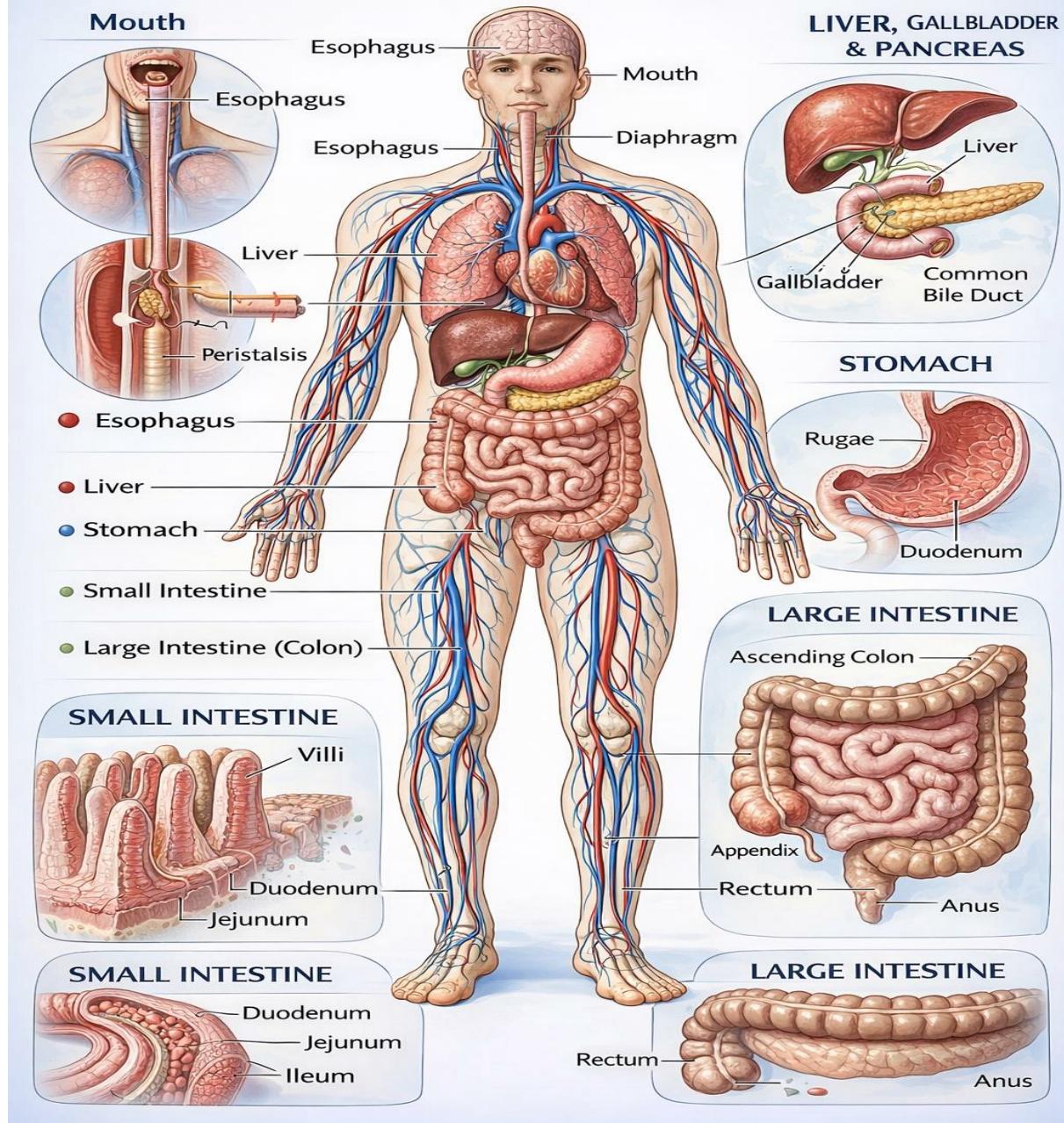


# THE DIGESTIVE SYSTEM



## The Digestive System

The digestive system consists of several key parts, each with its own specialized functions that contribute to the overall process of breaking down food, absorbing nutrients, and eliminating waste from the body.

**Mouth:** The mouth is where digestion begins. Teeth mechanically break down food into smaller pieces, while saliva, produced by salivary glands, contains enzymes like amylase that start the chemical breakdown of carbohydrates.

**Esophagus:** This muscular tube connects the mouth to the stomach and uses rhythmic contractions called peristalsis to push food down into the stomach.

**Stomach:** The stomach is a muscular organ that further breaks down food both mechanically through muscular contractions and chemically through the action of gastric juices. Gastric juices, which contain hydrochloric acid and enzymes like pepsin, help break down amino acids into smaller peptides.

**Small Intestine:** The small intestine is where most of the digestion and absorption of nutrients occur. Divided into three parts—the duodenum, jejunum, and ileum—the small intestine receives digestive enzymes from the pancreas and bile from the liver and gallbladder. These enzymes and bile help break down carbohydrates, amino acids, and fats into their smallest components, which can then be absorbed through the intestinal lining into the bloodstream.

**Large Intestine (Colon):** The large intestine absorbs water and electrolytes from the remaining indigestible food matter, forming feces. It also houses beneficial bacteria that aid in the digestion of certain substances and produce vitamins.

**Rectum and Anus:** The rectum stores feces until they are ready to be expelled from the body through the anus during defecation.

### Accessory organs:

**Liver:** The liver produces bile, a digestive fluid that emulsifies fats and helps with their digestion and absorption.

**Gallbladder:** The gallbladder stores and concentrates bile produced by the liver and releases it into the small intestine when needed to aid in fat digestion.

**Pancreas:** The pancreas produces digestive enzymes and bicarbonate, which are released into the small intestine to further break down carbohydrates, amino acids, and fats, and neutralize stomach acid.

**Overall, the digestive system plays a critical role in breaking down food into nutrients such as carbohydrates, fats and amino acids. They can then be absorbed into the bloodstream so the body can use them for energy, growth and repair. Unused materials are discarded as feces.**

### **Causes of Digestive System Problems:**

#### **Constipation**

Constipation is a common digestive system issue that affects millions of people worldwide. It occurs when bowel movements become infrequent, difficult, or incomplete, leading to discomfort and the accumulation of stool in the colon. This condition can be caused by a variety of factors, including a low-fiber diet, insufficient fluid intake/dehydration, stress, lack of physical activity, medication side effects, and certain medical conditions.

#### **Typical symptoms of constipation include:**

**Infrequent Bowel Movements:** Having fewer than three bowel movements per week is often a sign of constipation.

**Straining:** Difficulty passing stools, often requiring excessive effort and discomfort.

**Hard or Dry Stools:** Stools that are dry, hard, and difficult to pass.

**Incomplete Evacuation:** Feeling that you haven't fully emptied your bowels after a bowel movement.

**Abdominal Discomfort:** Cramping, bloating, and abdominal pain can accompany constipation.

#### **Treatment**

Treatment for constipation typically involves lifestyle modifications, such as increasing fiber intake, consuming more hydrating foods, smoothies, drinking cold pressed fruit juices, herbal teas and natural spring water, stress management, engaging in regular physical activity.

### **Digestive System Issues Caused By Parasites**

Digestive system issues caused by parasites, refer to health problems arising from the presence of harmful parasites within the digestive system. These parasites, which include protozoa, helminths, or other microorganisms, disrupt the normal functioning of the gastrointestinal tract, leading to a range of symptoms such as abdominal pain, diarrhea, nausea, and weight loss. Common examples of parasitic infections affecting the GI tract include giardiasis and amebiasis. Proper diagnosis and treatment, often involving herbal medicine and sometimes antiparasitic medications, are crucial to managing these issues and restoring gastrointestinal health.

### **Causes of parasitic infections**

Parasitic infections occur when organisms, such as protozoa, helminths, or arthropods, invade and live off a host organism. These parasites can be transmitted through various routes, including contaminated food and water, insect bites, or direct contact with infected individuals. Factors like poor sanitation, inadequate hygiene practices, and environmental conditions contribute to their spread. Once inside the host, parasites can cause a range of symptoms, from mild discomfort to severe illness, depending on the type of parasite and the individual's immune response.

**Symptoms:** Common symptoms parasitic infections include gastrointestinal issues like diarrhea, nausea, and abdominal pain, as well as fatigue, weight loss, and fever. Some parasites can cause skin rashes, itching, or swelling at the site of entry. In more severe cases, parasitic infections may lead to anemia, malnutrition, organ damage, or even death. It's essential to seek medical attention if experiencing persistent or concerning symptoms, as proper diagnosis and treatment are crucial for managing parasitic infections.

### **Treatment:**

Treatment for parasites typically involves lifestyle modifications, such as:

**Healthy Diet:** increasing fiber intake, and consuming hydrating foods such as berries (black berries, blueberries, raspberries, strawberries) key limes, lemons and melons.

**Herbal Remedies:** Bitter herbs contain astringent properties known as tannins that help rid the body of parasitic infections.

Examples of herbs that help aid in the elimination of parasitic infections include: (black walnut hulls, clove buds, wormwood), barberry root, ginger root, cascara sagrada bark, cinchona bark, pau d'arco, slippery elm bark and mugwort.

**Breathing Exercises:** Breathing exercises helps stimulate the circulatory and lymphatic defensive system and brings oxygen and nutrients to the cells.

**lymphatic massages:** Lymphatic massages helps to move lymph fluid and encourage the elimination of waste and toxemia.

**Sleep:** Adequate rest 7-9 hours on a nightly basis helps the body's kidneys, liver and lymphatic system to efficiently filter out and remove waste products, toxemia, heal and repair damage.

Keeping the digestive system healthy is vital for overall wellness as it ensures efficient nutrient absorption, supports lymphatic system function, and aids in waste elimination. A well-functioning digestive system enables the body to break down food effectively, extract essential nutrients, and distribute them for energy and bodily functions. Additionally, a balanced gut microbiome contributes to lymphatic system health, defending against infections and inflammation. Proper digestion also regulates bowel movements, preventing discomfort and promoting optimal waste removal.