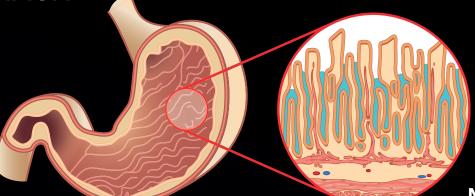
MOUTH

- Mechanical and chemical digestion, by teeth and enzymes in the saliva



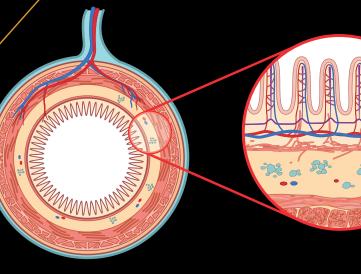


MUCOSA WITH GASTRIC GLANDS

SUBMUCOSA MUSCULARIS

- Preliminary digestion by stomach acid and enzymes
- The acid kills potential pathogens

SMALL INTESTINE



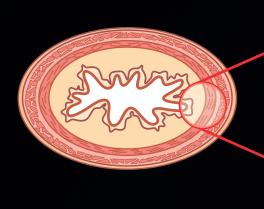
MUCOSA WITH MICROVILLI

SUBMUCOSA

MUSCULARIS

- Further enzymatic digestion (from pancreatic and brush border enzymes)
- Absorption of nutrients
- Specialised local lymphoid tissue

OESOPHAGUS

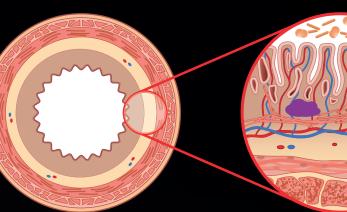


MUCOSA SUBMUCOSA

MUSCULARIS

- Muscular tube relaying food from the mouth to the stomach

LARGE INTESTINE



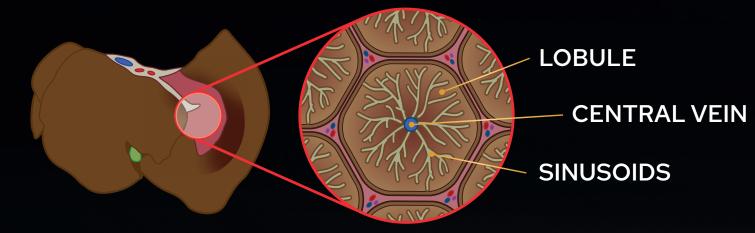
MICROBIOTA

MUCOSA WITH CRYPTS **SUBMUCOSA**

MUSCULARIS

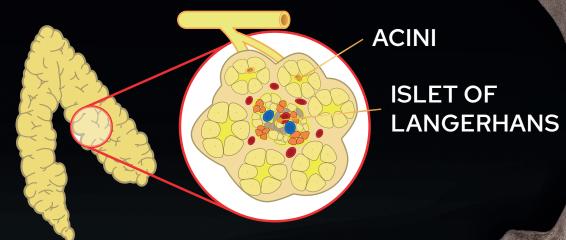
- Water and electrolyte absorption
- Contains bacteria which ferment nutrients to produce short-chain fatty acids, vitamins and other beneficial compounds
- Formation and transport of faeces
- Specialised local lymphoid tissue

LIVER



- Produces bile acids for fat digestion
- Processes nutrients coming from the small intestine

PANCREAS



- Produces enzymes in the acini for food digestion

- Produces hormones in the Islet of Langerhans to control blood glucose levels
- Bicarbonate secretion to neutralize the acidity coming from the stomach



THE GASTROINTESTINAL SYSTEM OF DOGS