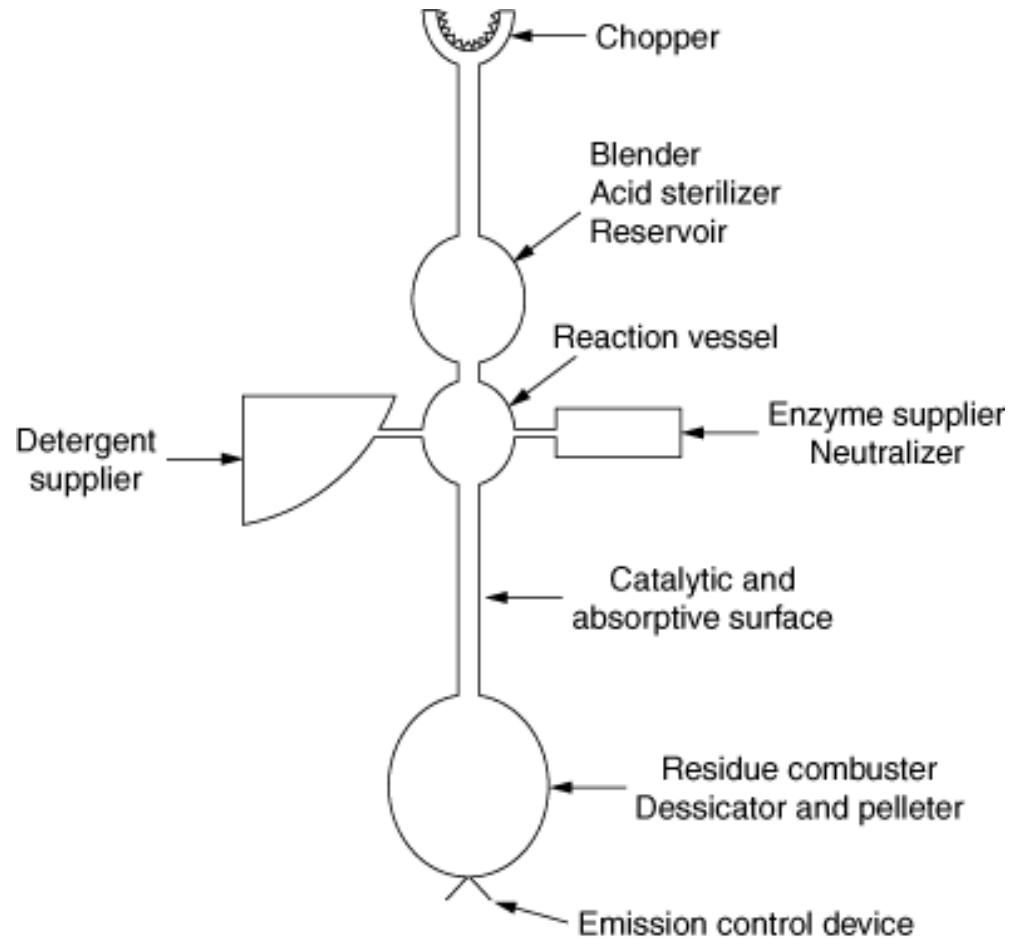


# Summary Slides

M Setshedi

# Functions of the Gut



- Don't forget the accessory organs
- Each section is adapted for its function
- Role of the gut in immunity is important
- Role of the microbiome in health and disease is key

Source: Barrett KE: *Gastrointestinal Physiology*:  
<http://www.accessmedicine.com>

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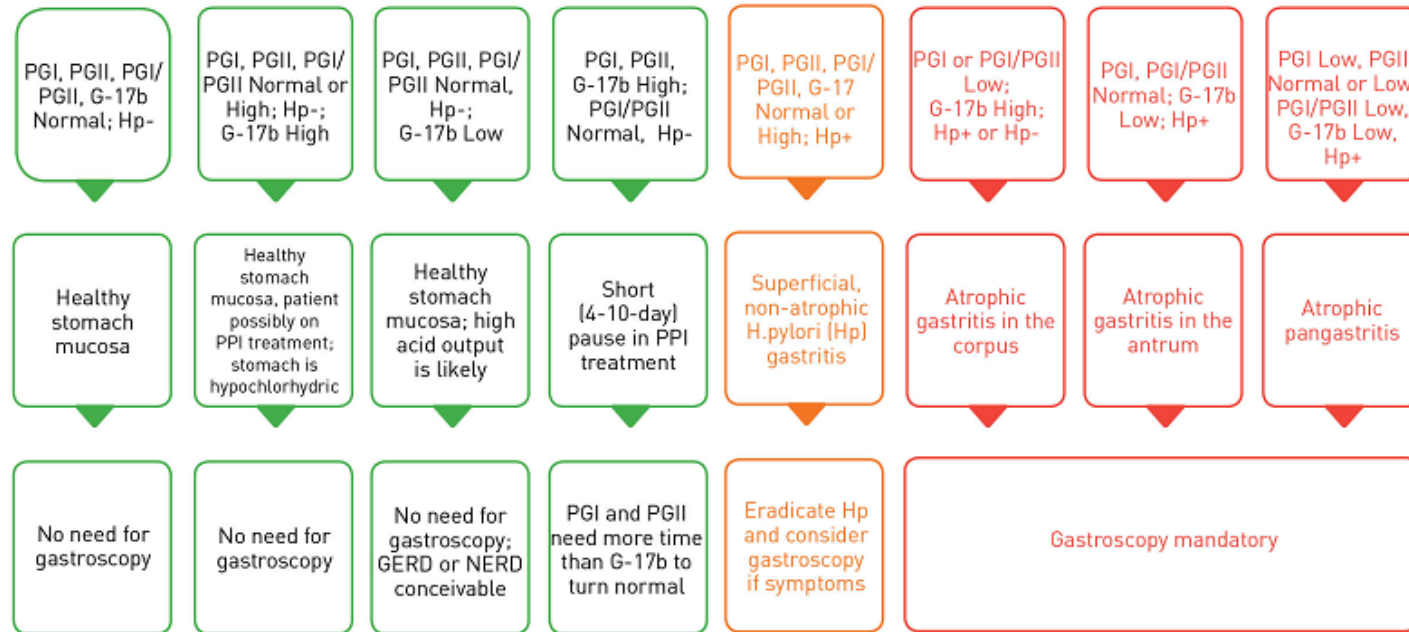
# Applications

- Oropharyngeal dysphagia
- GORD/NERD
- Acid suppressants MOA
- PG1/11 ratio, utility in gastric atrophy (gastro panel)
- SB vs large bowel diarrhoea
- Malabsorption
- SBS, SIBO, gut microbiome, FODMAPS

# GastroPanel for H. pylori

## GastroPanel® – interpretation guide snapshot

Structural and functional causes of dyspeptic symptoms diagnosed by GastroPanel test  
(PGI, PGII, PGI/PGII, G-17, Hp-Ab)



Normal structure

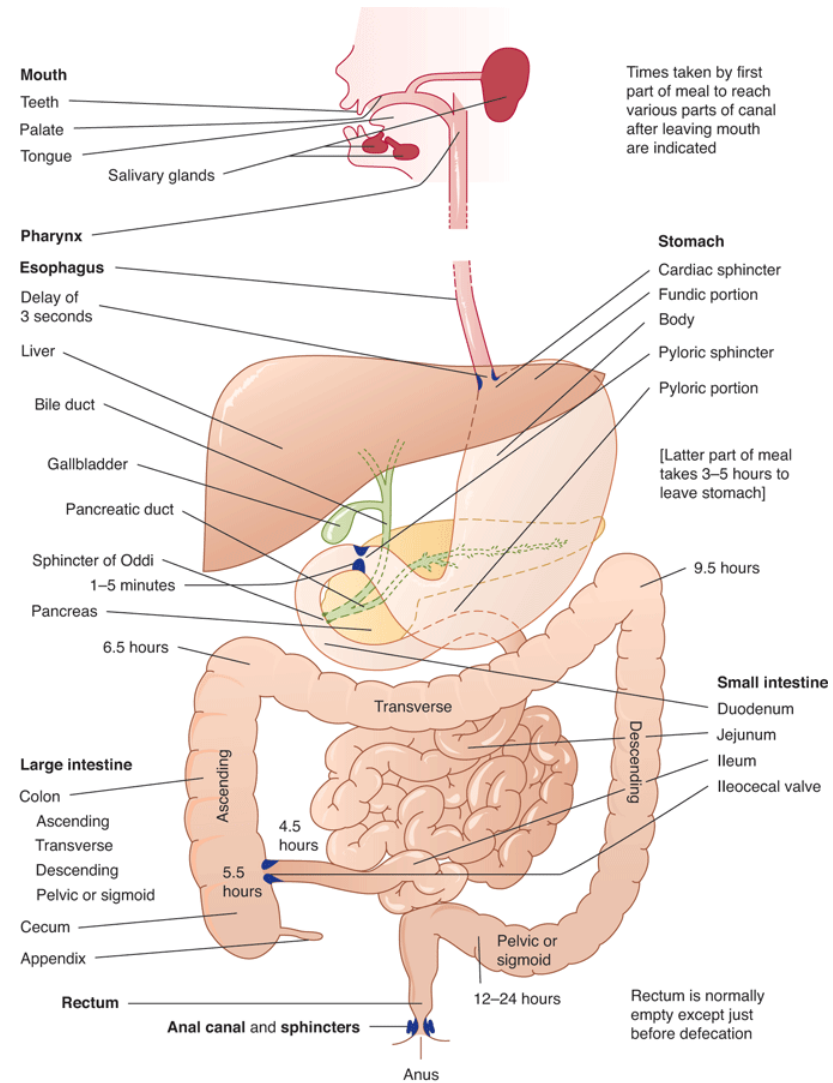
Referral to General Practitioner

Referral to Specialist; gastroscopy/biopsy

# Relevance of Gastrointestinal Research

Year of Nobel Prize	Recipient	Area of Unique Research
1904	Ivan Pavlov, Russia	Brain interactions and digestive physiology
1977	Rosalyn Yalow, USA	Identification and characterization of gut hormones
1988	James Black, UK	Histamine 2 receptor and translation to H2RAs
2005	Marshall & Warren (Australia)	H. Pylori causes PUD and GCA

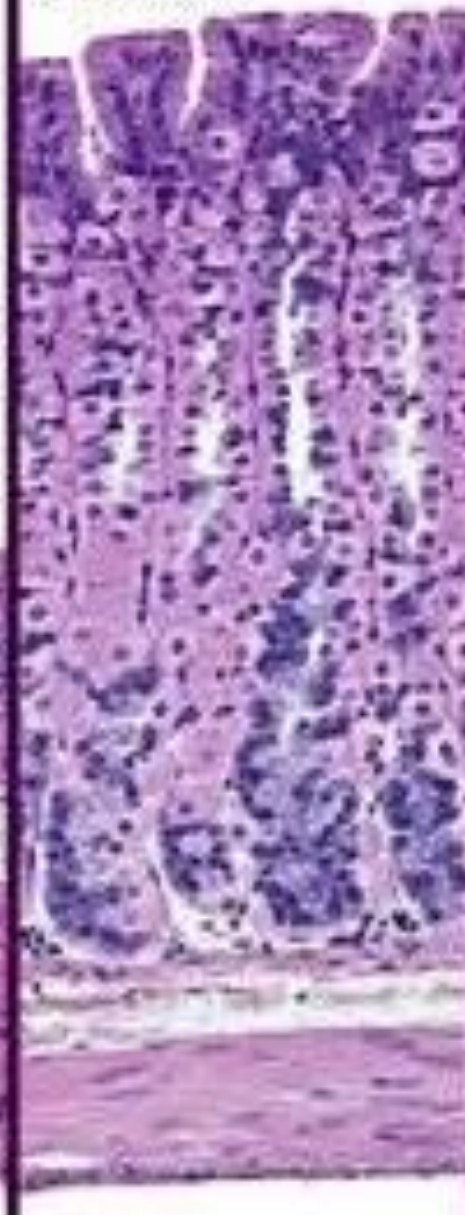
# Gut transit



Esophagus



Stomach



Small Intestine

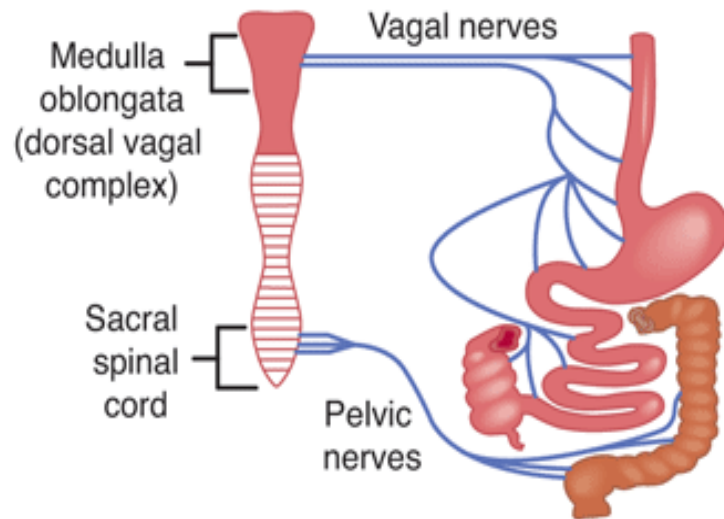


Large Intestine



## Parasympathetic

Neurons of the autonomic parasympathetic division project from the medulla oblongata and sacral regions of the spinal cord



## Sympathetic

Neurons of the autonomic sympathetic division project to the gut from thoracic and first lumbar segments of the spinal cord

