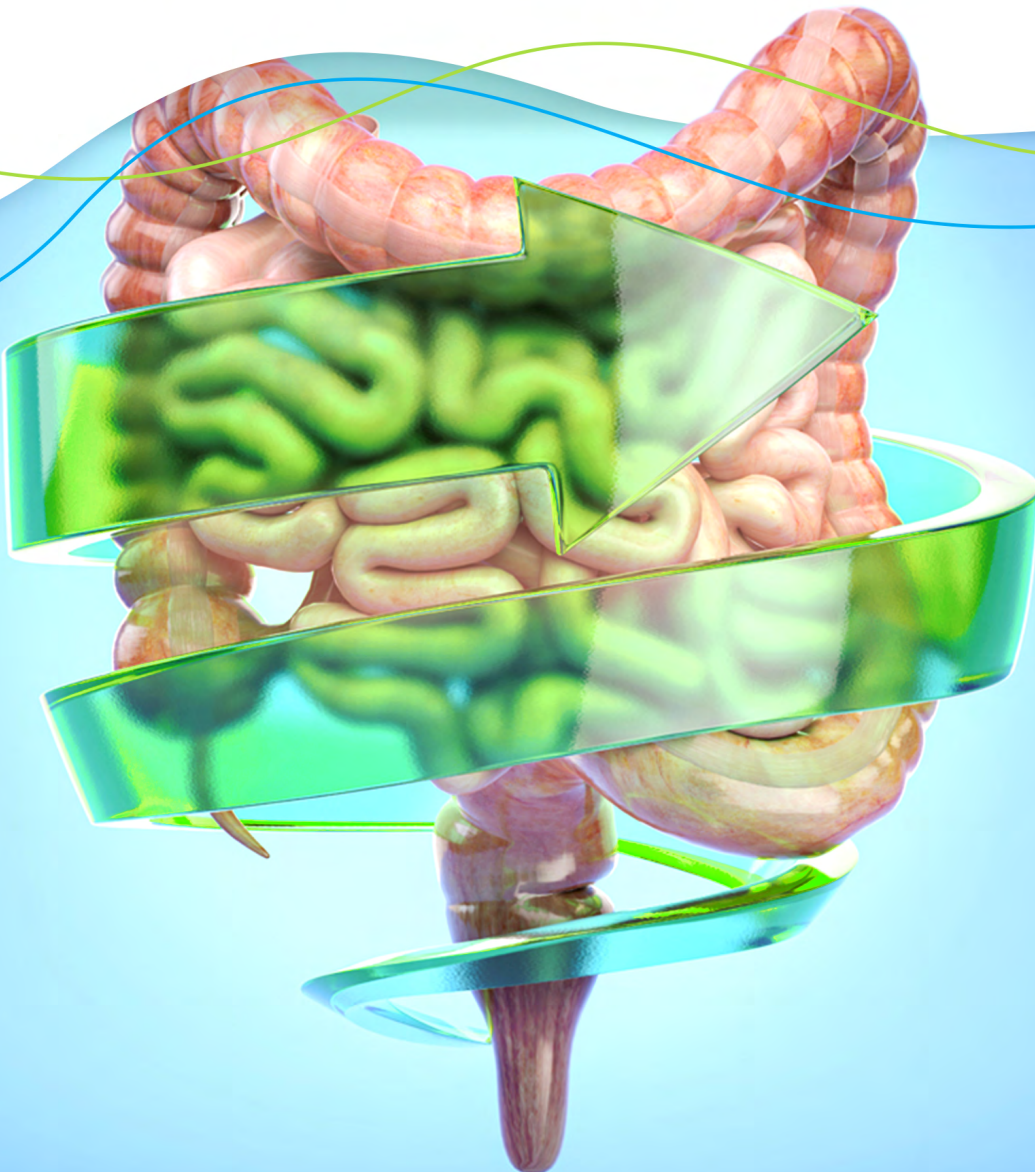




The  
**Gut-Immune**  
Solution

# Top 17 Nutrients for *Gut Repair*



# Disclaimer

Copyright 2021 by *Goodness Lover Pty Ltd* — All rights reserved.

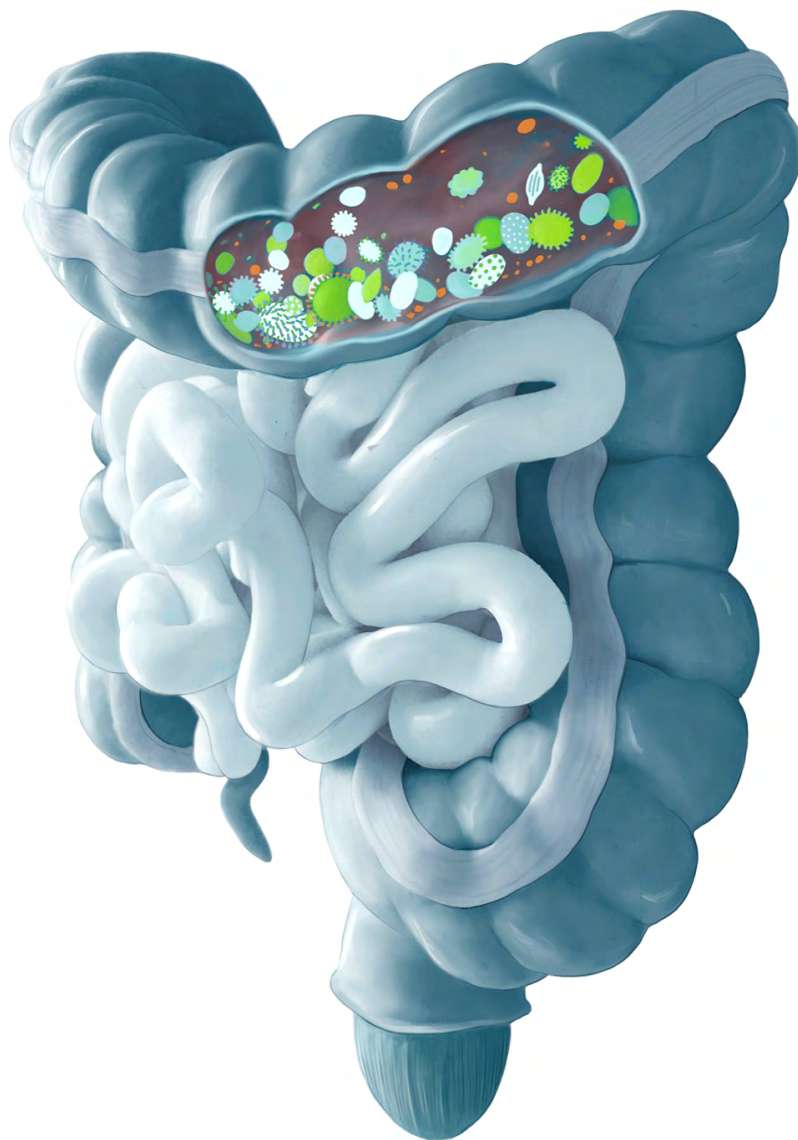
This book contains information that is not designed to take the place of, substitute, or replace any form and method of professional or medical advice and treatment or medicine. All content is the author's opinion and is not intended to diagnose and remedy. The facts and figures contained in this document are presented solely for informational and educational purposes only.

This book contains materials, statistics, news, and reports compiled from various resources and sources considered accurate and deemed reliable to the best of the Author's knowledge; however, the author cannot assure and guarantee its validity and accuracy and cannot be considered, nor held accountable for any omissions or errors. The contents of this book are periodically updated. You must seek medical advice, treatment, and medicine from a professional or doctor before utilizing any of the information, techniques, advice, and remedies mentioned in this document.

By applying and utilizing the information, techniques, advice, and remedies mentioned in this document, you consent to hold the Author unaccountable against and from any expenses, costs, and damages, including any potential legal fees subsequent from the use of any information presented in this book.

This disclaimer covers any injury or damages resulting from the application and uses, whether indirectly or directly, from any information or advice that are given, whether criminal intent, personal injury, negligence, offence, contract breach, or any action caused.

By reading the information presented in this document, you accept all the risks related with the application of the advice given herein, with a complete understanding that solely you are liable for any result or effect that occurs upon the use of the information and the execution in any manner, as well as regardless of the interpretation you considered of the advice. To ensure your safety and health, consult a medical or professional practitioner before applying any of the information, techniques, advice, and remedies mentioned in this document.



# Introduction

**“All disease begins in the gut.”**

Ancient wisdom spoken by Hippocrates, a Greek physician who is heralded as the father of modern medicine. His declaration is just as, if not even more so, true today as it was 2,500 years ago.

In the last 100 years, our way of life has changed dramatically. Our modern, technologically-advanced lifestyles come with perks like life-saving breakthroughs in emergency medicine, instantaneous long-distance communication and everyday conveniences that we wouldn't know how to live without!

*On the other hand, our lives have become increasingly busy, stressful and removed from nature.*



*We eat highly-processed, genetically-modified, pesticide-ridden foods.*

We know that exercise is fundamental to our health, but our sedentary lifestyles make it hard to get as much physical activity as we should.

And we're exposed to health-depleting toxins every day, from the industrial pollutants and heavy metals in the air we breathe to the radioactive elements and pharmaceutical drugs in our drinking water to the antibiotics and pesticides in our food.

**The cumulative stress of modern living takes a toll on our health, and especially on our digestive tracts.**

Meanwhile, modern scientists have finally caught up to Hippocrates' ancient word of warning: *the latest research affirms that at least 90% of all modern health problems and diseases begin in the gut.*

Chronic diseases such as arthritis, diabetes, and depression are rising to epidemic proportions – and they can be traced back to an irritated and inflamed gut. Even relatively minor ailments, such as constipation, eczema, lack of libido, aches and pains, and fatigue are directly linked to gut dysfunction.

A compromised gut means increased levels of toxins in the body – fueling inflammation, contributing to disease, causing weight gain and promoting premature aging.

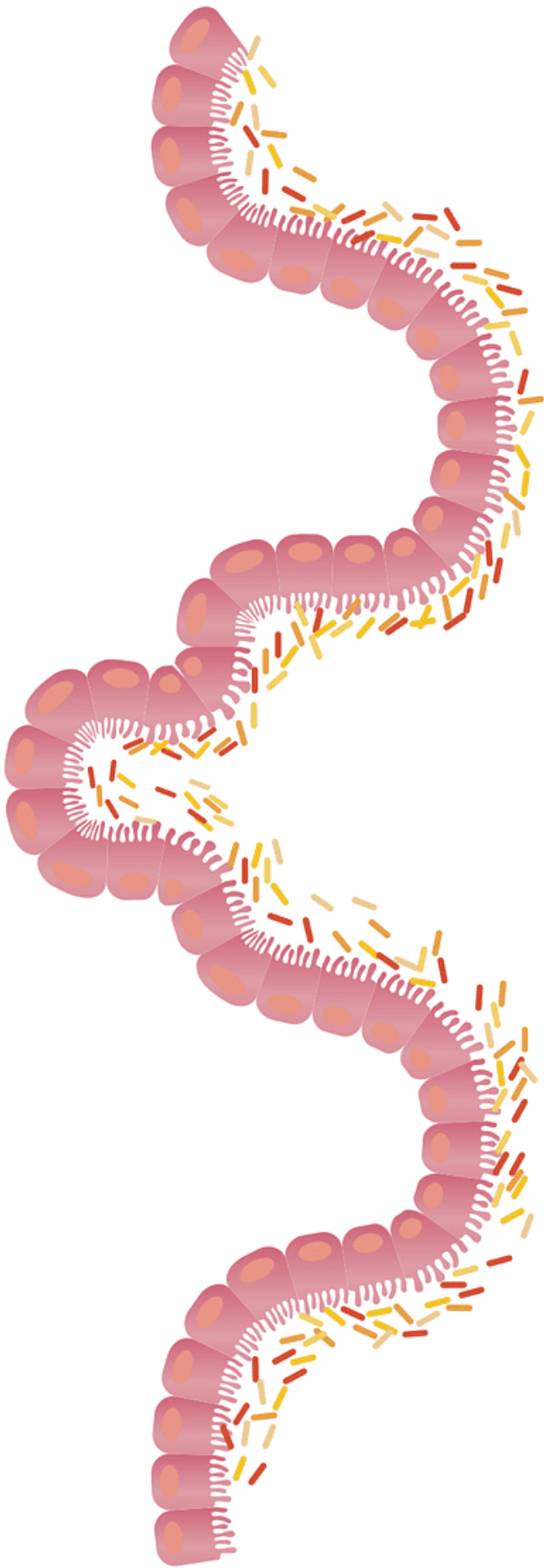
When our gut is unhealthy, the whole body is at risk. That's because the digestive, immune, nervous, and endocrine systems all communicate and interact with one another. When your gut is not functioning properly, the activities of the other systems are compromised.

**The gastrointestinal (GI) tract is the engine of the body.** It extracts nutrients from the food we consume and delivers energy to every cell of the body. It is a specialized, incredibly complex system, and every part plays crucial functions.

When our guts are healthy we have vibrant energy. Our immune systems are strong, our minds are sharp and our glowing complexions reflect our vitality.

But when our guts are imbalanced and inflamed, all aspects of our health suffer.

Bacterial imbalance, pathogenic infections, and chronic inflammation all wreak havoc on our digestive system, causing uncomfortable and embarrassing symptoms, depleting our energy and contributing to chronic conditions and serious disease.



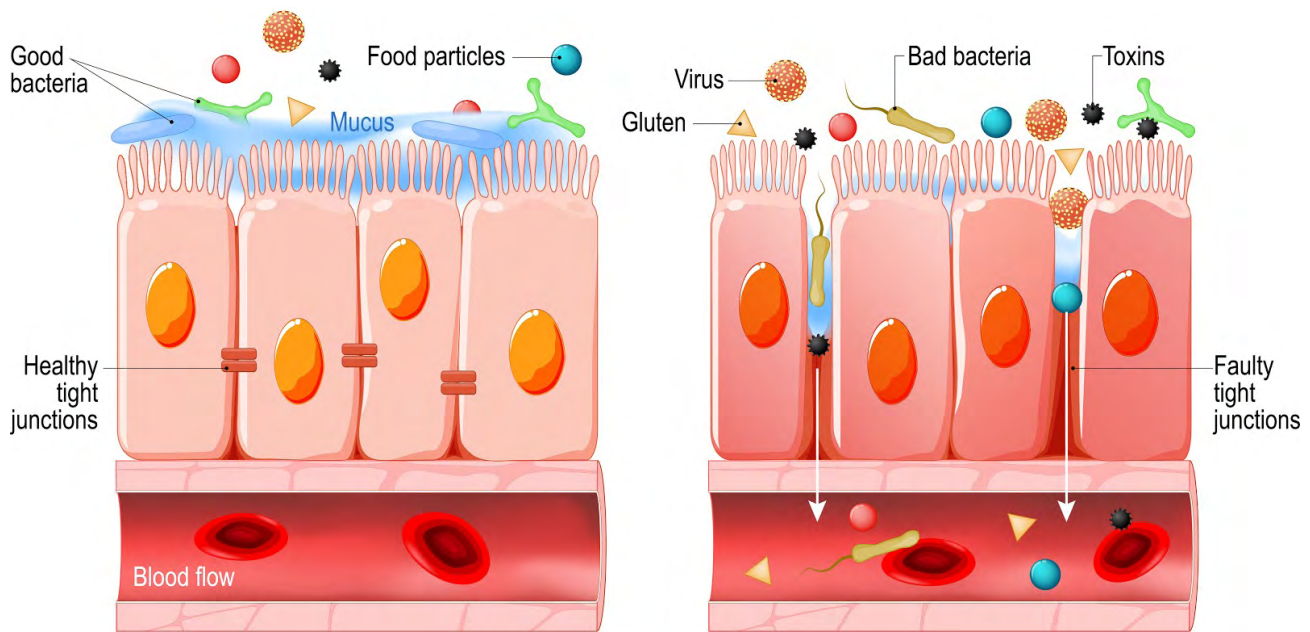
# What is 'Leaky Gut'?

Leaky Gut, also known as increased intestinal permeability/intestinal hyper-permeability, is just what it sounds like. It's a condition in which **the intestinal lining loses its integrity and becomes an entry point for inflammatory pathogens.**

It may come as a surprise, but the lining of our intestines is only one cell thick. These intestinal cells form the barrier, known as the gut barrier, that separates us from the outside world.

Imagine it as a wall in a castle fortress. In this castle wall there are multiple gates that open and close to allow citizens entry and to force intruders out.

These 'gates' are actually the tight junctions between each of the cells. The cellular junctions have an important and delicate role: to stay large enough to allow small vital nutrients to pass through into the bloodstream, yet small enough to ensure that larger and potentially dangerous particles ('*castle intruders*') do not cross or 'leak' through.



A healthy gut regulates the barrier between the intestines and bloodstream, allowing nutrients to flow to our organs and preventing contamination by pathogens.

However, when our microbiota is imbalanced we experience inflammation that causes hyper-permeability of our intestinal lining. This means that **irritants and toxins are now being released into our bloodstream, damaging our cells and impairing the function of our brain and other vital organs.**

*It's like having the castle gates continuously open.*

Additionally, every time an unwanted particle or pathogen enters the bloodstream, an immune response is triggered. So, if the gut continues to be hyperpermeable, the immune system will be on constant attack.

Thus, when a leaky gut is not healed, it leads to continuous and body-wide inflammation.

Unfortunately, this is taxing on the body, and often leads to the development of secondary inflammatory conditions. It is common for people with chronic GI inflammation to develop autoimmune ailments such as Crohn's disease, rheumatoid arthritis, multiple sclerosis, and ulcerative colitis.

# Leaky Gut and the *Immune System*

The gut lining is a critical part of the barrier component of the immune system that separates us from the outside world. Its role is to keep us separate from the bacteria in the gut as well as undigested food particles. **When the gut is leaky, this essential barrier is compromised, creating a breach in our immune system's first line of defense.**

When the gut is healthy, only the usable components of food can cross the lining: vitamins, minerals, amino acids, glucose, monoglycerides, and fatty acids. These are the building blocks of our muscle and tissue, as well as the fuel for our cells. When the gut is leaky, undigested proteins, carbs, and fats can leak into the bloodstream. They can't be utilized by the body and they are recognized by the immune system as foreign invaders, prompting a chronic inflammatory response.





Additionally, bacteria, yeast, fungi, and parasites can also leak into the bloodstream. While the gut is designed to host these organisms and maintain a healthy balance between microbes and ourselves, when they travel throughout the body, the immune system becomes chronically engaged in attempting to restore balance. On top of that, toxins created by pathogenic bacteria also enter the bloodstream. **Endotoxin, also referred to as lipopolysaccharide (LPS), is a toxic compound that is found in the cell membrane of gram-negative bacteria and released into the local environment when the bacteria die.**

LPS activates the innate immune system, triggering a cytokine response. When the gut is leaky, the part of the immune system that lines the digestive tract becomes chronically engaged.

One impact of LPS in the bloodstream is weight gain. Though the exact mechanisms are not understood, it has been demonstrated that bloodborne LPS is correlated with weight gain, obesity, and insulin resistance. In lab studies, test subjects with high levels of LPS who consumed a healthy diet gained weight and developed insulin resistance at a similar rate as those who did not have elevated LPS and consumed an obesogenic diet. Subjects with low levels of LPS were resistant to weight gain, inflammation, and insulin resistance, even when they

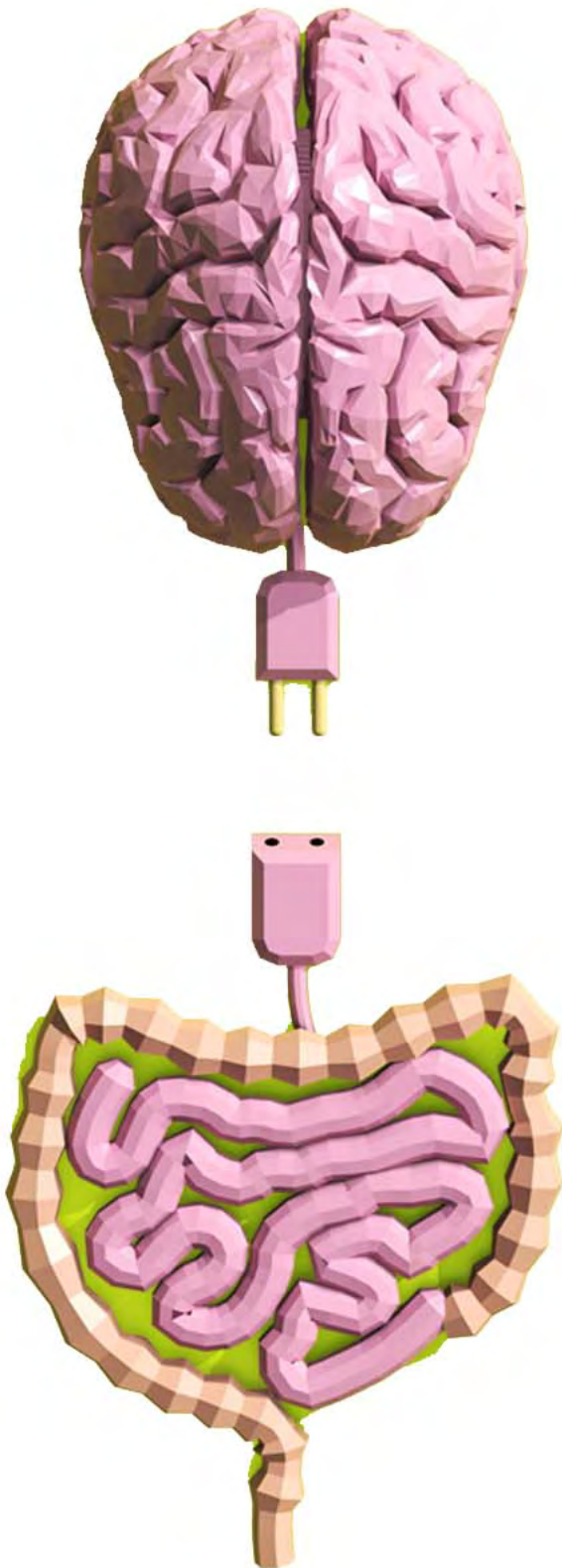
consumed a high-fat diet. If you've been struggling with weight loss, leaky gut may be a contributing factor.

The immune activation caused by leaky gut results in a cytokine imbalance. An excess of pro-inflammatory cytokines develops, while anti-inflammatory cytokines are suppressed. Such an imbalance is associated with numerous chronic diseases, including autoimmune disease, cancer, chronic heart failure, kidney disease, asthma, COPD, pulmonary fibrosis, and diabetes.

While these diseases take years or even decades to develop, other symptoms can manifest in the near term, like food sensitivities. Food sensitivities arise when undigested food particles gain access to the bloodstream and become targets of the immune system. Even healthy foods can create inflammation and imbalance when the gut is leaky. If you have food sensitivities, this is a clear indication that your immune system is compromised.

When one barrier system breaks down, problems are often seen in other barriers in the body. **Leaky gut can translate to leaky skin.** A compromised immune barrier in the skin can manifest in conditions such as acne, rosacea, psoriasis, dermatitis, or eczema.





**Leaky gut can also disrupt the blood-brain barrier, leading to a condition known as leaky brain.** Leaky brain is a state of neuroinflammation that can trigger brain fog, depression, memory loss, or fatigue.

Finally, leaky gut can translate into a compromised barrier in the airways, making us more susceptible to seasonal allergies and respiratory infections. Normal environmental exposures to dust, pollen, and animal dander are not a threat to our health and should not trigger a response in the immune system but, when the gut is leaky and the mucosal barrier in the airways is compromised, we become reactive to these harmless particles. If you suffer from allergies, it's important to consider the health of your gut.

*The stress induced by the chronic immune activation of leaky gut can stimulate heightened cortisol levels that disrupt the circadian rhythm and disrupt sleep patterns. If you have trouble falling asleep or staying asleep, the root cause could be a leaky gut.*

Lastly, leaky gut suppresses the components of the immune system that respond to viral and bacterial infections. An imbalance wherein the T-helper 2 system becomes overactive, fueling allergies and food sensitivities, while the T-helper 1 system is suppressed. The T-helper 1 system is the part of the innate immune system that fights infections. Thus, a leaky gut will make you more vulnerable to contagious pathogens like colds, sinus infections, and the flu.

# Symptoms of Leaky Gut

Leaky Gut is more common than you may think, and it contributes to many health problems. Recognizing the symptoms of Leaky Gut helps us to make sense of our digestive conditions and choose an appropriate course of treatment. **Leaky Gut affects many aspects of our health – not just our digestive capacity, but also our cognitive function, immune response and day to day well-being.**

## ***Digestive symptoms of Leaky Gut:***

- Constipation
- Gas
- Diarrhea
- Bloating
- Irritable Bowel Syndrome (IBS)
- Small Intestine Bacterial Overgrowth (SIBO)
- Celiac Disease
- Food sensitivities
- Gastric Ulcers
- Crohn's disease

## ***Systemic Symptoms of Leaky Gut:***

- Joint pain
- Arthritis
- Chronic fatigue
- Nutritional deficiencies
- Weak immune system
- Skin rashes
- Weight gain
- Thyroid disorders

## ***Cognitive Symptoms of Leaky Gut:***

- Brain fog
- Depression
- Anxiety
- Mood swings

## ***Autoimmune Symptoms of Leaky Gut:***

- Rheumatoid Arthritis
- Neuropathy
- Neurological Symptoms
- Multiple Sclerosis
- Lupus
- Headache/migraine
- Hashimoto's disease
- Fibromyalgia
- Alzheimer's disease

If you're suffering from any of these symptoms, you should be concerned about your immune status and your long term health.

*Taking action now can make all the difference in your future health.*

**Fortunately, there are many scientifically validated tools you can use to repair your gut so that you can enjoy better health for the years to come.**

# Top 17 *Supplements* for Gut Repair:





# 1. Deglycyrrhizinated Licorice (DGL)

DGL is an ancient remedy for ulcers and indigestion. It also relieves inflammation and restores the mucosal lining of the gut. While licorice root naturally contains a compound that, if consumed in excess, can raise blood pressure levels, DGL refers to deglycyrrhizinated licorice, which has had this compound removed and thus can safely be consumed on a regular basis.

## Benefits:

- ★ Reduces the symptoms of acid reflux
- ★ Soothes the lining of the digestive tract
- ★ Reduces inflammation
- ★ Promotes healing of the gut lining
- ★ Supports balanced blood sugar
- ★ Supports a healthy immune response





## 2. Marshmallow Root

Marshmallow root is helpful for inflammatory gut problems, including colitis, gastritis, mouth sores, and stomach ulcers. Recent research shows that dried marshmallow root contains proline as the main compound. Proline is an amino acid that helps build protein in the body for tissue repair. Marshmallow root helps us recover from leaky gut by creating a protective layer around the GI cell junctions.

### **Benefits:**

- ★ Relieves constipation, colic, and heartburn
- ★ Stimulates cells that promote tissue growth
- ★ Helps to heal leaky gut
- ★ Supports respiratory health
- ★ Improves hormonal balance
- ★ Relieves discomfort of indigestion



### 3. Meadowsweet

Meadowsweet is an herb in the rose family that has been used medicinally for centuries. Meadowsweet soothes the lining of the digestive tract and protects the mucus membranes. It has been used to treat chronic stomach ulcers and prevent lesions in the stomach. It contains salicylates which help to reduce inflammation coupled with mucilage that protects the stomach from salicylic acid.

#### **Benefits:**

- ★ Soothes upset stomach
- ★ Relieves ulcers
- ★ Soothes and protects the mucus membranes of the digestive tract
- ★ Prevents bacterial infections
- ★ Provides antioxidant protection
- ★ Relieves colds and coughs
- ★ Reduces joint pain and inflammation





## 4. Aloe Vera

Aloe vera has the same calming and healing effect on the digestive tract that makes it a go-to treatment for topical wounds and burns. It also relieves constipation, soothes inflammation, and prevents stomach ulcers. When shopping for aloe vera juice, you'll have a choice between whole plant or inner fillet. The inner fillet is wonderfully anti-inflammatory and powerfully effective at soothing irritation. The whole plant has the same benefits as the inner fillet, along with additional healing properties. Whole leaf aloe vera juice contains the bitter components of the rough outer skin which are particularly beneficial for our digestive tracts.

### **Benefits:**

- ★ Relieves constipation by stimulating gut motility
- ★ Reduces irritable bowel, diarrhea, and colitis
- ★ Soothes gut inflammation
- ★ Reduces bloating
- ★ Supports microbial balance
- ★ Relieves symptoms of Inflammatory Bowel Disease
- ★ Improves blood sugar balance



## 5. Slippery Elm Bark

Slippery elm bark is derived from a tree that is native to the US and Canada. It was used by Indigenous Americans to treat many common ailments including fevers, wounds, and sore throat. Slippery elm bark is anti-inflammatory and antioxidant. It contains a rich mucilage that coats the mouth, esophagus, stomach, and intestines. Slippery elm bark is used to treat inflammatory bowel conditions, such as colitis, enteritis, gastritis, and IBS. It can also be used to relieve diarrhea and reflux.

### Benefits:

- ★ Soothes the lining of the digestive tract
- ★ Reduces the symptoms of Crohn's, colitis, and IBS
- ★ Relieves GERD and heartburn
- ★ Soothes coughs and relieves sore throats
- ★ Promotes bowel regularity
- ★ Prevents oxidative stress





## 6. L-Glutamine

L-glutamine, an amino acid that is the main source of energy for the cells of the small intestine, is the most popular supplement for healing leaky gut. Supplemental L-glutamine gives the gut the energy it needs to repair and maintain its barrier function. It also nourishes some of the beneficial bacteria in the microbiome. While L-glutamine is naturally produced in the body, we cannot always produce enough to keep up with our needs. Supplemental L-glutamine gives us the boost we need in times of stress, illness, or injury. Please note however that some people with certain genetic mutations do not feel well while on L-glutamine supplements. If you feel nauseous while on L-glutamine, discontinue use.

### Benefits:

- ★ Accelerates the healing of leaky gut
- ★ Promotes microbial balance
- ★ Relieves abdominal, gas, and bloating
- ★ Soothes inflammation
- ★ Promotes bowel regularity
- ★ Supports recovery from injuries and infections
- ★ Improves immune function



# 7. Butyric Acid

Butyric acid is a short-chain fatty acid that serves as the primary source of fuel for the cells of the colon. It's produced in the microbiome when beneficial bacteria break down certain forms of fiber. Butyric acid supplementation improves the symptoms of IBS and supports healing of the lining of both the colon and the small intestine.

## Benefits:

- ★ Prevents leaky gut
- ★ Promotes healthy balance in the microbiome
- ★ Relieves the pain and symptoms of IBS
- ★ Reduces bodywide inflammation
- ★ Induces the death of colon cancer cells
- ★ Prevents metabolic syndrome
- ★ Reduces abdominal fat



## 8. Zinc Carnosine

Deficient levels of zinc are associated with intestinal inflammation, dysbiosis, poor wound healing, and impaired immunity. This particular formulation of zinc has been shown to be especially effective for improving gut health. In fact, the combination of zinc and carnosine is three times as effective for healing than zinc and carnosine used individually.

### Benefits:

- ★ Reduces inflammation in the gut
- ★ Supports the mucosal lining
- ★ Prevents oxidative damage to gut cells
- ★ Supports the healing of ulcers
- ★ Relieves colitis
- ★ Balances levels of H. pylori



## 9. Prebiotic Fiber

Prebiotic fiber passes through our digestive tract undigested and arrives in the colon where it is a prime food source for the microbiome. When bacteria in the gut are nourished with prebiotic fiber, they produce metabolites that support health within as well as beyond the gut. While we can get prebiotic fiber from certain foods, many of us just don't eat enough food sources of prebiotics. Supplemental prebiotic fiber is one of the top recommended gut supplements. By adding isolated prebiotic fiber to your diet, you can optimize your microbiome and improve your overall health.

### Benefits:

- ★ Supports a healthy microbiome
- ★ Improves immune function
- ★ Reduces the incidence of upper respiratory infections
- ★ Supports healthy weight management
- ★ Improves blood sugar balance
- ★ Promotes bowel regularity
- ★ Relieves gas and bloating





# 10. Quercetin

Quercetin is a potent, well-studied antioxidant that is naturally found in apples, onions, grapes, citrus fruit, and green, leafy vegetables. Quercetin not only soothes inflammation and restores the lining of the gut, but also acts as a natural antihistamine, which means it decreases the body's reaction to allergies and food sensitivities.

## Benefits:

- ★ Promotes the healing of leaky gut
- ★ Enhances diversity in the microbiome
- ★ Reduces inflammation
- ★ Improves immunity
- ★ Eases allergies
- ★ Supports respiratory health



# 11. Magnesium

Magnesium is a vital nutrient that 2 out of 3 people are deficient in. Suboptimal magnesium levels compromise health and set the stage for serious and chronic diseases. Magnesium glycinate is the preferred form of supplemental magnesium due to its superior absorption and effectiveness. Magnesium is required for over 300 bodily processes including energy production, nerve signaling, blood sugar balance, mood regulation, and hormone production. Magnesium is also a great nutritional supplement to take to assist with constipation. It helps to relax the nervous system and smooth muscles to be able to complete a proper bowel movement. Additionally, magnesium attracts water in the bowel, producing an osmotic effect.

## Benefits:

- ★ Promotes bowel regularity
- ★ Improves sleep
- ★ Relieves stress
- ★ Supports hormonal balance
- ★ Improves digestion
- ★ Supports mental health



# 12. Fulvic Acid

Fulvic acid is a naturally occurring organic compound found in special deposits around the world. Fulvic acid binds with nutrients and ushers them into the cell, enhancing cellular nutrition. It also binds to toxins so they can be excreted from the body. Fulvic acid improves microbial balance in the microbiome and reduces Candida overgrowths. It is a potent anti-fungal and anti-inflammatory agent and studies have shown it to be more effective and faster acting than other conventional antifungals.

## Benefits:

- ★ Improves nutrient absorption
- ★ Supports gut health
- ★ Reduces inflammation
- ★ Enhances immune response
- ★ Supports metabolism
- ★ Improves energy levels
- ★ Supports detoxification



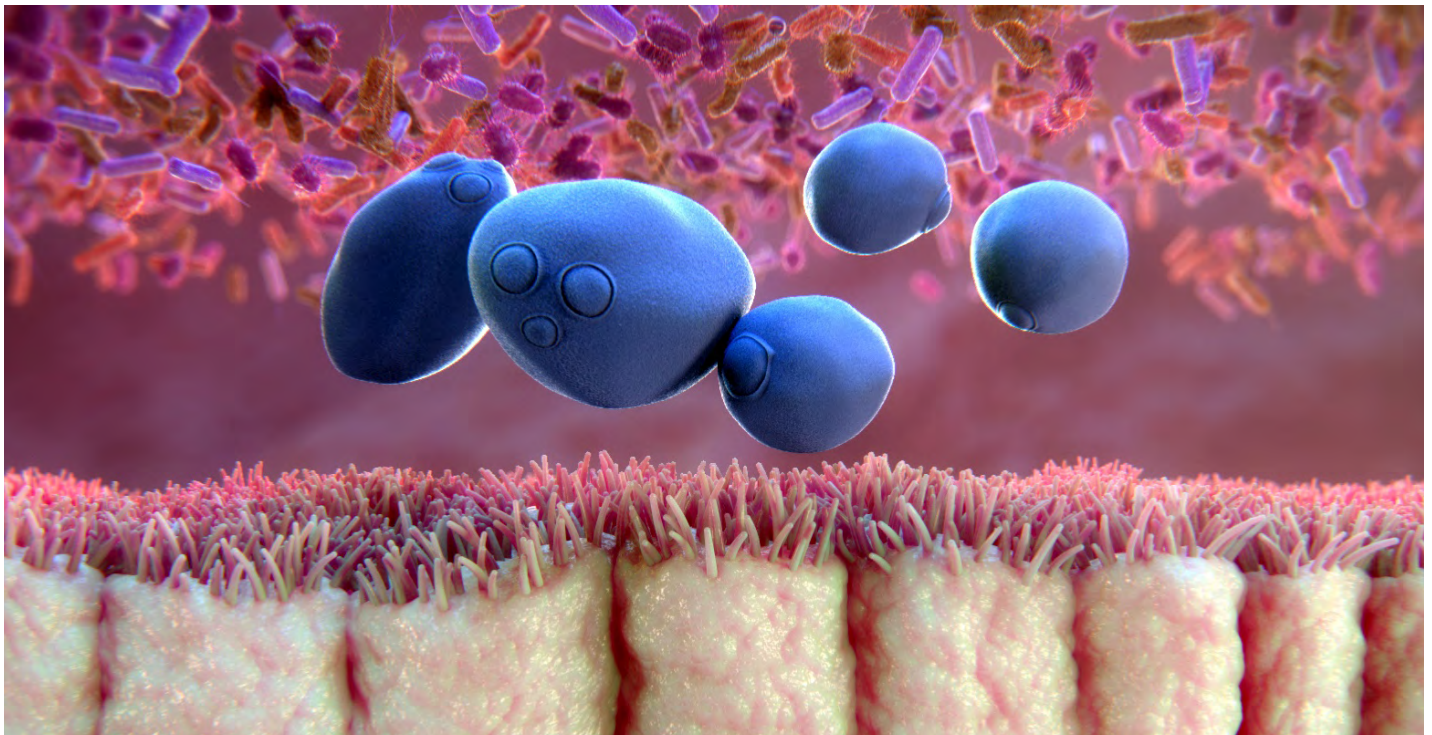


# 13. Saccharomyces Boulardii

*Saccharomyces boulardii* is a probiotic-acting yeast and is most well-known for its role in the prevention and treatment of traveler's diarrhea. This makes it a great one to take on holiday! It has the ability to regulate the balance in your gut by inhibiting pathogenic bacteria including *Candida albicans* and *Salmonella Typhimurium*. Like LGG, SB can shorten the duration of time you experience diarrhea as well as improve the consistency of your stools. As a bonus, it also helps to improve the absorption of nutrients by encouraging the production and secretion of digestive enzymes.

## Benefits:

- ★ Relieves diarrhea
- ★ Restores balance to the microbiome
- ★ Helps to heal leaky gut
- ★ Reduces overgrowths of *H. pylori*
- ★ Reduces inflammation
- ★ Balances *Candida* overgrowths





# 14. Digestive Enzymes

Enzymes play an essential role in physiological processes throughout the body. Natural digestive enzymes, such as lipase, amylase, and protease, aid in breaking down fats, proteins, and carbohydrates. If we lack digestive acids our food will putrefy in our stomachs, creating toxins that irritate and inflame our entire body. Enzyme supplements can be taken to help improve digestion. There are a few reasons your body may need assistance from digestive enzyme supplements, such as digestive disease, liver disease, pancreatic disease, or simply the aging process. In these cases, digestive enzymes may decrease the burden of digestion on the digestive organs, which in turn reduces inflammation and heals leaky gut. Some digestive supplements are intended to be taken with a meal, while others should be taken shortly before eating.

## Benefits:

- ★ Supports healthy digestion
- ★ Promotes optimal nutrient absorption
- ★ Reduces gas, bloating, and constipation
- ★ Improves colon health
- ★ Helps to prevent nutritional deficiencies
- ★ Improves microbial balance



# 15. Betaine Hydrochloride

Betaine hydrochloride supplements help support healthy gut function and digestion and restore normal gastric acidity. They aid in protein digestion, activate the protein-digesting enzyme pepsin, fight off the undesirable overgrowth of bacteria in the stomach and small intestine, and encourage the flow of bile and pancreatic enzymes. Always take HCL either during the meal or right at the end of the meal. Taking it before a meal may create a false experience of heartburn and can turn off stomach acid production for this meal. Do not take HCL if you are taking any NSAIDs such as ibuprofen or aspirin.

## **Benefits:**

- ★ Promotes healthy stomach pH
- ★ Reduces symptoms of GERD
- ★ Improves the absorption of nutrients
- ★ Reduces inflammation
- ★ Reduces the risk of heart disease
- ★ Promote healthy weight management
- ★ Improves liver function



# 16. Turmeric

Turmeric is a potent anti-inflammatory and antioxidant. Curcumin is the active ingredient in turmeric that heals inflammation and prevents oxidative damage. Curcumin has poor bioavailability. As a result, eating turmeric by itself will not induce health benefits as it is poorly absorbed, rapidly metabolized, and rapidly eliminated from the body. There are multiple components that can be added to turmeric to make it more bioavailable, with piperine being the most popular option. Piperine is the active component of black pepper and when added to turmeric it increases the bioavailability of the curcumin by 2,000%. Turmeric soothes inflammation, restores the gut, and relieves the symptoms of IBS.

## Benefits:

- ★ Reduces bodywide inflammation
- ★ Improves cognition
- ★ Supports digestion
- ★ Provides antioxidant protection
- ★ Supports cardiovascular health
- ★ Reduces joint pain and inflammation
- ★ Improves energy levels





# 17. Omega-3 Fatty Acids

Supplemental omega-3 fatty acids are powerfully effective for combating inflammation. Omega-3's support a healthy gut by promoting diversity and abundance in the microbiome. In fact, research has shown that omega-3 supplementation can repair stress-induced derangement in the microbiome in a matter of days. The anti-inflammatory benefits of omega-3s have been shown to reduce the risks of cardiovascular disease, neurodegeneration, and autoimmune disease.

## **Benefits:**

- ★ Reduces inflammation
- ★ Improves the microbiome
- ★ Promotes mental health
- ★ Reduces the risk of autoimmune disease
- ★ Improves vision
- ★ Improves heart health
- ★ Reduces cancer risk



# Conclusion

We hope the information we have provided you with here will help you to repair your gut so you can overcome digestive problems, improve your immune status, and have better health for the years to come.

*But we've only just scratched the surface.*

In order to empower you with everything you need to know to have a healthy gut and robust immune protection, we've created [The Gut-Immune Solution](#) – a 10-part docuseries masterclass with 20+ health experts, physicians, researchers, and nutritionists about how to **strengthen your immune system, fight off illnesses, and keep your family healthy** by improving your gut health...

Get practical tools based on cutting-edge science being discovered right now by top researchers in the field. Discover how to strengthen your gut health to bolster your immunity naturally... and at home.

[Be part of The Gut-Immune Solution](#) so you can know how to protect yourself (and your family), live well longer, and experience vibrant health now... and well into your golden years.

