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1. In a tabular form only, compare and contrast sections of the Gastrointestinal tract.

The human gastrointestinal tract consists of the [esophagus](https://en.wikipedia.org/wiki/Esophagus), [stomach](https://en.wikipedia.org/wiki/Stomach), and intestines, and is divided into the upper and lower gastrointestinal tracts. The GI tract includes all structures between the [mouth](https://en.wikipedia.org/wiki/Human_mouth) and the [anus](https://en.wikipedia.org/wiki/Human_anus)

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|  | Upper gastrointestinal tracts | Lower gastrointestinal tract |
| 1 | The upper gastrointestinal tract consists of the [mouth](https://en.wikipedia.org/wiki/Mouth), [pharynx](https://en.wikipedia.org/wiki/Pharynx), [esophagus](https://en.wikipedia.org/wiki/Esophagus), [stomach](https://en.wikipedia.org/wiki/Stomach), and [duodenum](https://en.wikipedia.org/wiki/Duodenum). | The lower gastrointestinal includes just the [large intestine](https://en.wikipedia.org/wiki/Large_intestine) |
| 2 | The mouth is the entry point for food, Once the food enters the mouth, chewing (mastication) breaks food into smaller particles that can be more easily attacked by the enzymes in saliva. The [teeth](https://www.medicinenet.com/habits_that_wreck_your_teeth_pictures_slideshow/article.htm) performs the job of cutting as well as grinding function to accomplish this task. The tongue assists in mixing the food with the saliva and then the tongue and roof of the mouth (soft palate) help move the food along to the pharynx and [esophagus](https://www.medicinenet.com/image-collection/esophagus_picture/picture.htm). | The role of the lower GI tract is to solidify the waste product by absorbing water, store the waste product until it can be evacuated. The large intestine (colon) is divided into four parts:   1. ascending colon, 2. transverse colon, 3. descending colon and 4. sigmoid colon.   All together the colon is approximately 7 [feet](https://www.medicinenet.com/feet_facts_quiz/quiz.htm) long and connects to the rectum where the waste product is moved along by peristalsis. As the waste product passes through the colon, water is absorbed and [stool](https://www.medicinenet.com/stool_color_changes/article.htm) is formed. The [stool](https://www.medicinenet.com/stool_color_and_texture_changes/symptoms.htm) from the colon is stored in the rectum. The anal sphincter provides the control over releasing stool or holding it. Once stool arrives in the rectum, a feedback to the brain makes the person aware of the need for a bowel movement. Voluntary control over the anal sphincter lets us hold the stool until we go to the toilet. |
| 3 | The pharynx (throat) is the transition area from the mouth to the esophagus. From the pharynx there are two paths that the food bolus can take; 1) the wrong path, which is down the windpipe into the [lungs](https://www.medicinenet.com/image-collection/lungs_picture/picture.htm), or 2) the correct path into the esophagus and then into the stomach. The act of swallowing is a complex process that closes the windpipe (to protect our lungs) and moves food into the esophagus. This process is mostly automatic (reflex) but it is also partially under our direct control. Once it enters the esophagus, food moves down the esophagus into the stomach. Peristalsis is the main mechanism by which food moves through our digestive system. |  |
| 4 | As the food approaches the stomach, a muscular valve (the lower esophageal sphincter) relaxes and lets the food pass into the stomach. This sphincter has the important function of closing the stomach so no food or stomach acid reenters the esophagus (and therefore avoiding [heartburn](https://www.medicinenet.com/heartburn_reflux/article.htm) or regurgitation). |  |

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| 5 | From glands that line the stomach, acid and enzymes are secreted that continue the breakdown process of the food. The stomach muscles further mix the food. At the end of this process, the food has been transformed into a thick creamy fluid called chyme.  This thick fluid is then pushed into the duodenum (the first part of the small intestine). With the help of enzymes from the pancreas and bile from the liver, further breakdown of the food occurs in the small intestine. |  |
| 6 | The small intestine has three segments. The first segment is the duodenum where further breakdown of the food takes place. The jejunum and ileum are the part of the small intestine mostly responsible for the absorption of nutrients from the processed food into the bloodstream through the walls of the intestine. the leftover waste moves into the large intestine or colon (the beginning of the [lower GI](https://www.medicinenet.com/barium_enema/article.htm) tract). |  |