

Colon - ANATOMY & PHYSIOLOGY OF COLON Functions Pharmacology Notes

The GI tract is divided into stomach, small intestine and large intestine. The large intestine extending from the ileocaecal junction to the anus is divided into three main parts. These are the colon, the rectum and the anal canal. The location of the parts of the colon is either in the abdominal cavity or behind it in the retroperitoneum. The colon itself is made up of the caecum, the ascending colon, the hepatic flexure, the transverse colon, the splenic flexure, the descending colon and the sigmoid colon (Figure 1). It is about 1.5 m long, the transverse colon being the longest and most mobile part (Meschan, 1975), and has a average diameter of about 6.5 cm. The colon from the cecum to the splenic flexure (the junction between the transverse and descending colon) is also known as the right colon. The remainder is known as the left colon.

Arterial supply to the colon of humans comes from branches of the superior and inferior mesenteric arteries. Venous drainage usually mirrors colonic arterial supply, with the inferior mesenteric vein draining into the splenic vein, and the superior mesenteric vein joining the splenic vein to form the portal vein, which then enters the liver.

Lymphatic drainage from the entire colon and proximal two-thirds of the rectum is to the paraortic nodes, which then drain into the cisterna chyli. The lymph from the remaining rectum and anus can either follow the same route, or drain to the internal iliac and superficial inguinal nodes. The dentate line only roughly marks this transition.

ANATOMY & PHYSIOLOGY OF COLON

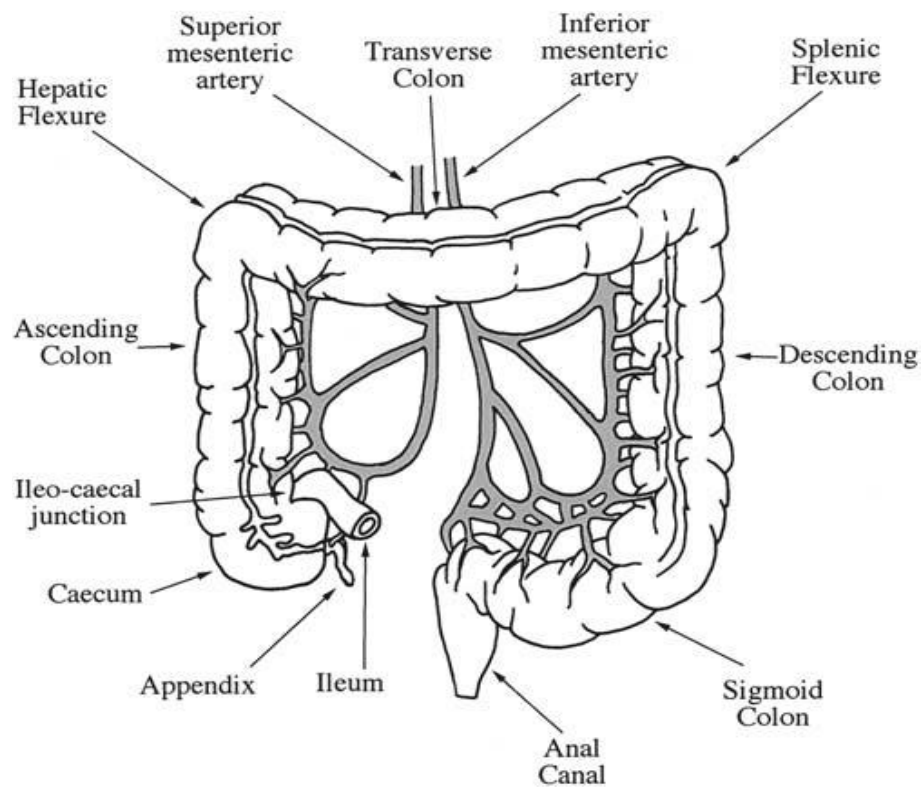


Figure 1. Main features of the colon

Functions of Colon

The colon serves four major functions. They are

1. Creation of suitable environment for the growth of colonic microorganisms
2. Storage reservoir of faecal contents
3. Expulsion of the contents of the colon at an appropriate time and
4. Absorption of potassium and bicarbonate.