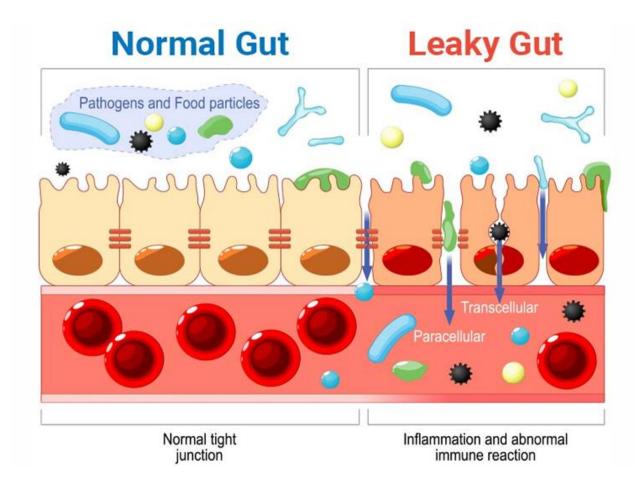
How to Heal Leaky Gut in 9 Easy Steps

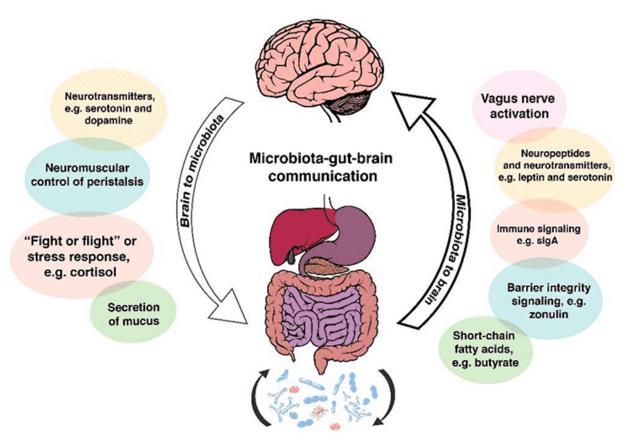
Leaky gut, also known as intestinal permeability, is a lot more common than most people think. Studies have shown that this afflicts more than 50% of the population, and it drives chronic disease.



When leaky gut is present, the immune system ramps up its response at the mucosal level and this increases inflammation and it weakens the gut barrier, which causes intact particles to leak through the gut junctions and into the blood stream.

The immune system will then respond, by further increasing inflammation, and signaling the brain that there is an issue.

With good microbial diversity and abundance, and a healthy balanced intestinal tract, we see good short chain fatty acid production (fuels the gut lining), barrier integrity (normal tight junctions), balanced immune signaling (Secretory IgA, the immunoglobulin secreted by the cells that line your intestinal tract), good neuropeptides and neurotransmitters are produced and vagus nerve signaling.



Microbial diversity and relative abundance

The brain is responsible for producing neurotransmitters, neuromuscular control of peristalsis (motility), controlling fight or flight/ stress response and secretion of mucous.

When leaky gut is present – all of these pathways are disrupted. This creates a negative feedback loop, where the brain will send cytokines (inflammatory immune chemicals) to further increase inflammation and immune system involvement. Leaky gut can also cause leaky brain, where inflammatory reactions disrupt the blood brain barrier becomes permeable, causing brain fog, anxiety, and concentration issues.

The inflammation that is caused by leaky gut, does not stay local. Systemic inflammation can be triggered when the endotoxin LPS (lipopolysaccharide) leaches into the blood stream. LPS is the major component of the membrane in gram-negative bacteria. When these turn over in the intestinal tract (as bacteria do – they have a short lifespan), they dump LPS into the intestinal tract. If you have dysbiosis (imbalanced gut bacteria) and too many gram negative bacteria to begin with, LPS alone can drive leaky gut. Normally, LPS is dealt with within the intestinal lumen and some is directed to the liver, where the liver processes it out of the body. When LPS leaks over into the blood stream at high numbers, this will cause systemic inflammation.

Most practitioners, when presented with a patient with chronic gut symptoms, assume that leaky gut is present. I prefer to test for this. If identified, and if present, this is a PRIMARY target. We need to treat this directly and then we can test this again to make sure that it has healed.

We also need to identify why leaky gut is present.

Common causes of leaky gut:

- Acute/ Chronic Stress and:
- Parasites
- Antibiotics
- Dysbiosis/ Pathogens
- Mycotoxins
- Chemicals/ Toxin Load

Nutritional Therapies That Can Help to Address Intestinal Permeability

- Zinc carnosine
- L-glutamine
- Curcumin
- L-arginine
- N-acetyl glucosamine (NAG)
- Amino acids/protein
- Immunoglobulins
- Probiotics and prebiotics
- Saccharomyces boulardii
- Digestive enzymes
- Marshmallow root
- Slippery Elm
- Boswellia
- DGL
- Pectin
- Aloe vera
- Quercetin
- Dietary interventions, such as gluten free (published, peer reviewed studies show that gluten triggers leaky gut), dairy free (once leaky gut is present, casein, one of the proteins in dairy, is very hard to digest)

Here is How I Heal Leaky Gut in 9 Easy Steps

Leaky gut can heal quickly, if you take the right steps and you are diligent following through with the protocol. Treatment should continue for at least two months.

- 1. **Increase short chain fatty acids**, like Butyrate, from food (Ghee, clarified butter and fiber) and supplementation. Butyrate helps to fuel the cells that line the intestinal tract. It also helps to keep the pH low (more acidic), which creates a more ideal environment for beneficial flora.
- 2. **Add in the right fats**. Omega 3 from food (salmon, sardines, etc.,) and from supplement, as well as Coconut oil (from food) and, if needed, supplementation, "MCT" Medium Chain Triglycerides
- 3. **Address stress**, with adaptogens, phosphatidyl serine, meditation, belly breathing/diaphragmatic breathing
- 4. **Digestive Enzymes** help to break down proteins
- 5. Dietary changes:
 - Remove gluten and dairy. Gluten has been implemented in triggering leaky gut.
 Once leaky gut is present, casein, a protein in dairy, can be very tough to digest.
 While healing leaky gut, it is best to remove both of these (feel free to continue to eat ghee. Although this is dairy, the process of clarifying butter into ghee, removes almost all protein).
 - Prepare food in a way that improves its digestibility: cook all vegetables, add more water to grains and cook them longer, add sauces (bone broth/ vegetable broth as base) to wet food to make it easier to chew. Ground meats are easier to chew than whole meat (meat balls, meat patties, meat skewers). Fresh fruit is okay.
- 6. **Bioflavonoids**, to help with intestinal repair
- 7. Collagen peptides strengthen the gut barrier
- 8. **Glutamine and Zinc Carnosine** to help fuel the gut lining and heal wounds in the intestinal tract.
- 9. PLUS one, or more: Immune Regulation, Vitamin A, Vitamin D and Immunoglobulins, probiotics.

Get the Full Kit Here: Heal Leaky Gut Kit



The Heal Leaky Gut Kit includes the following items:

- <u>Collagen Restore, Vita Aid</u>: Contains b-vitamins, vitamin A, antioxidants: green tea extract, trans-resveratrol and bearberry extract, as well as flavonoids. 2 capsules with breakfast and 2 capsules with lunch
- <u>Probutyrarte, Tesseract</u>: Contains butyrate (short chain fatty acid): 2 capsules with breakfast and 2 capsules with lunch
- <u>GI-Restore, Vita Aid</u>: Contains zinc carnosine, DGL, slippery elm, L-glutamine, quercetin and S-methylmethionine: 1 scoop twice a day
- <u>Digestive Enzymes, Klaire Labs</u>: 1-2 with each main meal, or 15 minutes before each meal (whichever timing you feel works best for you)