

Hormones of the Digestive System

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Overview

- Major hormones that deal with the functions of the digestive system are
 - Gastrin
 - Secretin
 - Cholecystokinin (CCK)
- In addition to:*
 - Ghrelin
 - Peptide YY

Gastrin

- This hormone is responsible for
 - Producing acid for dissolving and digesting foods.
 - Also necessary for normal cell growth in the lining of the stomach, small intestine, and colon.
 - Produced in the stomach, duodenum, and pancreas

Secretin

- Is responsible for
 - Causing the pancreas to secrete the digestive juice that is rich in bicarbonate (which is useful in neutralizing the stomach contents before they enter the small intestines)
 - Also stimulates the stomach to produce pepsin (which is an enzyme that digests protein)
 - And stimulates the liver to produce bile
 - Produced in the Duodenum

Cholecystokinin (CCK)

- Is responsible for:
 - Causing the pancreas to produce the enzymes for pancreatic juice
 - Causes the gallbladder to empty
 - Promotes normal cell growth of the pancreas
 - Responsible for digestion of fat and protein
 - Hunger suppressant
 - Produced in the Duodenum

Ghrelin

- This is produced in the stomach and the upper intestine due to the absence of food in the digestive system (basically stimulates your appetite).

Peptide YY

- Is produced in the digestive tract in response to food in the system and stops the stimulation of your appetite.

Hormone	Function	Location
Gastrin	Produce an acid for dissolving and digesting some foods. Normal cell growth in the lining of the GI	Produced in the stomach, duodenum, and pancreas
Secretion	Causes the pancreas to send out digestive juice that is rich in bicarbonate	Produced in the Duodenum, And in smaller numbers Within the jejunum
CCK	Causes the pancreas to produce the enzymes of pancreatic juice, and causes the gallbladder to empty	Produced in the Duodenum
Ghrelin	Stimulates the appetite	Produced in the stomach
Peptide YY	Inhibits the appetite	Produced in the Digestive Track (GI)