

GASTROINTESTINAL SYSTEM

FUNCTIONS: breakdown of food for absorption
waste excretion
pathogen defence

Basic plan: muscular tube lined with epithelium

Gut wall: 3 layers:

mucosa - epithelium, lamina propria,
muscularis mucosa

submucosa

muscularis externa - (usually) 2 muscle layers
inner circular,
outer longitudinal

Regions:

esophagus - transport food to stomach

stomach - enzymes mix with food-> chyme

small intestine

duodenum - absorption/secretion

jejunum - absorption

ileum - absorption/defence

large intestine - water/salt resorption

anal canal, rectum - transport/eliminate

SMALL INTESTINE GENERAL FEATURES

all regions:

- absorptive epithelium - increased surface area
 - wall folded (plicae)
 - epithelium folded (villi)

glands between villi - secretory

lamina propria - vascular

muscularis mucosa - moves villi

submucosa

muscularis externa - 2 layers - peristalsis

- inner - circumferential
- outer - longitudinal

3 regions: all absorb

duodenum - Brunner's glands

jejunum - surface area high - large folds

ileum - lymphoid - Peyer's patches