LEAKY GUT IN AUTOIMMUNE DISEASE

Using Probiotics and Digestive Enzymes in Autoimmune Disorders

© Elaine Moore

Many autoimmune disorders show signs of intestinal permeability, which is thought to contribute to disease development and worsen symptoms.

Leaky Gut Syndrome

Leaky gut syndrome or intestinal permeability are terms used to describe an inability of the stomach lining to absorb protein molecules. Instead of being absorbed and digested, these protein molecules circulate throughout the blood stream. Here, they stimulate the immune system, and, in turn, immune system cells react to their presence as they would to any foreign protein by initiating an inflammatory reaction that leads to autoantibody production and autoimmune disease development.

Evidence for this theory includes the presence of gastrointestinal tissue damage seen in patients with a number of different autoimmune diseases including ankylosing spondylitis, irritable bowel syndrome, rheumatoid arthritis, Crohn's disease, multiple sclerosis, vasculitis, thyroiditis, and dermatitis herpetiformis. In many of these conditions, a reduction of digestive inflammation correlates with a reduction or remission of autoimmune symptoms.

In Ayurvedic medicine, the presence of ama, which is a toxic byproduct of digestion, is responsible for most treatable conditions. Ama impairs nutrient absorption and tends to accumulate in tissues that are weak, causing congestion, inflammation, and degenerative changes. Among medical practitioners today, intestinal permeability is thought to be caused by a substance or combination of substances, such as allergens or toxins, which initiate inflammation in the digestive tract. This inflammation allows for large molecules to pass across the intestinal barrier, including molecules from proteins, fats, parasites, bacteria, ad fungi. Because human tissues have protein antigens similar in structure to these other proteins, the scene is set for autoimmune disease development.

Causes and Symptoms of Leaky Gut Syndrome

Common causes of leaky gut syndrome include antibiotics, alcohol, caffeine, parasites, bacteria, some food preservatives and additives, allergic states such as gluten sensitivity and lactose intolerance, corticosteroids, non-steroidal anti-inflammatory drugs, refined carbohydrates, oral contraceptives, and fungi. Chronic inflammation from these sources damages the protective coat of immunoglobulin (antibody) A, which interferes with the body's normal ability to inhibit these substances. The resulting toxins then interfere with the liver's ability to detoxify these substances. One result is increased sensitivity to
environmental agents such as cigarette smoke, chemical cleaning agents and strong perfumes. Early symptoms include a tendency toward hayfever.

Other symptoms include nutrient deficiencies, acne, headaches, poor concentration, fatigue, and irritability. With aging and exposure to stress, a gradual loss of stomach acid occurs, which can aggravate the problem and contribute to vitamin B12 deficiency and deficiencies of minerals such as chromium, copper, iron, magnesium, manganese, selenium, and zinc.

**Treatment**

Oral supplementation with friendly bacteria and digestive enzymes help restore intestinal permeability. Substances known as probiotics supply these friendly bacteria. Probiotics include tablets containing Lactobacillus acidophilus, Propionibacterium freudenreichii, shermanii, and Bifidobacterium bifidum. The recommended dosage is 6-18 billion bacteria used three times daily. Added polysaccharides in these preparations also offer benefits.

Gentian, barberry and other bitter herbs as well as the digestive enzymes papain, bromelain, and pancreatin are used to restore stomach acid. Clinical research shows that oral supplementation of probiotics enhances the immune system's ability to fight foreign organisms (phagocytic property).

Herbs and botanicals with anti-inflammatory properties include black cohosh, turmeric, wild yam, licorice root, devil's claw, willow, and ashwaganda. Demulcents are used to establish integrity of the stomach lining and include, aloe vera, marshmallow root, slippery elm, and licorice root. Herbs used to help relieve musculoskeletal pain include arnica, wild lettuce, Jamaican dogwood, nutmeg, and California poppy. Herbs used to reduce congestion and eliminate wastes include red clover, celery seed, burdock, dandelion root, and stinging nettle.

Immunomodulators offer benefits, whereas immunostimulants such as Echinacea should be used with caution. Ayurvedic therapies such as massage and herbal mixtures are based on the body's primary imbalance or tendency toward kapha, pitta, or vata predominance.

Eliminating or reducing substances that promote intestinal permeability also promotes intestinal healing. This includes avoiding antibiotics, nonsteroidal anti-inflammatory drugs, pesticides, herbicides, and meat contaminated with hormones. Substances that promote healing include high fiber foods rich in antioxidants such as cabbage, cauliflower, beets, and onions; omega-3 fatty acids found in salmon and flaxseed, multi-mineral supplements, and digestive enzymes such as bromelain and pancreatin.

**Resources:**


The copyright of the article Leaky Gut in Autoimmune Disease in Autoimmune Disease is owned by Elaine Moore. Permission to republish Leaky Gut in Autoimmune Disease in print or online must be granted by the author in writing.