

Gut Function and Enteral Nutrition for GI Disease

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The gastrointestinal tract is one of the most dynamic organs and is also the most essential part in utilizing nutrition. In addition to oral intake, which is the primary way to meet caloric needs, vital nutrition can be given through enteral feeding in order to increase the secretion of digestive enzyme and gastro-intestinal hormone to accelerate cell renewal. The use of different nutrients will trigger various pathophysiological reactions. The route of enteral nutrition administration also plays a vital role in determining outcome.

Patients with different conditions will require specific nutrient component to trigger desired physiological interaction. The correct functioning of the small intestine in the digestion, absorption and subsequent assimilation of ingested nutrients is of paramount importance because once nutrients enter the gastrointestinal track, a wide array of stimulation will occur, which triggers interaction between several hormones and the enteric nervous system. These stimuli not only induce the flow of digestive enzyme, but also elicit the various forms of physiological response. The ability of the gastrointestinal tract in influencing a remote organ system's response to external insult or injury is also becoming an important field of study.

Through advanced research in understanding biological processes and analytical techniques in the relationship between nutrients and GI hormone, the possibilities for designing dietary therapy can be expected. For most hospitalized patients, nutritional support is a vital part of the therapy. Early initiation, particularly via the enteral route, has a significant effect on disease progress in a wide variety of patients. In addition, considering the lower cost and physiologic superiority of enteral nutrition, the enteral feeding should be attempted in patient's critical illness.