

Journal of Clinical Gastroenterology and Hepatology

ISSN: 2575-7733

Open access Commentary

Functions of Cecum in the Digestive System in Humans and Animals

Syed Amir*

Department of Surgery, Tehran University of Medical Sciences, Iran

DESCRIPTION

Cecum, also spelled caecum, is the principal area of the digestive organ and is a pocket or large cylinder-like structure in the lower stomach cavity that collects undigested food items from the small digestive system. The ileocecal valve, which separates it from the ileum and slows food passage into the cecum, may help prevent material from returning to the small intestine. The primary functions of the cecum are to store liquids and salts that remain after gastrointestinal processing and absorption, as well as to combine these substances with a lubricant called body fluid. Water and salts are ingested through a mucus coating that covers the majority of the cecum's contents. A substantial layer of muscular tissue that generates stirring and massaging actions lies beneath that covering.

Creatures have different cecum sizes and constructions. The cecum is a developed organ seen in small herbivores like rabbits that aids in the absorption of plant food and aids in the retention of supplements. Cecum count can also change; the stone hyrax, for example, has two ceca, however other insectivores don't have enough ceca. The most distal component of the digestive system, the cecum, is located in the right iliac fossa of the middle portion. When produced due to excrement, aggravation, or danger, it can be touched because of how inadequately it lies next to the ileocecal intersection. The cecum's inferior, blind end gives rise to its name. The rising colon and the cecum are persistent in their superiority. The cecum is intraperitoneal and has a changeable mesentery, unlike the rising colon. The ileocecal valve is located between the cecum and ileum. When peristalsis occurs, this architecture prevents the reflux of large amounts of gut contents into the ileum and is remembered to function latently rather than as a defined solid sphincter.

While lungfish and the majority of amniotic species have a cecum, neither are any land or water-proficient living things. It often appears from the dorsal side of the digestive organ in reptiles as a single middle structure. Hyraxes, in contrast to most vertebrates, and birds frequently have two paired ceca. Birds do not possess ceca. Many species of mammalian herbivores have a cecum that is substantially larger than the colon and supports a large number of microorganisms that aid in the enzymatic breakdown of plant material like cellulose. Interestingly, the cecum in committed carnivores, whose diets contain almost no plant stuff, is often partially or completely replaced by the supplement. Raccoons, bears, and red pandas are among the mammalian species that lack a cecum.

Even though they go by the moniker "pyloric ceca," many fish have numerous tiny out pockets along their digestive system that serve the purpose of enlarging the general area of the stomach-related epithelium. Some animals without spines, like squid, may also have structures with the same name, although these don't have any connection to vertebrates.

The embryological midgut is where the cecum is obtained. The vascular stock then passes through several of the main mesenteric arteries. The ileocolic vein, which is a component of the common mesenteric conduit, provides the blood vascular supply. Consequently, it separates into front and back cecal conduits, which directly supply the cecum. The associated ileocolic vein supplies venous waste, which then empties into the main mesenteric vein. The cecum and educational supplement are innervated by sympathetic and parasympathetic components of the autonomic sensory system. This is achieved through the ileocolic portion of the unparalleled mesenteric plexus, which transmits vagal and thoughtful nerve strands and travels along a similar path to the ileocolic corridor.

ACKNOWLEGEMENT

None

CONFLICT OF INTEREST

Authors declare no conflict of interest.

 Received:
 01-August-2022
 Manuscript No:
 IPJCGH-22-14407

 Editor assigned:
 03-August-2022
 PreQC No:
 IPJCGH-22-14407 (PQ)

 Reviewed:
 17-August-2022
 QC No:
 IPJCGH-22-14407

 Revised:
 22-August-2022
 Manuscript No:
 IPJCGH-22-14407 (R)

Published: 29-August-2022 DOI: 10.36648/2575-7733.6.8.38

Corresponding author Syed Amir, Department of Surgery, Tehran University of Medical Sciences, Iran, Email Id: amir_s121@ yahoo.com

Citation Amir S (2022) Functions of Cecum in the Digestive System in Humans and Animals. J Clin Gastroenterol Hepatol. 6:38.

Copyright © 2022 Amir S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.