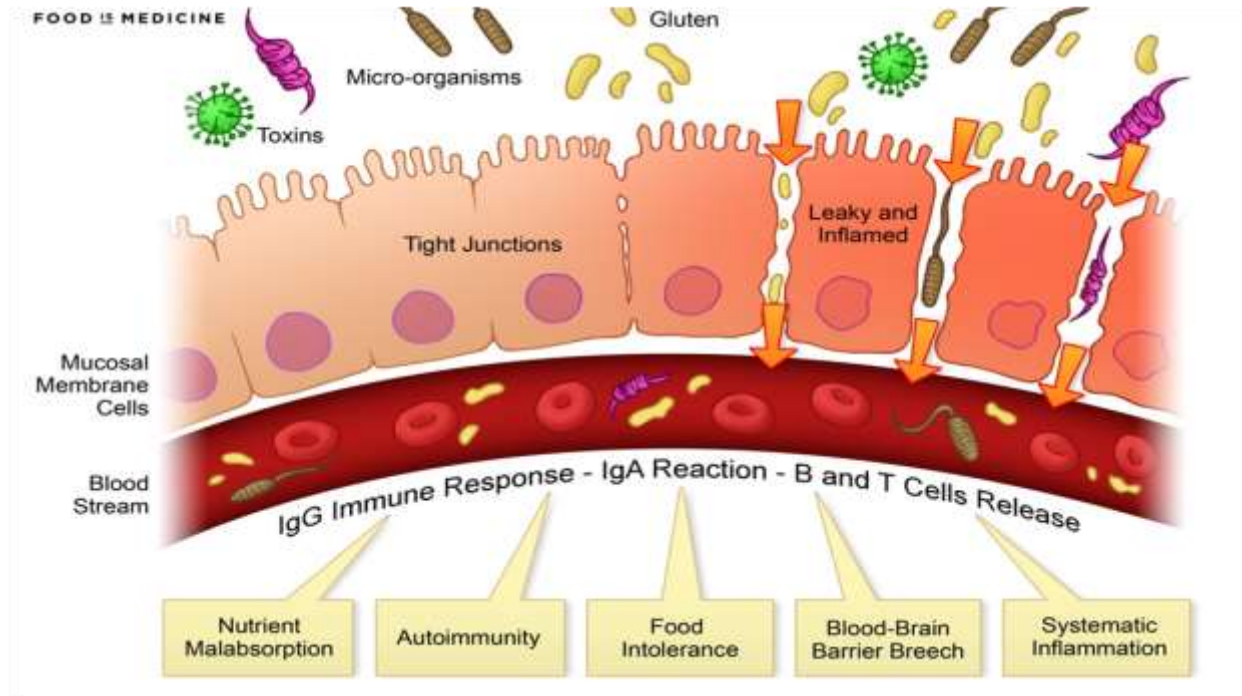


## ~Leaky Gut, Autoimmunity, and Herbal Allies~



### What is leaky gut?

The intestines are lined by cells that are bumped right next to each other. These “tight junctions” prevent undigested foods, proteins, bacteria and their waste products, yeast and their waste products, and more, into the blood stream. Our bodies have specific lock-and-key systems to only allow what we need, when we need it, to enter the bloodstream.

Leaky gut occurs when the tight junctions of the intestines become damaged by things like:

- 1) chronic and severe stress
- 2) antibiotics and other harsh medications and herbs
- 3) Even in people without allergies or intolerance to gluten, ingesting gluten stimulates the release of zonulin, which directly damages the tight junctions.
- 4) ingestion of non-organic foods sprayed with pesticides and insecticides

When the gut develops these gaps between the cells, foreign matter (like undigested foods, proteins, parasites, viruses, bacteria, yeasts, and all of their waste products—yuck!) is free to move into the blood stream. This causes chronic inflammation, which leads to any number of

physical and mental diseases, malnutrition, and autoimmune conditions. Pathogenic (disease-causing) bacteria thrive under these conditions, outcompeting beneficial bacteria in the gut.

Interesting fact: Schizophrenia used to be called “bread madness.” When doctors in psychiatric wards removed bread from their diets, the symptoms resolved. They likely had what we know now as “leaky gut.” When gluten and by-products were free in the blood stream, they were able to penetrate the blood-brain barrier, causing psychiatric symptoms.

### **Signs of Leaky Gut:**

- 1) Digestive issues: irritable bowel syndrome (IBS), Crohn’s or Celiac, constipation, gas, diarrhea, bloating
- 2) Food sensitivities/allergies
- 3) Brain fog/memory difficulties/dementia and Alzheimer’s
- 4) Chemical/environmental sensitivities
- 5) Chronic fatigue/fibromyalgia
- 6) Skin problems: acne, rosacea, psoriasis, eczema
- 7) Autoimmune diseases: leaky gut causes chronic inflammation, triggering an overactive immune system (autoimmunity), and can be physical and/or mental. *Some* of these include:
  - a. Allergies/asthma/immune deficiencies
  - b. ADD/ADHD/dyslexia
  - c. Asperger’s/autism
  - d. Depression/anxiety
  - e. Schizophrenia/bipolar
  - f. Arthritis
  - g. Hashimoto’s
  - h. Lupus
  - i. Hormone problems (irregular periods, PCOS, PMS)
  - j. Seizures/tic disorders
  - k. Osteoporosis, tooth decay, and nutrient deficiencies
  - l. Neurological Diseases like Multiple Sclerosis
  - m. Rheumatoid arthritis:

A 2014 study found that rheumatoid arthritis is linked to leaky gut:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4246018/>

## How to Heal:

We all have heard it before: *eat healthy* and *exercise* for good health. *Prioritize sleep* and *spend time in nature*. *Nurture positive connections with family and friends*, and *create space for intentional relaxation, mindfulness, meditation, or spiritual practices*. These things *really do* impact our gut health... and it turns out, *everything else!*

Specific steps to get to the ROOT of the disease and heal leaky gut include:

- 1) *Eat organic* or *homegrown*, nutrient-dense foods like organ meats, bone broths, fresh organic vegetables, and fresh ripe fruits. *Whole foods* don't have an "ingredient list!"
- 2) Complete an *elimination diet*. *Whole 30* is a good starting point. *Minimally: eliminate all sugar and gluten* as soon as possible.
- 3) *Explore the different diets* that will suit your specific needs:

Paleo/Paleo-AIP (auto-immune protocol)

Wahl's Protocol

Specific Carbohydrate Diet (SCD)

GAPS ("Gut and Psychology/Physiology Syndrome," based on SCD)

Carnivore

All of these diets are based on *Weston A. Price's* discoveries about the optimal health of indigenous people, even into very old age. Similarities include:

~whole foods based (organic when possible)

~increasing nutrient-dense foods like organ meats, oily fish, cod liver oil, grass-fed butter, dark leafy greens and colorful vegetables

~re-establishing a healthy gut biome, and

~temporary or permanent elimination of inflammatory foods like grains, processed foods, refined sugars and flours, processed vegetable oils and margarines, and pasteurized and/or unfermented dairy.

- 4) Use *herbs, diet, and lifestyle to manage other chronic and acute conditions* when possible. Consider herbal antibiotics for non-emergency use, which are gentler on the gut microbiome. Pharmaceutical drugs are often made with petroleum products, fluoride, and other substances that are difficult for our bodies to manage.
- 5) Spend time in the *sunshine*. Vitamin D heals many tissues in the body, including the gut.
- 6) Take a cup of *bone broth, gelatin, or collagen powder* at least once daily. Bone broth is high in glutamine, which seals the leaks.

- 7) Add *probiotics* and *fermented vegetables*. These will re-establish healthy gut microbes.
- 8) Use *healing herbs*.

### **Herbs for Leaky Gut:**

*Mucilaginous herbs* coat the stomach in a healing mucous.

Marshmallow root is the superstar for leaky gut: it's gentle and effective when taken in tea, capsule, or tincture.

Licorice root adds a sweet flavor to any tea blend. Use caution with high blood pressure, or consider deglycyrrhizinated (DGL) licorice for safer long-term use.

Fennel seeds, a common kitchen spice, can be added to a tea blend or boiled on their own, then strained for a healing tea.

Plantain (*Plantago major*) and violet are common "weedy" mucilaginous herbs as well, often found growing among grassy lawns. The leaves can be boiled or chewed as is.

Slippery elm increases the mucilage content in the gut, and stimulates nerve endings to heal.

*The mint family* of herbs is also filled with gut superstars. Their anti-spasmodic, anti-inflammatory, nerve-soothing qualities make them particularly beneficial for gut issues. Peppermint is well-known for taming irritable bowel syndrome. Lemon balm is calming to the nerves, and perfect for "nervous stomach." Stinging nettle is nourishing, with high levels of nutrients, and aids in reducing the histamine allergic response often seen with leaky gut.

*Anti-inflammatory* herbs like ginger, turmeric, boswellia (frankincense), and chamomile calm and soothe the gut. Ginger also relieves the gastrointestinal system by stimulating digestion.

Even though intervention and cures have been achieved with appropriate diet and lifestyle changes for decades—curing things once thought incurable, like schizophrenia, multiple sclerosis, autism, and seizure disorders!—western medicine is only now beginning studies on these success stories. Unless your doctor is a functional medicine practitioner, they are unlikely to be familiar with these curative steps. Do your own research and, of course, trust your gut.

	WHAT IS IT?	FOODS TO ENJOY	FOODS TO AVOID	ISSUES ADDRESSED
<b>KETOGENIC</b>	A ketogenic diet primarily functions to place the body into ketosis, a metabolic state where the body burns energy from fat instead of carbohydrates.	A ketogenic diet places its emphasis on good, quality fats. The recommended Macro break down is: <ul style="list-style-type: none"> <li>• 75% of your food from quality fats (coconut oil, ghee, grass-fed butter &amp; cheese, salmon, chia seeds, avocados, nuts &amp; seeds)</li> <li>• 20% from quality sources of protein</li> <li>• 5% from carbohydrates</li> </ul>	<ul style="list-style-type: none"> <li>• Gluten &amp; grains</li> <li>• Refined sugars, artificial sweeteners</li> <li>• Processed foods</li> <li>• Milk</li> <li>• Alcohol</li> <li>• Soy products</li> </ul>	Originally the Ketogenic Diet was created to help with epilepsy. Keto has also seen success in aiding many health problems such as diabetes, Parkinson's, and Alzheimer's. Keto has helped fight cancers and aids weight loss.
<b>GAPS</b>	The GAPS Diet stands for Gut and Psychology Syndrome.  GAPS addresses three main underlying factors: Leaky gut, gut flora imbalance and nutrient deficiencies. The diet aims to restore gut flora and strengthen a weakened immune	GAPS Diet looks for nutrients that aid in immune system and gut functionality and restoration. The GAPS Diet places importance on these types of food: <ul style="list-style-type: none"> <li>• Fermented foods</li> <li>• Probiotic supplementation</li> <li>• Nutrient-dense, traditional foods (exceptions on the right)</li> </ul>	<ul style="list-style-type: none"> <li>• Complex carbohydrates (including sweet potatoes)</li> <li>• Gluten, grains</li> <li>• Sugars (including honey and maple syrup)</li> <li>• Most nuts</li> <li>• Most legumes</li> <li>• Processed foods and additives</li> <li>• Milk, alcohol, fruit juices, coffee, tea, soft drinks</li> </ul>	The GAPS Diet can help with a variety of chronic health concerns, especially those originating in the gut. GAPS has seen success in helping with: autoimmune diseases, chronic candida overgrowth, arthritis, anemia, eczema, hay fever, allergies and chronic colds. Because of the gut/brain connection, GAPS has also helped those dealing with learning disabilities.
<b>AIP</b>	The Autoimmune Protocol (AIP) focuses on eliminating the attacks the immune system has on the organs. Because autoimmune diseases are essentially untreatable, this protocol takes a holistic approach to support the immune system naturally by decreasing inflammation, healing the gut, support the digestive tract and overall bettering organ functions	The AIP looks for nutrients that support the immune system by "cooling" down chronic inflammation.  Nutrient-dense, traditional foods (exceptions on the right): <ul style="list-style-type: none"> <li>• Beef, Chicken, Wild Caught Fish</li> <li>• Snap Peas, String Beans, Harkot Vert</li> <li>• Beets, Carrots, Leafy Greens</li> <li>• Sauerkraut, Kombucha, Kimchi</li> </ul>	<ul style="list-style-type: none"> <li>• Complex carbohydrates (including sweet potatoes)</li> <li>• Gluten &amp; grains</li> <li>• Sugars (including honey and maple syrup)</li> <li>• Most nuts</li> <li>• Most legumes</li> <li>• Processed foods and additives</li> <li>• Milk, alcohol, fruit juices, coffee, tea, soft drinks</li> </ul>	AIP looks to heal those dealing with autoimmune diseases and has had great success in restoring balance and health back to those suffering from health issues such as: Crohn's Disease, Multiple Sclerosis, and Lupus, among others.
<b>LOW FODMAP</b>	FODMAP stands for Fermentable Oligo-saccharides, Di-saccharides, Mono-saccharides And Polyols. The Low FODMAP diet aims to eliminate short-chained carbohydrates in the diet, as they can be problematic for those suffering from irritable bowel syndrome and other digestive issues.	Nutrient-dense, traditional foods (exceptions on the right): <ul style="list-style-type: none"> <li>• Quality meats, fish and eggs</li> <li>• Almonds, walnuts, flax seeds</li> <li>• Avocado, banana, blueberries</li> <li>• Leafy greens, carrots, green peppers</li> <li>• Oats, quinoa, brown rice</li> </ul>	<ul style="list-style-type: none"> <li>• Short-chained carbohydrates such as: Fruits: apples, apricots, blackberries, cherries, dates, figs, pears, peaches, watermelon and canned fruits Vegetables: Artichokes, asparagus, broccoli, beetroot, Brussels sprouts, cabbage, cauliflower, garlic, fennel, leeks, mushrooms, okra, onions, peas, shallots</li> <li>• Milk: from cows, sheep or goats</li> <li>• Wheat, barley, rye</li> <li>• Legumes: beans, chickpeas, lentils, kidney beans, baked beans, soybeans</li> <li>• Alcohol, fruit juices, soft drinks</li> </ul>	Mostly digestive problems. Great success with Chronic IBS, as well as, chronic gas, bloating diarrhea, constipation and chronic stomach pains.
<b>PALEO/ PRIMAL</b>	The Paleo / Primal diet is an evolutionary diet that focuses on eating similarly to what our ancestor's ate and avoiding processed and refined foods. The difference between a traditional primal and paleo diet is a few additional food groups.	<p><b>Paleo:</b></p> <ul style="list-style-type: none"> <li>• Quality meat, fish and fowl</li> <li>• Eggs</li> <li>• Vegetables</li> <li>• Nuts and seeds</li> <li>• Good, quality fats</li> <li>• Limited fruits</li> </ul> <p><b>Primal:</b></p> <ul style="list-style-type: none"> <li>• Quality meats, fishes and eggs (occasionally raw)</li> <li>• Fresh, local fruits and vegetables</li> <li>• Fermented dairy products</li> <li>• Occasional legumes</li> </ul> <small>(heavily debated in nutritional circles)</small>	<p>Paleo diets avoid: gluten, grains and dairy Limit fruit consumption, avoid soy and legumes</p> <p>Primal diets avoid: grains and gluten Limit raw/fermented dairy products, occasional legume consumption</p>	Both traditional diets have aided in better sleep patterns, more energy, weight loss, skin health and lowering inflammation in the body.