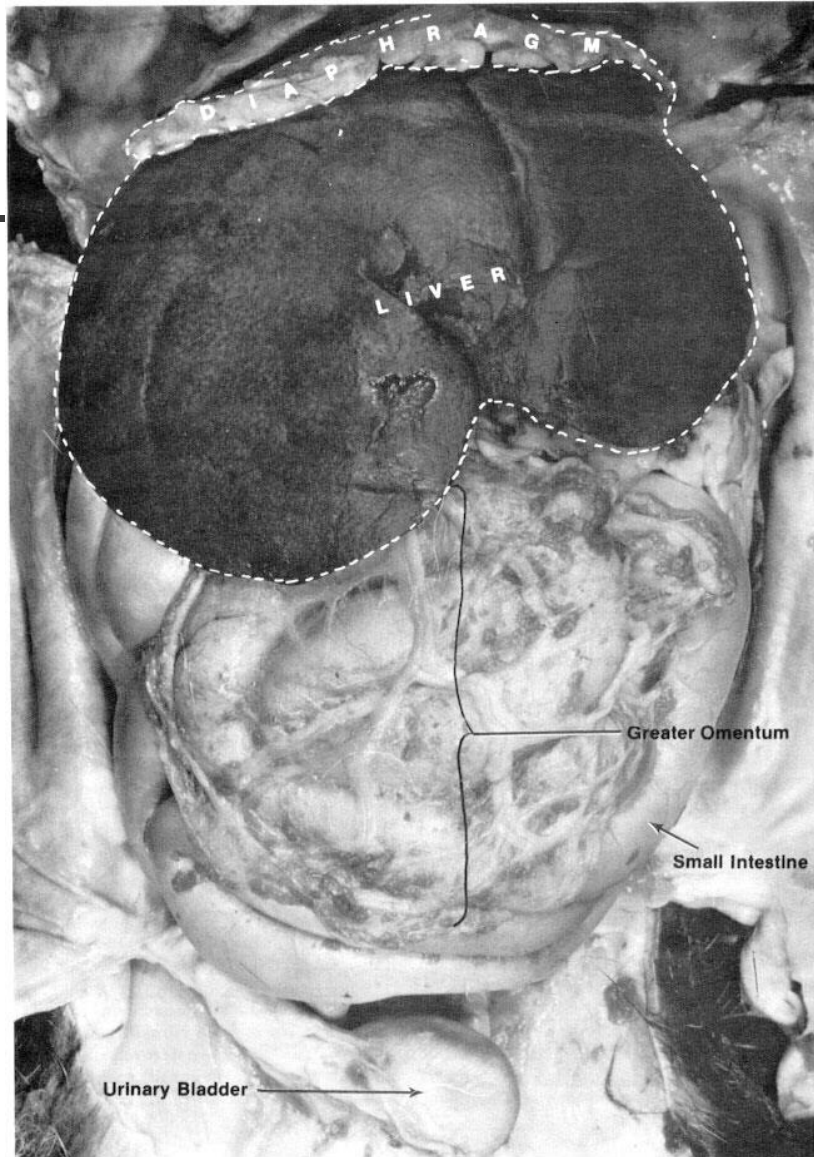
- Use your scalpel and cut the muscles from xiphoid process to the pubic symphysis
- Then cut laterally toward the hind legs.
- Fold back the abdominal wall to expose the entire abdominal cavity



# Membranes

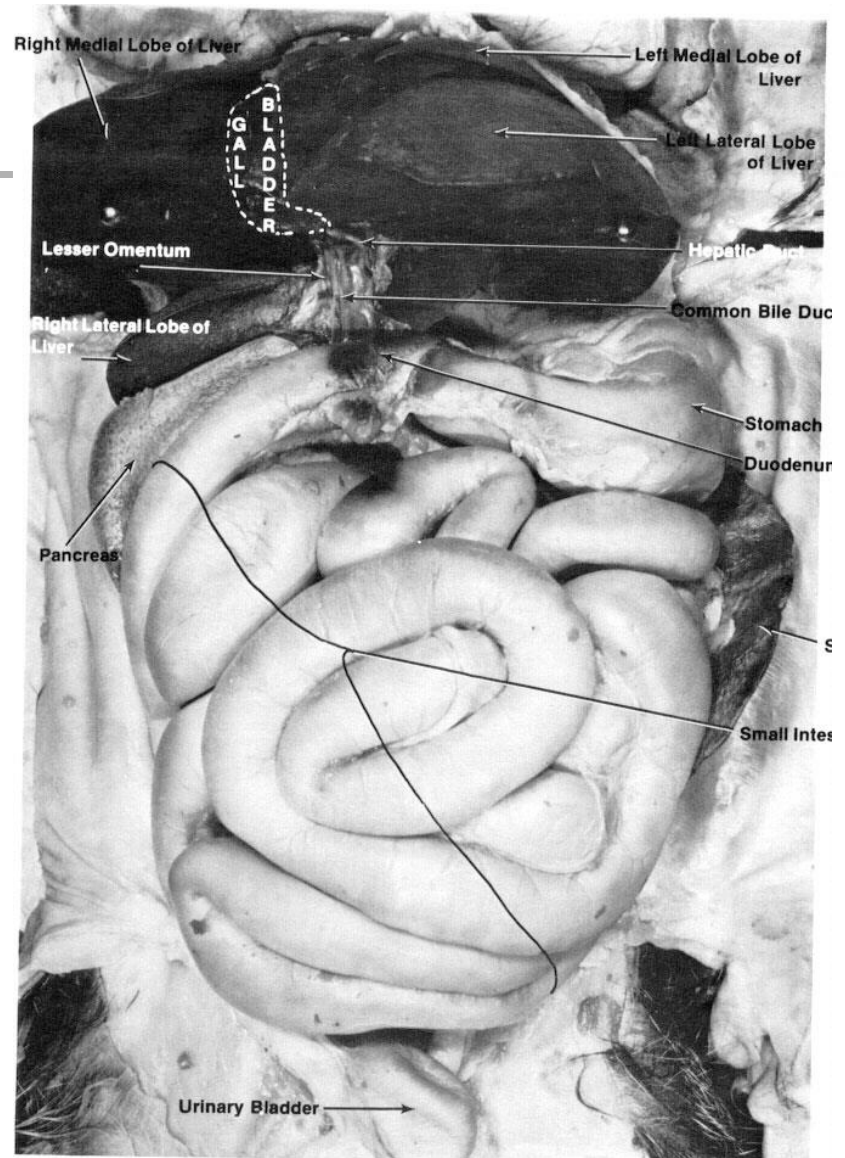
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- Peritoneum: a fine membrane that lines the inside of the abdominal cavity
- Visceral peritoneum: thicker membrane that covers the guts. Cut through this membrane the same way you did the muscles.



Remove the **greater omentum** (a double-layered sheet of peritoneum containing many fat deposits)

Greater omentum removed...





# Structures to Find & Know

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- Diaphragm: muscle that separates the thoracic from the abdominal cavity; important for breathing
- Liver: Dark brown organ that dominates the upper abdomen. Look for 5 lobes
- Gall Bladder: sac-like structure that stores **bile** that it releases into the small intestine; important for fat break-down





# Structures to Find & Know

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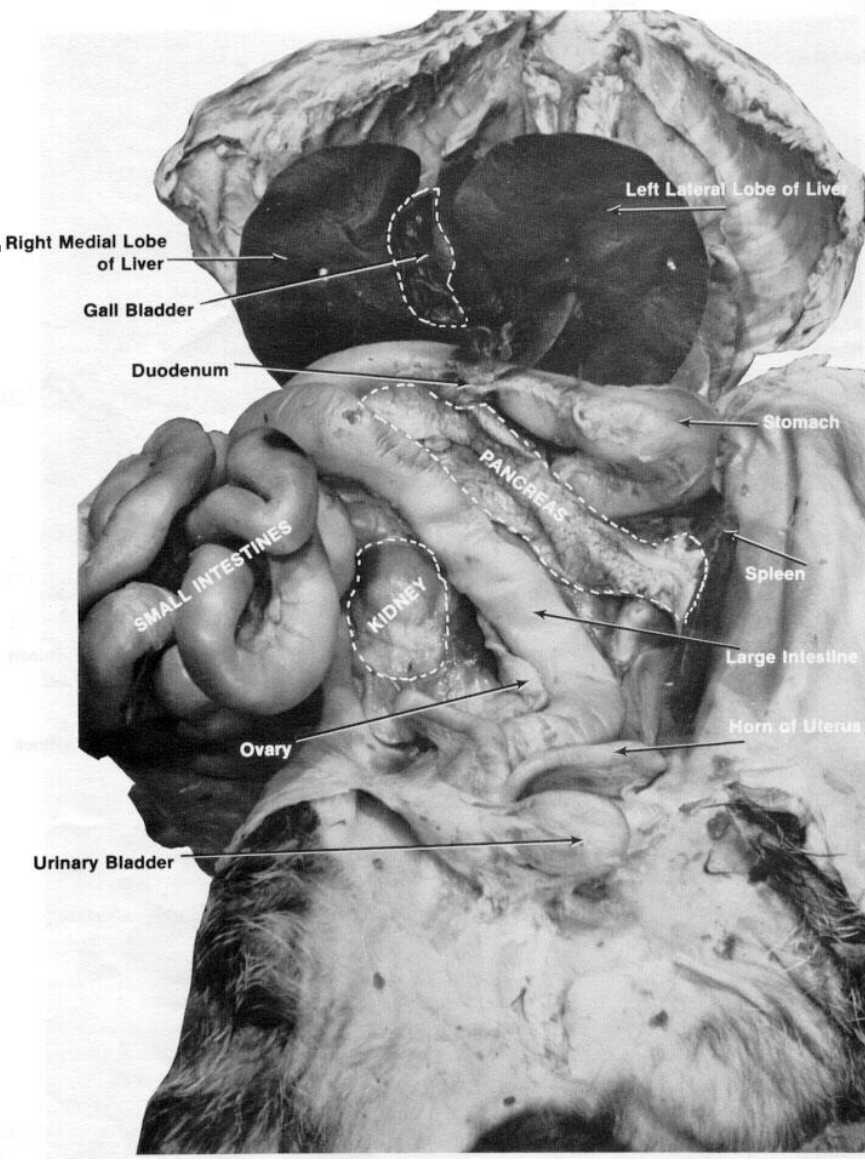
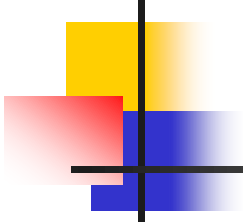
- Esophagus: the muscular tube behind the trachea that leads from mouth to stomach
- Stomach: a muscular pouch on the left side of the upper abdomen.
  - a) cardiac end of stomach
  - b) fundus
  - c) body
  - d) pyloric end of stomach



# Stomach (up close & personal)

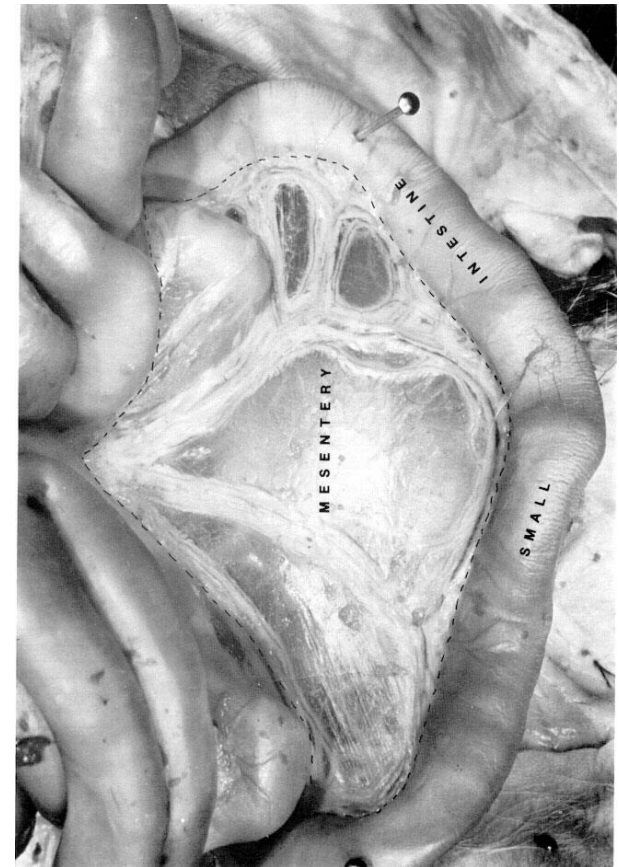
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- Open the stomach w/ scissors by cutting along the greater curvature of the stomach on the left side.
- Find the **cardiac sphincter** and the **pyloric sphincter**.
- Find the **rugae** along the inner walls of the stomach.



# The Small Intestine

- Around 20' long in humans and composed of several parts...
  - Duodenum
  - Jejunum
  - Ileum
- The coils are held in place by a fine peritoneal membrane called the **mesentery**





# The Large Intestines (LI)

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- The end of the ileum projects into the **caecum**, the 1<sup>st</sup> segment of the LI. This is the junction of the **ileocecal sphincter valve** (cut & observe the valve.)
- The cat does not have an **appendix**
- Locate & identify these segments of the LI:
  - Ascending colon
  - Transverse colon
  - Descending colon
  - Rectum
  - anus



# Other Organs (1)

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- Pancreas: Lies between the duodenum & the spleen. Has ducts that lead into the small intestine
- Spleen: dark-colored organ lies to the left of the stomach; it is part of the circulatory system (bigger in cats than man)
- Kidney: reddish brown bean-shaped organ lying embedded in the dorsal body wall



## Other Organs (2)

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- Adrenal glands: located near the anterior end of each kidney, but separated from it – in humans, it forms a “cap” on the kidney
- Urinary bladder: Oval-shaped organ at the posterior end of the abdominal pelvic region
- Reproductive structures: (covered later)

# HUMAN DIGESTIVE SYSTEM

