

GI Motility

Serves two important functions

- Movement of food from the mouth to the anus
- Mechanically mixing food to break it into smaller particles and to mix with digestive juices

Muscle types involved in GI motility

- Muscles of mouth, pharynx, upper esophagus, and external anal sphincter are striated and innervated by somatic motor neurons.
- Muscles of the rest of GI tract are smooth and innervated by autonomic neurons.

GI Motility part 2

GI Motility includes the following processes:

- ***Ingestion***: Taking food into the mouth.
- ***Mastication***: Chewing the food and mixing it with saliva.
- ***Deglutition***: Swallowing the food.
- ***Peristalsis and Segmentation***: Rhythmic, wavelike contractions (peristalsis), and mixing contractions in different segments (segmentation) move food through the GI tract.
- ***Defecation***: Elimination of solid, semisolid, and/or liquid waste from the GI tract via the anus.

GI Motility part 3

General Characteristics of GI smooth muscle:

- Smooth muscle is an involuntary non-striated muscle.
- GI smooth muscle contracts spontaneously, driven by pacemakers
- Cells are electrically connected by gap junctions
- Different regions exhibit different types of contractions
 - Tonic contractions
 - Phasic contractions
- Slow wave potentials
 - 3-20 per min (depends on segment of GI tract)
 - Not all result in contraction