

Digestion

Text

What You Don't Know Can Hurt You!

Digestive Problems

- Approximately 36.5 million visits annually to ambulatory care facilities due to the diseases of the digestive system
- Over 4 million ulcers reported each year

Antacid Use

- Half of American adults have used antacids
- 3rd most common OTC medication
- 75% of antacid consumption is by heavy users
- Median duration of the use by heavy users - 20 years
- Average 2-6 doses per day concentrated through the work week
- Often self medication for heartburn and reflux-like symptomatology

Understanding Antacids

- Tums/Roloids-
- H2 Blockers
- Proton Pump Inhibitors

Digestion and Health

- Your health is a function, not only of what you eat, but what you are able to assimilate and use.
- Digest, Absorb, Utilize, and Eliminate

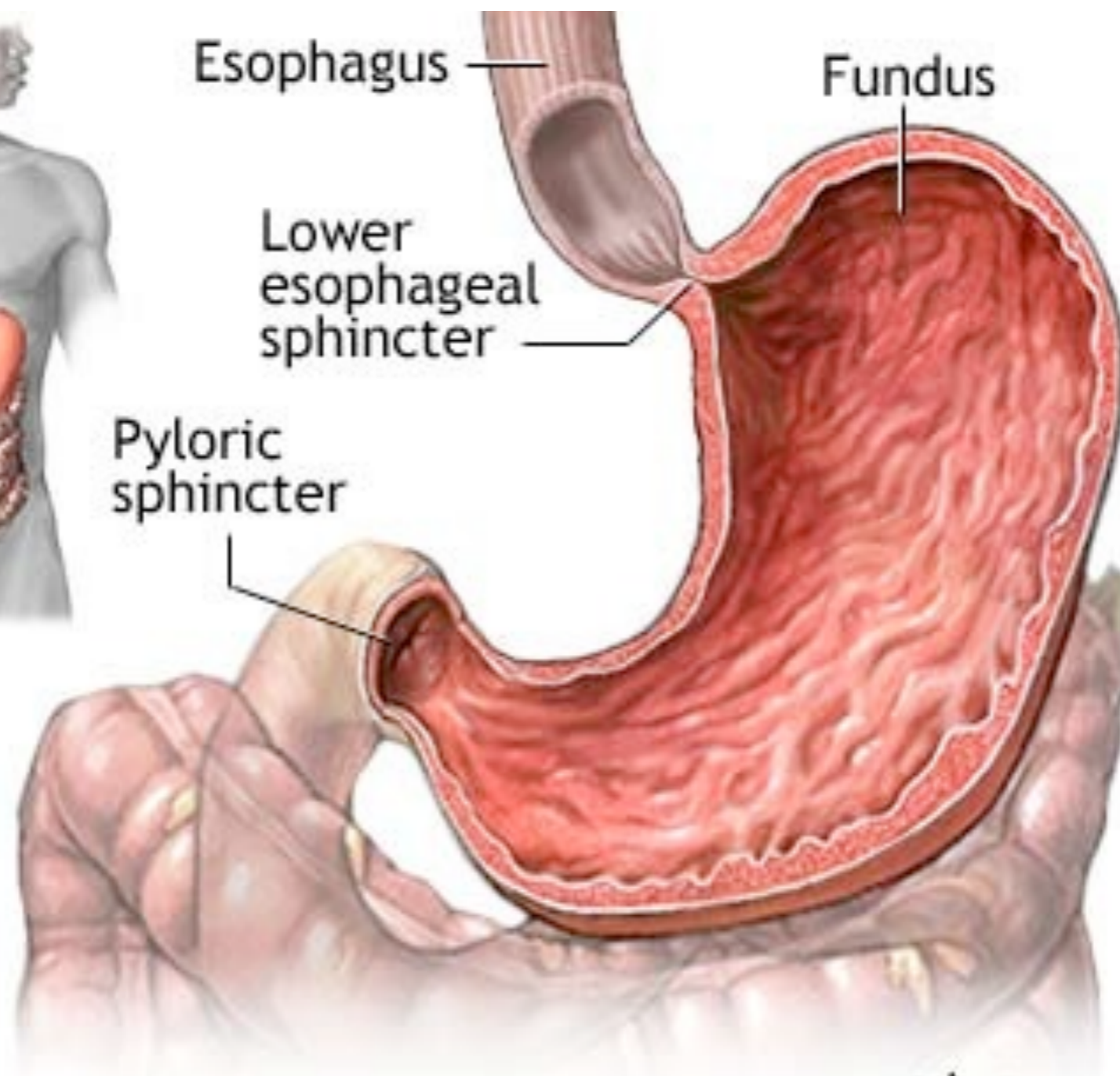
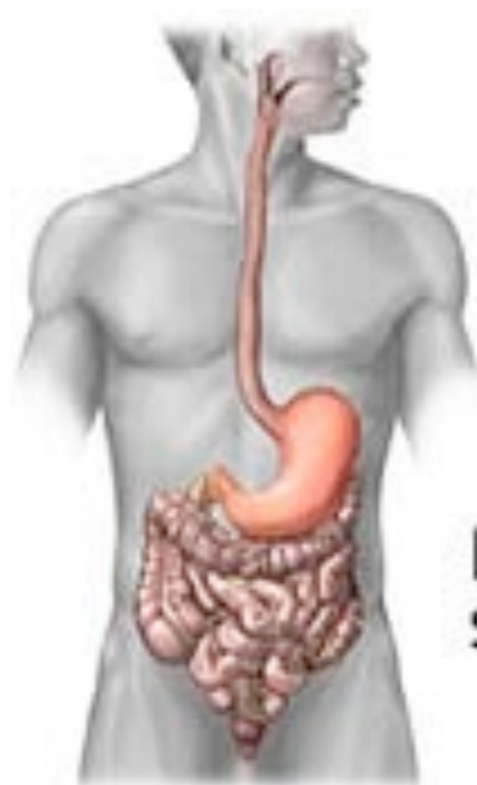
How Health Digestion Works

Digestion Begins with Thought and Smell

- Pavlov's Dog

Chewing is Critical

- Chewing properly is important because it breaks up the food and mixes it with water and enzymes.
- Salivary Amylase and Lipase and IgA antibodies and Lysozyme.



 ADAM.



What Happens

- Food enters the stomach
- Stomach distends
- Distention triggers Gastrin to be released
- Gastrin stimulates HCL production in the stomach

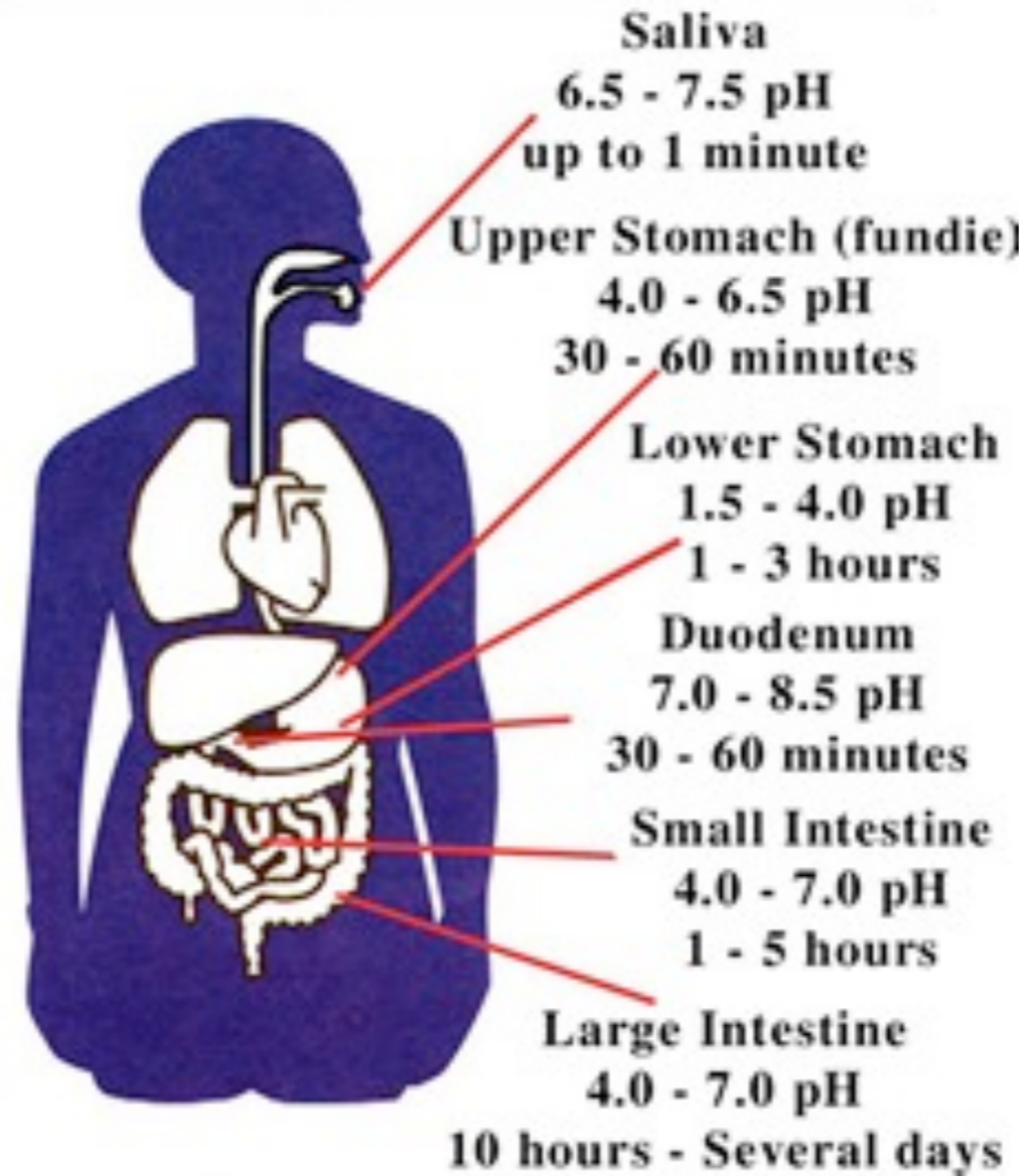
HCL

- HCL- is stomach Acid
- Once stomach acid contents PH is below 2.0
- Gastrin production is shut off
- Mucus is released to coat the stomach
- Esophageal sphincter is closed

Insufficient HCL Production

- PH never gets below 2.0
- Mucus production is not initiated
- Gastrin production is not shut off and the parietal cells continue to secrete HCL that can lead to ulceration in the stomach
- Esophageal Sphincter does not close which lead to Acid Reflux.

The Human Digestive Tract pH Range Chart



The diagram illustrates the average time food spends in each part of the digestive system along with the average pH.

What Causes Insufficient Production of HCL

- Poor Eating Habits
- Over Eating
- Too Much Liquids With Meal
- Eating Bad Foods
- Mineral Deficiencies
- Calcium
- Anti-Acid Use

IBS / Dysbiosis

Irritable **B**owel **S**yndrome

- 1 of every 6 people in US.
- This is the most common gastrointestinal disorder reported to general practitioners and up to 50% of referrals to GIT specialists are for this complaint.
- It is more common in women, especially between ages 20-40 years.

In this condition, the small and/or large intestine has lost its rhythmic peristaltic pattern and takes on a more spastic, irregular pattern of movement.

Symptoms include:

Typical symptoms include abdominal pain and bloating, excessive flatus and variable bowel habit for which no endoscopic, radiological, histological, biochemical or microbiological cause is apparent

- Pain may be transient and is typically increased with food and reduced by defecation
- Bowel habits are variable. Some patients will have predominant diarrhea, especially in the morning, some will have predominant constipation, and others may have alternating diarrhea and constipation.
- Bloating/distention, excessive flatus, borborygmus ('rumbling' bowel sounds), nausea, weight loss, headache, lack of energy

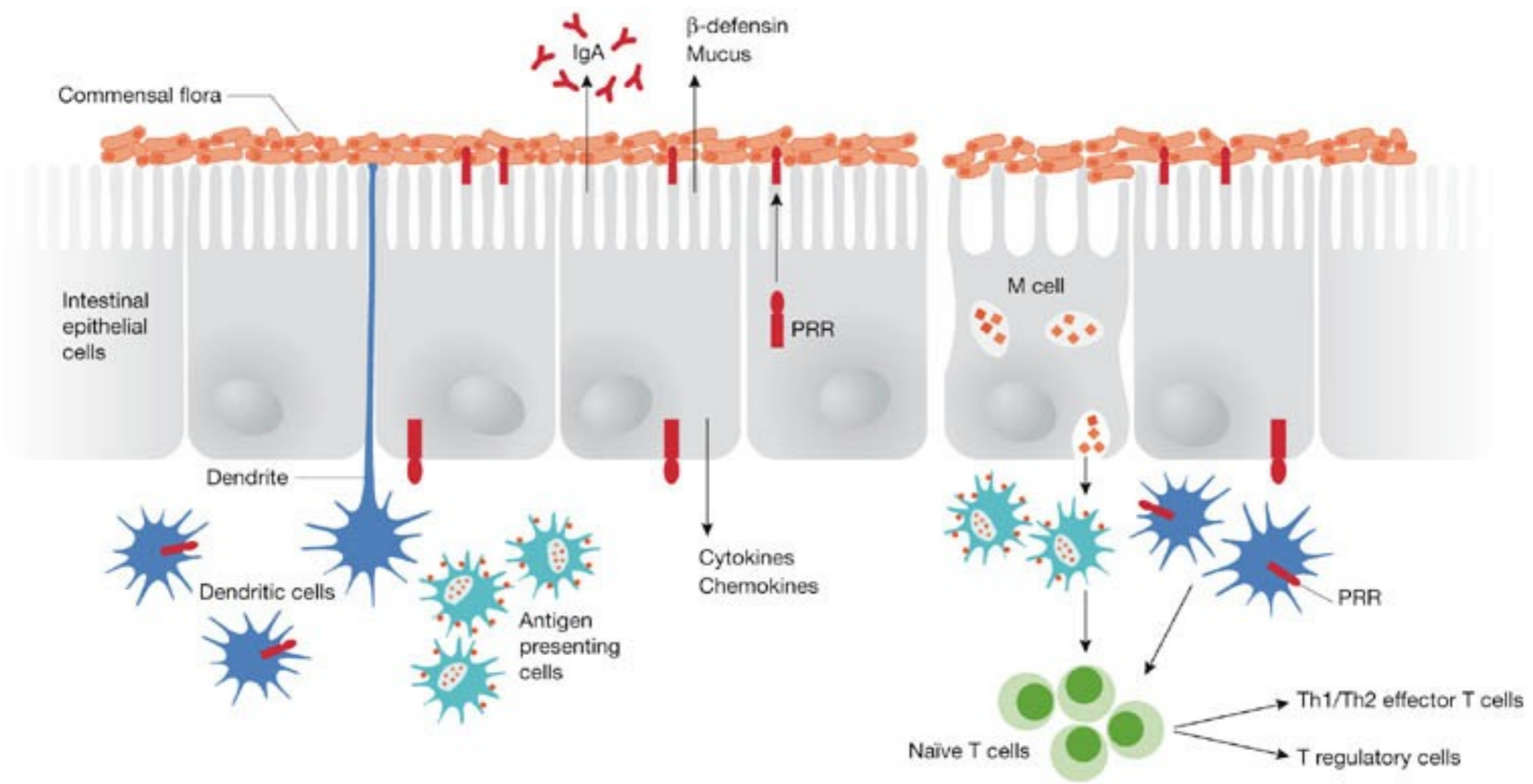
There is now considerable evidence to implicate intestinal dysbiosis as a significant factor in IBS.

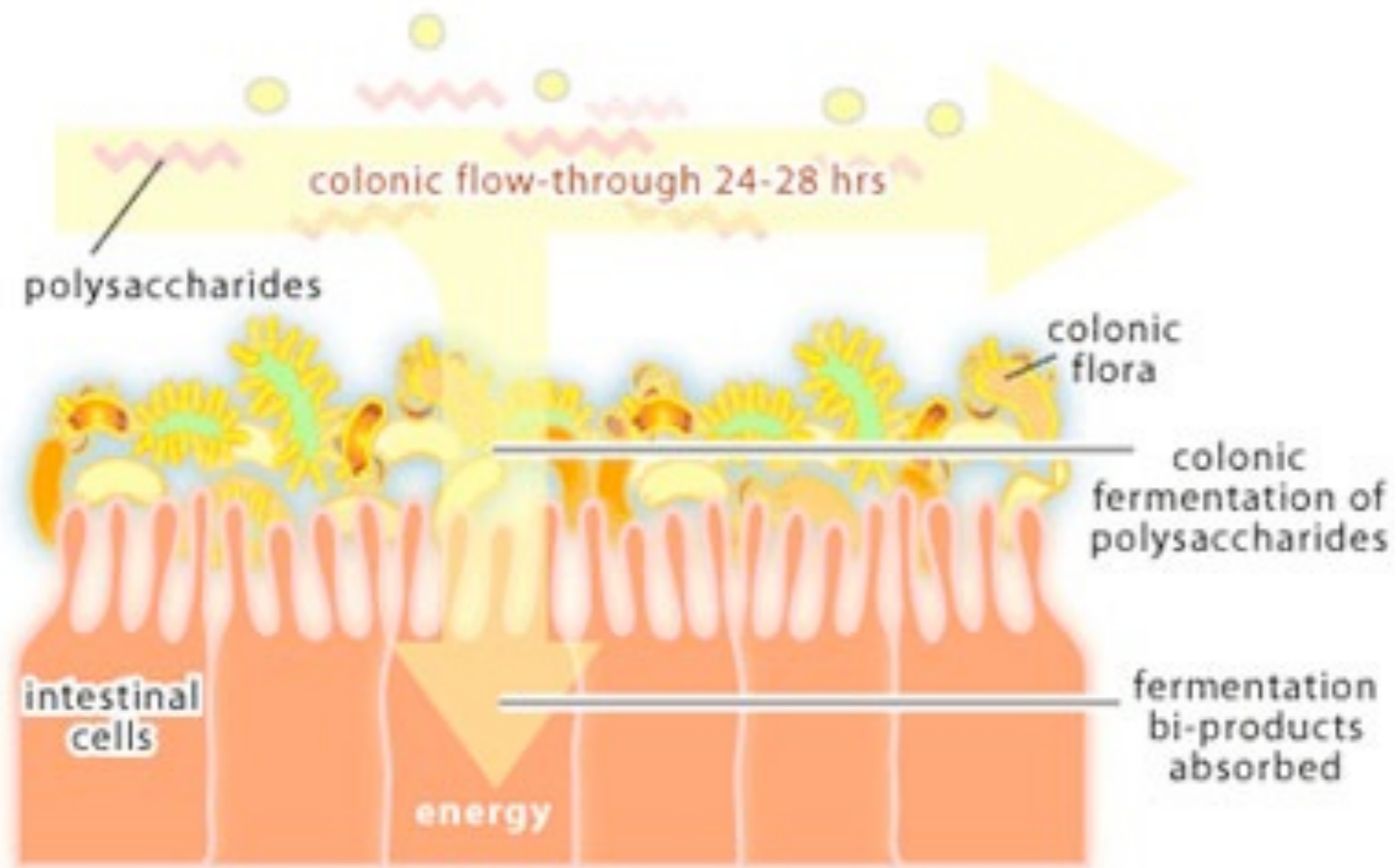
Irritable **B**owel **S**yndrome and **G**ut **F**lora •

One type of dysbiosis recently implicated in IBS is small intestinal bacterial overgrowth (SIBO).

Conventional therapies aimed at SIBO have shown success rates of 5 to 80% in IBS patients.

Changes in the colonic flora, especially reduced levels of Bifidobacteria, have also been consistently found.





Candidiasis is a common finding and it is often essential to follow an anti- candida program and re-establish bowel flora balance.

Food intolerances are often implicated in the etiology of IBS. It is important to determine and avoid aggravating foods.

The best way of testing for IBS food intolerances is by elimination diets and systematic reintroduction of foods.

Leaky Gut = Autoimmune Disease

So What Do We Do?