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NUTRIENTS THAT HEAL A LEAKY GUT



by Holly Lucille, ND, RN

Has your gut sprung a leak? Leaky gut, a lay person's term for "intestinal hyperpermeability"—a condition where the intestinal barrier has been compromised—affects more than 80 percent of all American adults. At its core, leaky gut—technically known as gut enteropathy—arises when the intestinal barrier becomes permeable and allows bacteria, toxins, and microscopic bits of undigested food to "leak" out of your gut and into your bloodstream. These contaminants can then wreak havoc throughout the body.

When the intestinal barrier is healthy, it allows beneficial nutrients, electrolytes, and water to cross into your bloodstream via gate-like structures known as tight junctions. These tight junctions also prevent harmful compounds from escaping the gut and

entering the body. Problems start when this finely tuned system breaks down, losing its selectivity. There are a number of things that contribute to this breakdown. Pathogens can weaken the intestinal barrier, altering the way fluids and electrolytes pass into the bloodstream. Your daily habits can also play a big role in undermining the integrity of the intestinal barrier.

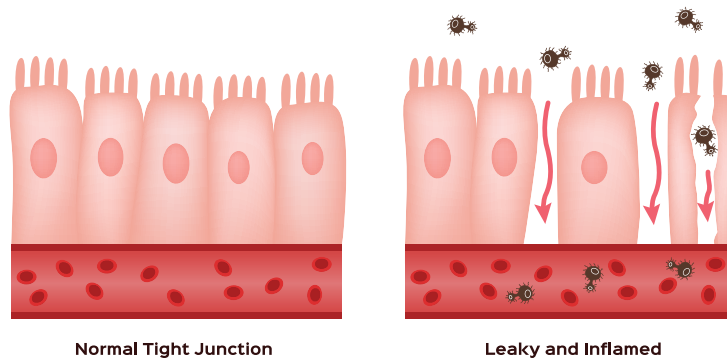
Barrier Busters

The Standard American Diet (SAD for short), is one of the biggest contributing factors to leaky gut. Not only does a highly processed diet reduce bacterial diversity, it also

triggers inflammation that damages the intestinal barrier. Among the worst offenders are food additives like carboxymethyl cellulose and polysorbate-80 which increase intestinal permeability by disrupting how tight junctions work and by promoting low-grade inflammation. Fortunately, flavonoid-rich fruits and vegetables, tea, red wine, coffee, and chocolate can have a protective effect on the gut barrier.

Non-steroidal anti-inflammatory drugs (NSAIDs) like aspirin, ibuprofen, or naproxen can also increase intestinal permeability. In fact, research shows that 70 percent of long-term NSAID users experience

leaky gut. Another culprit? Proton pump inhibitors (PPIs) like Prilosec or Nexium. In one clinical trial that appeared in the journal *Alimentary Pharmacology & Therapeutics*, people taking a PPI to ease their acid reflux symptoms



experienced leaky gut within just a few days of taking the drug.

Stress has been shown to influence numerous systems in the body, and your intestinal barrier is no exception. Stress increases permeability via the gut-brain axis—a bidirectional “highway” that links what happens in the brain with what happens in the gut. Research in the journal *Gut* confirmed that people under stress have increased permeability and that may explain why people dealing with chronic stress are more vulnerable to an assortment of health problems.

Gut-Strengthening Supplements

Nothing can take the place of a healthy lifestyle, however the following nutrients can help to fortify a healthier intestinal barrier. Adding them to your daily wellness plan may help prevent or even improve leaky gut syndrome.

Boswellia. Boswellia has a well-earned reputation as a powerful anti-inflammatory, and studies show that it can help protect the gut barrier. The secret to its efficacy is boswellic acids—especially acetyl-11-keto-β-boswellic acid (AKBA), which has the unique ability to block a key

DID YOU KNOW

The intestinal barrier is the largest and most important barrier within the body—and yet it is only one cell thick!

inflammatory pathway in the body called 5-LOX. In an experimental model of intestinal inflammation and a compromised barrier, Italian scientists found that pretreating cells with boswellia improved tight junctions and reduced damage caused by inflammation. Boswellia also prevented free-radical damage due to its antioxidant properties. Look for a boswellia supplement standardized to contain at least 10 percent AKBA for maximum benefit.

Curcumin. Derived from the golden spice turmeric, curcumin concentrates in the gastrointestinal tract where its anti-inflammatory and antioxidant activity help maintain the integrity of the intestinal barrier. Research shows that curcumin is so effective it reduces permeability, even in the face of an unhealthy diet. But standard curcumin supplements are very poorly absorbed by the body. To ensure you’re getting all of the barrier-boosting benefits from your supplement, look for one that combines curcumin with turmeric essential oil (which is also a source of anti-inflammatory ar-turmerone). Listed on labels under the name BCM-95 or Curcugreen, this specially blended curcumin is considerably more absorbable and bioavailable, meaning it remains in the bloodstream for a longer period of time.

SIGNS YOU MAY HAVE LEAKY GUT

- ☐ Chronic diarrhea, constipation, gas, or bloating
- ☐ Food allergies or sensitivities
- ☐ Autoimmune issues, including rheumatoid arthritis or type 1 diabetes
- ☐ Cravings for sugar or simple carbs
- ☐ Joint pain
- ☐ Frequent headaches or brain fog
- ☐ Anxiety or depression
- ☐ Seasonal allergies
- ☐ Skin reactions, such as eczema, hives, or rashes
- ☐ Unexplained fatigue
- ☐ Impaired nutrient assimilation
- ☐ Weakened immunity

L-glutamine. Glutamine is an important amino acid that serves as a building block of protein and plays a critical role in immunity. But its best claim to fame is its ability to repair the intestinal lining. Research in the

AYURVEDIC HERBS EASE THE SYMPTOMS OF LEAKY GUT

that pairs the gut-healing power of Ayurvedic herbs like turmeric, andrographis, Indian laburnum, and

Healing a leaky gut can take time—during which you can suffer from digestive discomfort. Make it easier by looking for a supplement

licorice with traditional Indian digestive herbs like chebulic myrobalan, galangal, ginger, gotu kola, and Indian tinospora. Used for centuries throughout India to enhance digestion, these Ayurvedic herbs not only aid in repairing a leaky gut, they can also ease the gas, bloating, and indigestion that can accompany the condition.

6 BARRIER-HEALING HABITS



Get your zzzz's.

Shortchanging your shut-eye can seriously impact your gut health. In fact, sleep and your circadian rhythms appear to affect the health and diversity of the bacteria in your gut. Strive to get seven to nine hours of uninterrupted shut-eye each night.

Eat clean. A diet rich in foods that foster the growth and diversity of beneficial bacteria was shown in a 2018 study review by the U.S. Army Research Institute of Environmental Medicine to reduce the risk of leaky gut. Focus on omega-3-rich foods like fatty fish, healthy fats, fermented foods, and plenty of fruits and vegetables. Whenever possible, choose organic.



Drink up.

Research published in *The FASEB Journal* shows that staying hydrated has a beneficial effect on the mucosal lining of your intestine and can help keep your gut bacteria in balance. Aim to drink at least half your body weight in ounces of pure water daily to make sure you're staying within the healthy hydration zone. For example, if you weigh 150 pounds you would want to drink at least 75 ounces of water daily to stay within the healthy hydration zone.



Move more.

Exercise can help limit inflammation in the gut while beneficially modifying gut flora. Plus, studies suggest that a good aerobic workout increases blood flow to the digestive organs. Consider jogging, swimming, biking, or dancing. One of the best choices is walking. Simply taking a 20- to 30-minute walk after dinner can kick-start sluggish digestion and normalize bowel activity.



Celebrate responsibly.

Studies have consistently shown that the occasional consumption of moderate amounts of alcohol can be a healthy thing. The key word in all of this is "moderate." Other research has found that excessive drinking can have a direct negative impact on your intestinal barrier. What's moderate? For women, that means no more than one drink per day.



For men, the limit is two per day.

Stress less.

Chronic stress impacts digestion and the bacterial balance in your intestinal tract, and this can affect the integrity of your intestinal barrier. Even an acute bout with stress can boost cortisol levels and increase permeability. Manage stress and improve intestinal health by tapping into relaxation techniques whenever life throws you a curve. While yoga and meditation are the most popular go-to stress relievers, other techniques that may help restore a sense of calm to your gastrointestinal tract include hypnosis, progressive muscle relaxation, mental imaging, biofeedback, deep breathing, and even simply listening to some soothing music.



journal *Amino Acids* reported that glutamine improves the growth and survival of intestinal cells called enterocytes. It may also help regulate the function of the intestinal barrier during stress. Even low doses of supplemental glutamine may improve intestinal permeability after strenuous exercise or other physical stress.

Probiotics. The beneficial bacteria in probiotics are well-known for their protective role in gastrointestinal diseases. Besides competing with bad bacteria for real estate in the gut, probiotics strengthen the tight junctions and enhance the barrier function of the intestinal walls. Recent studies also show that probiotics tame the intestinal inflammation that can create future problems. Look for a probiotic supplement that has live, active cultures and includes *Lactobacillus plantarum*, *Lactobacillus rhamnosus*, and *Bifidobacterium bifidum*. Another tip? Don't automatically think that more is better. Many commercial probiotics are packed with 80 billion colony-forming units (CFUs) or more. The problem is, there is currently no research that shows that these high CFU counts provide any greater health benefits than lower counts. What really matters is viability—and that is particularly true if you suffer from leaky gut. ■



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