



Digestive System

The digestive tract, also known as the gastrointestinal (GI) tract is the system of organs that takes in food, digests it to extract the necessary nutrients and ingredients, and expels the remaining waste. The entire process is known as digestion. In a normal adult male, the GI tract is approximately 25 feet long.

Food enters our body through our mouth where it is chewed up and digestive enzymes in our saliva begin to break it down. Once we swallow, the food moves through the esophagus into the stomach where it is further digested by acids and enzymes. The food then goes into the small and large intestines where nutrients are extracted and exported into the bloodstream for transfer to cells throughout the body. Eventually, after most nutritive quality has been taken out, the resulting waste is expelled through the rectum. Other organs acting in this system are the liver,

Constipation

Constipation occurs when a person has hard feces that are difficult to eliminate from the body and doing so is extremely painful. In severe cases, fecal impaction can lead to symptoms of bowel obstruction. Constipation can be caused by a variety of means, though diet, hormones, medicinal side effects and anatomy are most often to blame. Treatments include a change in dietary habits, laxatives, fiber therapy, enemas, and rarely surgery.

	COMPANY	PRODUCT	PHASE
Constipation	Shaklee Corporation	Herb-Lax	M

Diarrhea

Diarrhea is characterized by frequent watery, loose bowel movements. Approximately 1.5 million infants are killed each year in the Third World from this easily preventable condition. Access to safe water and proper waste disposal will prevent many of the cases in the Third World. Diarrhea is also a symptom of disease, allergy, food intolerance and a result of excess of vitamin C and/or magnesium.

	COMPANY	PRODUCT	PHASE
Diarrhea	Napo Pharmaceuticals, Inc.	Crofelemer / SP-303	II
	Napo Pharmaceuticals, Inc.	Crofelemer / SP-303	II
	Osel, Inc.	Cdactin-O	III
	Napo Pharmaceuticals, Inc.	Crofelemer / SP-303	III
	Novartis AG	Dukoral	M

Dry Mouth

Dry mouth is caused by a lack of saliva in the mouth and can have a variety of causes. It can lead to speech and eating difficulties, halitosis (bad breath), an increase in the number of cavities, and increased vulnerability to infection. Saliva is an important source of disease-fighting agents; when these are reduced, bacteria have a greater ability to enter the body. Dry mouth may be due to an underlying disease such as Sjögren's syndrome, inadequately treated diabetes, or Eaton-Lambert syndrome. Drug side effects, medication, alcohol trauma, dehydration, radiation therapy, and marijuana also may contribute to the problem. Treatments focus on identifying and eliminating the cause of the disease in addition to oral moisturizers.

	COMPANY	PRODUCT	PHASE
Dry Mouth	Impax Laboratories, Inc.	Pilocarpine Hydrochlorine Tablets	A
	Parnell Pharmaceuticals, Inc.	Mouthkote Oral Moisturizer	M

Gastroesophageal Reflux Disease (GERD)

Gastroesophageal reflux disease (GERD) refers to chronic symptoms or mucosal damage produced by the abnormal reflux of gastric (stomach) contents into the esophagus. It is characterized by heartburn (a burning discomfort behind the breastbone), esophageal inflammation, difficulty swallowing and chronic chest pain. Certain foods are known to exacerbate GERD: coffee, alcohol, vitamin C, high fat foods, soft drinks, chocolate, peppermint, and spicy foods, among many others. Patients should first change the foods they eat and ensure that they are exercising regularly. In more serious cases, drug therapies and surgery might be necessary.

COMPANY	PRODUCT	PHASE	
ARYx Therapeutics	ATI-7505	II	Gastrointestinal Disorders
Receptor BioLogix	Insegia (G17DT immunogen) / Gastrimmune	II	Gastroesophageal Reflux Disease
Xenoport, Inc.	XP19986	II	
Impax Laboratories, Inc.	Omeprazole Delayed Release capsules	M	Gastrointestinal Disorders

Pancreatic Diseases

The pancreas is an organ that aids in digestion by producing digestive enzymes that will be used in the stomach and by digestive organelles. The pancreas is also responsible for the production of insulin, the body's main regulator of sugar in the blood. Because of the large range of functions, there are many diseases and disorders that can be linked to the pancreas. Treatments are being developed to treat pancreatic abnormalities and diseases.

COMPANY	PRODUCT	PHASE	
Impax Laboratories, Inc.	Lipram (pancrelipase)	M	Pancreatic Diseases

Ulcerative Colitis

Ulcerative colitis is an inflammatory bowel disease (IBD) that causes inflammation and ulcers in the lining of the bowels, specifically the rectum and colon. Ulcers form where the inflammation has killed cells usually lining the colon; these areas bleed and produce pus. Colon inflammation causes diarrhea and rectal inflammation. If the entire colon is affected it is commonly called pancolitis. Ulcerative colitis can be difficult to diagnose because symptoms are similar to other another IBD called Crohn's disease. Crohn's, however, causes inflammation in different organs. Ulcerative colitis usually starts between ages 15 and 30 and then again between 50 and 70. Men and women are affected equally and the condition often runs in families. According to the NIH, a higher incidence is seen in people of Caucasian and Jewish descent.

COMPANY	PRODUCT	PHASE	
PDL BioPharma, Inc.	Nuvion (visilizumab) / SMART anti-CD3 antibody	III	Ulcerative Colitis

