PHYSIOLOGY OF THE LARGE INTESTINE

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The principal function of the colon is absorption of water; approximately 1000 /uni00A0 mL of ileal content enters the caecum in faeces. Sodium absorption is e ffi ciently accomplished by an active transport system, while chloride and water are absorbed passively . Fermentation of dietary fibre in the colon by the normal colonic microflora leads to the generation of short chain fatty acids, which are an important metabolic substrate for colonic mucosa. Diversion of the faecal stream, denying the mucosa of this nutrition, may lead to inflammatory changes in the colon downstream (diversion colitis). Absorption of nutri ents, including glucose, fatty acids, amino acids and vitamins, can also take place in the colon. Colonic motility is variable. In general, faecal residue reaches the caecum 4 hours after a meal and the rectum after 24 hours. Passage of stool is not orderly because of mixing within the colon (see Chapter 73).

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