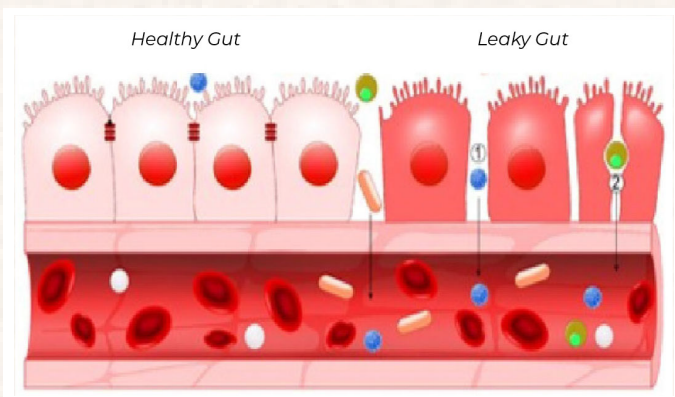


The digestive tract serves as a key interface where our bodies engage with the external environment. The small intestine lining acts as a crucial barrier, facilitating the entry of nutrients and blocking the passage of bacteria, viruses, toxins, and other undesirable substances into the body. Through the digestion process, we absorb essential nutrients from food while simultaneously expelling various toxins and by-products generated during digestion.

A distinct layer of cells forms the lining of the small intestine, tasked with both nutrient absorption and shielding the body from detrimental substances. When extended, this cell lining would encompass over 300 square feet, approximately the size of a studio apartment. Spanning the gaps between these cells are specialized spaces known as "tight junctions." The well-being of the cells comprising the small intestine lining and the integrity of these tight junctions play a crucial role in determining what gets absorbed in the digestive tract and what does not.

What Is Intestinal Permeability?

Intestinal permeability is the measure of how permeable or porous the lining of the small intestine is. A condition of increased permeability, often termed "leaky gut," arises when the protective barrier of cells is compromised, resulting in a loss of tight connections.



While a certain degree of intestinal permeability is normal, heightened permeability allows harmful substances and partially digested food to enter the bloodstream in quantities that exceed the body's typical management capabilities. This increased permeability can impede the absorption of essential nutrients crucial for maintaining good health.

When leaky gut occurs, the immune system may be triggered, leading to inflammation, reactions to food, and an elevated risk of various diseases. Some studies suggest that heightened intestinal permeability could be an underlying factor in conditions such as migraines, depression, and various autoimmune diseases, including Celiac disease and rheumatoid arthritis.

What Causes Increased Intestinal Permeability?

Numerous factors can contribute to heightened intestinal permeability. Infections caused by viruses and bacteria, the use of antibiotics and other medications, exposure to toxins, stress, inflammation, food intolerances, and imbalances in gut bacteria have all been proposed as potential causes. Addressing this issue can involve various approaches, and your functional medicine provider might suggest dietary modifications, lifestyle adjustments, and specific nutritional supplements to restore the protective function of your intestinal barrier.

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