

Gastrointestinal hormones

Enteroendocrine system regulates the digestive process through the secretion of gastrointestinal hormones. The lower part of the alimentary canal contains endocrine cells called **Paracrine cells** or **Histocrine cells**. These cells secrete Gut polypeptides or GI hormones.

The GI hormones control the motility of alimentary canal and secretion of digestive glands. Some of the important GI hormones are:

Gastrin – It is secreted by the G cells of intestinal wall and upper gastric wall. It stimulates the secretion of gastric juice and insulin

Cholecystokinin – Pancreozymin – It is secreted from the I cells of duodenum. It stimulates Pancreas for secretion and Gall bladder for bile secretion.

Secretin – It is secreted by the S cells of small intestine. It stimulates the Pancreas for bicarbonate secretion. It is secreted when the stomach becomes acidic.

Motilin – The EC cells of duodenum secrete Motilin to increase intestinal motility

Vasoactive intestinal polypeptide _ VIP _ Secreted from the gut to inhibit gastric secretion and motility.

Neurotensin – Secreted from Ileum to enhance blood flow in the intestine and to inhibit motility.

Gastric inhibitory peptide – GIP – Secreted by the K cells of duodenum and jejunum to stimulate insulin secretion and inhibition of gastric secretion. It is stimulated by the presence of fat and glucose in the intestine.

Somatostatin – Secreted by the D cells of Pancreas. Stimulated by acid in the stomach. It is a GH inhibiting hormone.