

INNATE INTELLIGENCE

ILEUM

• **Normal Function** – The final part of the small intestine absorbs nutrients, particularly vitamin B12 and bile salts.

• **Innate Stimulus** – Involuntary, wave-like muscle contractions propel food through the digestive tract, bringing solids and liquids into the ileum.

• **Innate Response** – The ileum contains small masses of lymphatic tissue that monitor the intestinal environment (homeostasis) and prevent bacterial overgrowth and help maintain a balanced gut microbiome, and prevent infection.

Jejunum

Absorbs hydrolyzed carbohydrates, amino acids, and fatty acids into the bloodstream, facilitating their transport to the body's organs.



Ileum

Absorbs nutrients, particularly vitamin B12 and bile salts.



Ileocecal Valve

| SYMPTOMS OF ENERGY DEFICIENCY | |
|--|--|
| STRESS RESPONSE | ORGAN EXHAUSTION |
| Increases nutrient requirements Inhibits digestive secretions and peristalsis | Deficient nutrients available Inadequate digestive secretions and peristalsis |
| FREQUENT SYMPTOMS | |
| Crohn's disease in that part of the small intestine causes abdominal pain, chronic diarrhea, and unexplained weight loss. | Additionally, fever, nausea, vomiting, and fatigue may also be present, especially with more severe cases. |
| NUTRITIONAL CONSIDERATIONS | |
| Improve Digestion and Absorption | |
| Focus on foods rich in fiber, probiotics, and healthy fats. Fiber-rich foods like whole grains, fruits, and vegetables help add bulk to stool, stimulating the intestines for proper bowel movements. Probiotics, found in fermented foods like yogurt and kefir, promote a healthy gut microbiome, aiding digestion. Healthy fats, like those in avocados and nuts, aid in nutrient absorption and can reduce gut inflammation. | |
| CLINICAL CONSIDERATIONS | |
| Involuntary muscle contractions | |
| Sympathetic Nerve Supply | T5 to T11 |
| The ileum receives sympathetic nerve supply through the superior mesenteric plexus, which is an extension of the lower portion of the celiac plexus. This plexus receives sympathetic fibers from the greater and lesser splanchnic nerves. The superior mesenteric plexus also contains parasympathetic innervation via the vagus nerve. | |

Supplementing nutrients to counter symptoms is little more than educated guesswork. Symptoms are Innate's signal that a system, organ, or tissue is unable to produce adequate energy to meet its responsibilities for maintaining homeostasis and normal physiological function. **Carbohydrates, protein, lipids, vitamins, and minerals are building blocks used in producing energy.** They must be put to work. They are not workers.

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