

1. Movement of Alimentary Canal :-

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Significance

The passage of food material begins after the food is taken into the mouth. The onward journey of the food material is carried out by the complex and co-ordinate movement of alimentary canal. Such movements are necessary for the passage of food onwards, for proper mixing of food with digestive enzyme, absorption of digestive product, secretion of digestive enzyme etc. There are different types of movements according to their function. There are two types of movements -

1. Translatory movements,
2. Stationary movements.

Translatory movement -

This type of movements travels ^(moving forward) onwards and carry the food mass. Peristalsis, antiperistalsis and massperistalsis are this type of movements. It is present in the every part of the g.i. tract.

Stationary movement -

This movements are localised in nature and doesnot move onward. Early segmentation, tonic contraction and pendulum movement are this types of movements. This type of movement is seen at the limited part of the g.i. tract.

● Cause of movement :-

On the basis of the origin of the movement, the movement can be classified as musculogenic (myogenic) and neurogenic. Peristalsis and antiperistalsis are neurogenic in nature. Because these movements are depends on the nerve activity. Segmentation and Pendulum movement are myogenic in nature because this movement depends only on muscular activity.

The wall of the gut is consist of four different layer serosa, muscularis, submucosa and mucosa layers from out side to inward. Serosa is a fibrous layer of connective tissue. Muscular layers contain smooth muscle. The submucosa layers contain blood ~~vessel~~ ^{vessels} vessel, lymph gland and nerves. Mucosa layer contain squamous and columnar epithelium cell. Muscularis mucosa is a thin layer of smooth muscle which forms a boundary between submucosa and mucosa.

The muscular layer control the diameter of the g.i. track and propels the food material by systematic contraction and relaxation. The nerve supply of the g.i. track has two parts —

i) Intrinsic part

ii) Extrinsic part

The intrinsic mechanism consist of series of plexuses. ~~a~~ Plexuses are consist of nerve cells and its fibre.