



TOP
23

Natural Medicines
TO REPAIR LEAKY GUT:
BANISH BLOATING, INDIGESTION, AND AUTOIMMUNITY!



Top 23 Natural Medicines to Repair Leaky Gut

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TABLE OF CONTENTS

Introduction	iv
Zinc	1
L-Glutamine	1
Probiotics	2
Aloe Vera	3
Berberine	4
Curcumin and Cardamom	4
Licorice Root	5
Fiber	6
Collagen Peptides	6
Betaine Hydrochloric Acid (HCL)	7
Slippery Elm	7
Marshmallow Root	8
Vitamin C	8
Peppermint and Thyme	9
Selenium	10
Magnesium	10
Omega-3 Fatty Acids	11
Quercetin	11
Digestive Enzymes	12
Vitamin D	12
Caprylic Acid	13
Ginger	13
N-acetyl-glucosamine (NAG)	14
Conclusion	15
About Jonathan Otto	16
References	17

INTRODUCTION

Are you feeling unwell and are unsure why? Are digestive issues troubling you, including chronic diarrhea, constipation, or maybe bloating?

These symptoms may be accompanied by headache, fatigue, joint pain, widespread inflammation, difficulty concentrating, and skin problems like acne and eczema. While these symptoms may seem random, when they occur together, chances are high that you have leaky gut syndrome¹.

Leaky gut syndrome is defined as a digestive condition that affects the lining of the intestines. Also known as increased intestinal permeability², leaky gut is characterized by gaps in the intestinal walls through which toxins, bacteria, and other pathogens enter the bloodstream³.

A protein called zonulin is a major contributor to leaky gut since it regulates intestinal permeability. Gluten and bacteria in the intestines can trigger its release. Gut leakiness also occurs from a poor diet and stress.

While anyone can develop leaky gut syndrome, some people are at a higher risk than others. Common risk factors include:

- Chronic, systemic inflammation⁴
- Chronic stress⁵
- Excessive alcohol consumption⁶
- Excessive sugar intake⁷
- Long-term use of non-steroidal anti-inflammatory drugs (NSAIDs)⁸
- Nutrient deficiencies (especially being deficient in vitamins A⁹ and D, and zinc)
- Poor gut health¹⁰
- Yeast overgrowth in the gut¹¹

When left unmanaged, leaky gut can significantly affect quality of life and even aggravate the management of other health problems and autoimmune conditions such as Crohn's disease, celiac disease, type 1 diabetes, and lupus.

Since the medical establishment has been slow to recognize leaky gut syndrome, a standard treatment protocol doesn't yet exist. The best way to manage this condition and its horrible symptoms is to modify your lifestyle. Simple lifestyle modifications will make a difference and help you feel better. However, healing a leaky gut is a complex and individual process.

The foods, herbs, spices, and supplements suggested here are helpful, but you still need to work with your doctor because leaky gut involves complex lifestyle and other factors as well as diet. Of course, the most important lifestyle changes are exercising regularly, getting enough sleep, managing stress, and eating a healthy, wholefood diet.

Boost your health with natural remedies and much-needed nutrients to manage any symptoms you're experiencing and improve your quality of life.

Since dietary factors can reverse intestinal leakiness and mucosal damage¹² in this eBook we are going to focus on 23 of the best natural medicines to consider. You'll discover what supplements, herbs, and nutrients you need to consume to tackle leaky gut successfully and in an entirely natural way.

ZINC

Zinc is a trace element without which the body is unable to function properly. Naturally present in some foods, and added to others, it is also available as a dietary supplement.

Zinc participates in numerous bodily functions. This mineral plays a role in cellular metabolism and is crucial for the catalytic activity of about 100 enzymes. The body needs zinc for protein synthesis, immune function, DNA synthesis, wound healing, a healthy pregnancy, growth and development¹³, and more.

Yet another reason to consume enough zinc is its potential to support the repair of leaky gut. Studies show that zinc deficiency harms the liver¹⁴, as well as disrupting the epithelial barrier function by disassembling tight junction proteins. In other words, insufficient consumption of zinc harms the intestinal walls. This means that an effective and natural way to repair leaky gut and its symptoms involves consuming adequate amounts of zinc.

A study published in the clinical journal *Inflammatory Bowel Diseases* found that supplementing with zinc tightened leaky gut in patients with Crohn's disease¹⁵. If you have Crohn's, tightening your leaky gut could help reduce the risk of relapse. Zinc restores intestinal permeability with its ability to modulate tight junctions in the small and large bowels¹⁶.

Epithelial and endothelial tight junctions selectively seal the space between adjacent cells, preventing toxins and bacteria in the gut from entering the bloodstream. Previously it was believed that tight junctions were passive structures, but they're actually dynamic.

Their dynamic nature allows them to constantly adapt to stimuli. Exposure to different environmental stimuli such as foods or bacteria can impair tight junctions and lead to a leaky gut. The presence of zinc impacts the barrier¹⁷ in a positive way, thereby improving gastrointestinal health.

TIPS:

- Make sure you consume a daily diet of zinc-rich foods, including beans, chickpeas, lentils, tofu, almonds, walnuts, cashew nuts, chia seeds, ground linseed, hemp seeds, pumpkin seeds, oatmeal, and quinoa.
- If you require additional zinc, supplementation is an affordable option.
- Take supplements one or two hours after meals.
- In case of stomach upset, it is fine to take them with a meal.



L-GLUTAMINE

L-glutamine is an amino acid produced naturally by the body. In fact, L-glutamine is the most abundant amino acid in the blood and other bodily fluids¹⁸.

Just because your body produces L-glutamine naturally, it doesn't mean you have enough to keep you healthy. Sometimes the needs of the body for L-glutamine are greater than its ability to produce this amino acid¹⁹.

As someone with leaky gut syndrome, you're probably wondering why you need to increase your consumption of L-glutamine-rich foods or take supplementation. The answer is simple – this amino acid has an important role in gastrointestinal health.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

Studies show that L-glutamine is considered to be the most important nutrient for healing leaky gut syndrome since it is the preferred fuel for colonocytes and enterocytes — cells in the gastrointestinal system. A low level of L-glutamine in the body is associated with the disruption of the intestinal barrier, inflammation, and diarrheal diseases. On the flip side, glutamine supplementation leads to significant improvement in the function of the intestinal barrier²⁰.

Not only can L-glutamine improve the growth and survival of enterocytes, but it also helps regulate the intestinal barrier during stress²¹. Bear in mind that stress is a major risk factor for leaky gut²². Since L-glutamine has the potential to reduce leakiness in the gut, it is a wonderful choice of natural remedy for men and women with this problem.

TIPS:

- Increase your daily L-glutamine intake by consuming almonds, walnuts, pistachios, peanuts, red kidney beans, chickpeas, white-eyed beans, and cabbage.
- L-Glutamine supplements come in capsule and powder form.
- A side benefit of the amino acid is fighting a virus. It is often given to patients in the hospital.
- It is a calming amino acid and very effective at reducing anxiety, as well as sugar and alcohol cravings.



PROBIOTICS

Probiotics are live microorganisms — good bacteria — that maintain digestive health and boost the immune system. Not only are they found in several fermented foods such as pickled vegetables and sauerkraut, but probiotics also come in the form of dietary supplements²³. As such they are readily available.



You've probably heard a lot about the importance of probiotics for digestive health. Since their popularity keeps growing, it is easy to be skeptical about it due to good marketing. No way! Probiotics are crucial for gastrointestinal health and prove to be a great ally in repairing leaky gut and its symptoms.

Zonulin and its activation are crucial for a leaky gut as mentioned. Evidence shows that supplementation with probiotics lowers zonulin levels²⁴. This way, probiotics help address leaky gut and its symptoms, since activated zonulin leads to gut leakiness.

There are many types of probiotics. When shopping for supplements or looking for probiotics-rich food, pay attention to labels to ensure the item contains probiotics.

The Lactobacilli species of probiotics promotes digestion, boosts the immune system, increases resistance to infection, and inhibits the growth of bad bacteria. It also reduces ethanol-induced intestinal mucosal permeability and decreases oxidative stress in the colon and small intestine.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

Another species of probiotics, *Bifidobacteria*, improves the function of the gut barrier and supports intestinal integrity. Additionally, *S. Cerevisiae*, yet another species of probiotics, promotes the formation of tight junctions and preserves the gut barrier and immune system during intestinal injury²⁵. In short, probiotics protect the gut, repair damage, and help improve overall digestive health.

TIPS:

- Enrich your diet with probiotic-rich foods such as pickles, sauerkraut, kimchi, kombucha, miso, tempeh.
- They are found as well in sourdough bread and water kefir.
- If you plan to use probiotic supplements, make sure they deliver the probiotics mentioned above, i.e., strains proven to work.
- If taking a live strain probiotic supplement, ideally take them 20 minutes after you eat, first thing in the morning or right before bedtime to allow more of them to get into the large intestines.

ALOE VERA

For thousands of years, the aloe vera plant has been an important part of traditional medicine in various cultures around the world. This versatile plant is still widely used in natural medicine. The uses of aloe vera go beyond skincare and extend to wound healing and digestive health. In fact, aloin, an active compound in aloe vera, exhibits antibacterial properties for certain intestinal bacteria.

Orally consumed aloe products reach the intestines, where they interact with intestinal epithelial cells and inhabitant intestinal microbiota²⁶. In other words, since aloin has antimicrobial and antibacterial properties, aloe vera can act on bad bacteria that harm your gut and contribute to leakiness.

One study found that aloe vera exhibits a beneficial effect on people with irritable bowel syndrome (IBS). What's more, the subjects reported no side effects²⁷. Scientists are continuing to research the various ways in which aloe vera protects the gut.

Let's not forget the soothing nature of aloe vera and its ability to alleviate inflammation. Besides supporting the immune system, aloe vera also increases the water content in the intestines and aids in the control of yeast overgrowth²⁸.

The nutritional content of aloe vera has largely been underestimated. This wonderful succulent contains essential vitamins such as vitamin A, vitamin E, vitamin B12, folic acid, and choline. All these nutrients are important for gut health and general health and wellbeing.

TIPS:

- Grow your own aloe vera plant to provide fresh leaves for your recipes. Aloe vera is a dream plant that requires little to no effort.
- Aloe vera has a clean, fresh taste that goes well with other foods. It's very versatile and perfect for juices, smoothies, salads, dips, and salsas.
- To prepare the gel, cut off the spiky edges on the top and alongside the leaf. Next, slice off the skin on the flat side, remove the clear gel, and dice it into small cubes.
- An option is to purchase a dietary aloe vera supplement, available online, in health food stores, and at many pharmacies.



BERBERINE

Berberine is a plant compound that also happens to be one of the most useful supplements you can find today. It is extracted from several plants, including European barberry, tree turmeric, and goldthread, to name a few. Since berberine is yellow, the plants containing this compound have been used as a dye, especially for coloring wool²⁹.

Considered an alkaloid, berberine has antioxidant, anti-inflammatory, antibacterial, and antiviral properties. Consumption of berberine supports gut health with the potential to alleviate systemic inflammation. In fact, berberine can protect the function of the gut barrier³⁰.

The role of berberine in the improvement of the gut barrier in managing a leaky gut isn't surprising if we bear in mind that berberine was used historically to treat inflammatory bowel diseases³¹.

One study investigated the role of berberine supplementation on nonalcoholic fatty liver disease. The results showed that berberine successfully alleviated changes in intestinal mucus and exhibited positive effects on intestinal barrier function³².

What this means for people with leaky gut is that consuming berberine improves the gut barrier, thereby preventing or reducing leakiness. It also exhibits antioxidant and anti-inflammatory effects to combat inflammation and oxidative stress, which aggravate leaky gut damage and symptoms. In short, berberine is an effective and entirely natural "tool" for leaky gut repair.

TIPS:

- It is tricky to find food sources of berberine.
- Supplementation is the most convenient option. It's safe to take 500mg of berberine up to three times a day before meals. More can cause side effects like upset stomach, nausea, or constipation.
- Studies are looking into the effects of berberine on obesity, diabetes, and heart disease.

CURCUMIN AND CARDAMOM

Curcumin is the main active ingredient in turmeric, one of the most powerful plants in the world. In fact, curcumin is the reason turmeric has its distinctive, vibrant yellow color. Besides boasting medicinal properties, turmeric is also used to dye fabrics — and it is all thanks to curcumin.

Generally speaking, curcumin has poor bioavailability meaning that the body doesn't absorb it well. However, taking turmeric and ginger together solves the absorption issue for people with leaky gut. Evidence shows that intestinal epithelial cells and the intestinal barrier are major sites of action of curcumin. Since this compound can reduce the dysfunction of the intestinal barrier, curcumin is capable of regulating chronic inflammatory diseases³³.

By reducing inflammation in the digestive tract, curcumin can help prevent leaky gut from worsening and allows you to manage symptoms more effectively. Cardamom, on the other hand, is a spice from the ginger family known for its intense flavor. For centuries, people from different cultures have used cardamom for medicinal purposes.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

Its health benefits are numerous, including positive gastro-protective effects. In terms of digestive health, the greatest amount of research has been related to healing ulcers. Indeed, cardamom can completely prevent or reduce the size of gastric ulcers by at least 50%³⁴.

What makes cardamom useful for people with leaky gut is its antioxidant and anti-inflammatory³⁵ properties. Both inflammation³⁶ and oxidative stress³⁷ can contribute to unpleasant leaky gut symptoms. In short, the consumption of cardamom can exert a favorable effect on the gastrointestinal system³⁸.

TIPS:

- Add more cardamom and curcumin to your diet. These two powerhouse spices are incredibly versatile and complement many dishes, both sweet and savory.
- Turmeric (contains curcumin) is usually used in curry, but you can also add it to stews and rice dishes.
- Try it in a smoothie for a boost of health.
- To consume cardamom, use ground seeds or the whole pod.
- Both curcumin and cardamom are available in supplement form. For people who don't like spicy foods, these are an easier way to get these spices into the system.

LICORICE ROOT

The use of licorice root in traditional medicine dates back thousands of years. It is believed that the ancient Egyptians drank the herb as a digestive tonic. In fact, large amounts of licorice root were found in the tomb of King Tut!

Deglycyrrhized licorice, or simply DGL, is a herbal supplement made from licorice root. In total, licorice root contains about 73 active compounds.

DGL, just like licorice root itself, is known for its gastro-protective properties. Consumption of DGL improves mucus activity. Extra mucus functions as an acid barrier in the esophagus and stomach, thus explaining why DGL is widely used for the management of acid reflux. Additionally, the barrier could promote the healing of damaged tissue.

In cases of food poisoning, stomach ulcers, and heartburn, DGL can speed the repair of the stomach lining and restore balance. DGL could aid in the management of leaky gut and its symptoms through its potential to inhibit inflammatory reactions from bacterial infection. Thus, it reduces mucosal damage caused by inflammation and bad bacteria.

By promoting a healthy mucosal lining, DGL can be an effective ally in leaky gut repair. As mentioned, leaky gut occurs due to a damaged gut lining³⁹, which leads to the formation of "holes" through which bacteria and toxins reach the bloodstream.

TIPS:

- The easiest way to use licorice root to manage leaky gut is through DGL supplementation.
- Licorice root, which is easily accessible, is available in chewable form, liquid extracts, capsules, powder, and as a loose herb.
- The preferred way to use licorice root is to make tea, either from loose leaves or packaged tea bags.
- You can take the herb under the tongue as well.



FIBER

Failing to mention fiber when discussing leaky gut would be impossible. Fiber is crucial for digestive health, but ideally, it should come from whole food sources. Beware of packaged foods that claim to contain added fiber as this can end up doing more harm than good.

While you need to consume more fiber to preserve or improve gastrointestinal health and function, people with gut issues need to practice some caution. It may be necessary to first allow the gut to heal before increasing fiber intake.

Fiber feeds good bacteria in the gut and thereby functions as a prebiotic⁴⁰. Fiber is essential for the gut microbiome. When fiber is fermented by gut flora, it creates a short-chain amino acid called, butyrate. This is important because butyrate stimulates mucus production and improves tight junctions in the lining of the digestive tract⁴¹.

Consumption of fiber, therefore, provides a protective role for colonocytes, ensuring the preservation of the intestinal barrier⁴². More precisely, the gut lining becomes stronger, and you can expect leakiness to reduce. With reduced leakiness, symptoms subside.

Doctors recommend IBS patients increase their fiber intake to regulate stools and reduce abdominal pain. Problems with bowel movements are common in people with leaky gut as well.

Dietary fiber improves bowel habits by increasing stool bulk through stimulation of the colonic mucosa. Additionally, the consumption of fiber has other favorable effects such as supporting weight management, improving glycemic control, and lowering blood cholesterol levels⁴³.

TIPS:

- You can easily obtain enough fiber through a healthy diet. Some of the best high-fiber foods include lentils, kidney beans, split peas, chickpeas, oats, apples, pears, avocados, artichokes, almonds, and chia seeds.
- Fiber supplements aren't the same as dietary fiber. They don't provide the vitamins, minerals, and other necessary nutrients that fiber-rich foods do.
- While supplementation is a viable option, scientists explain that soluble, nonfermenting, gel-forming fiber has been clinically proven to provide health benefits⁴⁴.
- Avoid fiber-laden packaged goods that contain sugar.

COLLAGEN PEPTIDES

Collagen is the most abundant protein in the body. It protects your organs, joints, and tendons; holds together bones and muscles, and maintains your gut lining. Your body makes its own collagen, but as you age, your body makes less.

There is no evidence that eating collagen directly helps your body. Many experts believe that because your body doesn't absorb collagen in its whole form, eating collagen may not help bone growth.

Research suggests that collagen supplements may help to reduce visible signs of aging — like wrinkles and cellulite. But most are made from animal products, which some plant-based eaters find problematic.

The best way to help your body build collagen is to eat a diet rich in leafy green vegetables, which offer the phytonutrients your body needs to produce collagen.

Collagen-forming foods not only strengthen the digestive tract, but they also tackle some of the most unpleasant symptoms of leaky gut, such as diarrhea⁴⁷.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

TIPS:

- Vitamin E works with vitamin C to promote collagen synthesis. Some of the most vitamin E-rich foods are sunflower seeds, almonds, wheat germ, spinach, and broccoli. Some of the most vitamin C-rich foods are citrus fruits, dark leafy greens, bell peppers, kiwi, berries, and broccoli.
- The sulfur-containing foods, such as garlic, onion, and members of the cabbage family, may promote collagen production.
- Amino acids glycine, proline, and lysine found in dark leafy green vegetables, soy, nuts, seeds and legumes may also help promote collagen production.
- Supplements from multiple brands may include common food allergens, such as fish, shellfish, and eggs.

BETAINE HYDROCHLORIC ACID (HCL)

Betaine HCL is an acidic form of betaine, a vitamin-like compound found in several food sources. The most common use of betaine HCL is for digestive problems.

Betaine cooperates with endocrine hormones to regulate water and electrolyte metabolism. Additionally, betaine improves intestinal functions by enhancing the digestive enzymes, enriching intestinal microbiota, and improving intestinal morphology⁴⁸.

Yet another reason to consider betaine HCL for repairing leaky gut, is its potential to protect from dehydration. This is particularly important if you have chronic diarrhea. Also, betaine HCL improves poor digestion⁴⁹.

People with leaky gut struggle with chronic digestive issues, and it has a major impact on their quality of life. Moreover, betaine HCL promotes optimal gastric acidity⁵⁰ which is yet another way to strengthen digestive functions.

TIPS:

- Increase your consumption of betaine HCL-rich foods, such as quinoa, beets, spinach, and sweet potatoes
- Eat healthy grains, including kamut, amaranth, and bulger.
- A second option is to take betaine HCL supplements either halfway through a meal or at the end. If you do it before the meal, it can produce heartburn or affect stomach acid.
- Try not to take betaine HCL if you're taking NSAIDs (anti-inflammatory drugs, including aspirin, ibuprofen, and Tylenol).

SLIPPERY ELM

Slippery elm (*Ulmus rubra*) is a tree native to the eastern and central regions of the United States and Ontario, Canada. The tree is well known for its bark, which can be dark brown or reddish, and it can grow up to 80 ft high. Native Americans would peel the bark and use it for medicinal purposes as a remedy for various ailments such as sore throat, wound healing, and fever.

Slippery elm can soothe a number of conditions, including digestive problems because it is a demulcent⁵¹. When a plant or compound has demulcent properties, it has the potential to soothe the stomach lining and intestines by reducing irritation. In a nutshell, demulcents are muco-protective, i.e., they protect the intestinal mucus.

Since slippery elm contributes to intestinal mucus, meaning this herbal remedy can neutralize excessive acidity in the gut. In gastrointestinal illnesses, slippery elm protects the function of the mucosal barrier⁵² and exhibits antioxidant effects⁵³. Thus, it is suitable for people with inflammatory bowel diseases such as Crohn's.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

Let's not forget that oxidative stress can contribute to leaky gut and aggravate symptoms. Through its antioxidant effects and potential to support intestinal mucosa, supplementation with slippery elm can aid the management of leaky gut symptoms and thereby improve quality of life.

TIPS:

- Slippery elm is used primarily as a dietary supplement available in powder form, capsules, and lozenges.
- If you opt for the powdered bark, the average dosage is one tablespoon up to three times a day, taken with water or another beverage.
- Adding too much will make a liquid difficult to digest.
- Many people enjoy slippery elm tea, either making it from the powder or buying it in pre-packaged tea bags.

MARSHMALLOW ROOT

Marshmallow root (*Althaea Officinalis*) is a perennial herb native to Europe, Northern Africa, and Western Asia. For thousands of years, people have used marshmallow root as a remedy for various problems, including digestive issues. That's exactly the reason why marshmallow root is on our list of the best natural remedies to repair leaky gut.

The benefits of marshmallow root are not just anecdotal folk tales. Scientific evidence supports the claims. More studies on this plant are necessary, but current evidence confirms that marshmallow root can tackle gastric ulcers, and; it does so without adverse reactions⁵⁴ or side effects.

The protective effects of marshmallow root, in terms of digestive effects, come down to its antioxidant properties⁵⁵.

The healing powders of marshmallow root also have a lot to do with its high mucilage content. This mucilage content covers the digestive tract with a protective lining to alleviate gut inflammation and soothe constipation, diarrhea, and improve the integrity of the digestive system. Marshmallow root may stimulate the cells that support tissue regeneration⁵⁶.

TIPS:

- Marshmallow root tea is a popular herbal tea that can be made from dried marshmallow root powder or pre-packaged tea bags.
- The powder form can also be added to other beverages or smoothies.
- The simplest way to consume marshmallow root is in the form of dietary supplements because these products contain optimal amounts of the extract.
- Marshmallow root helps with coughs, wound healing, and skin health and serves as a diuretic and pain reliever.

VITAMIN C

Vitamin C is one of the most widely-present micronutrients in our prescribed leaky gut diet. The functions of vitamin C are numerous, ranging from the growth and repair of tissues to improved absorption of iron.

In addition, it forms an important protein that is used to make skin, ligaments, blood vessels, and tendons. Vitamin C is known as an immune booster, and we tend to consume large amounts during winter days to avoid the flu and colds.

But did you know that vitamin C benefits your digestive health, too? In fact, vitamin C is the most important water-soluble antioxidant in the body. The antioxidant properties allow the vitamin to restore the gut microbiota microenvironment and increase the number of good bacteria in the gut.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

By exhibiting antioxidant effects, vitamin C manages oxidative stress and all the consequences it can cause, such as worsening leaky gut symptoms.

Additionally, vitamin C prevents iron deficiency by improving the absorption [of this mineral by up to 67%, which is particularly important in that iron deficiency can aggravate inflammatory bowel diseases with a negative impact on the gut microbiota⁵⁷.

Regular intake of vitamin C-rich foods, especially fruits and vegetables, helps boost the strength of the immune system, neutralizes free radicals and oxidative stress, and also benefits digestive health. If you experience confusion and poor memory due to leaky gut, vitamin C can strengthen your cognitive abilities⁵⁸.

TIPS:

- Consume Vitamin C daily.
- The best sources are citrus fruits, tomatoes, red and green peppers, kiwi, berries, cantaloupe, pineapple, mango, broccoli, and Brussel sprouts.
- Although vitamin C-rich foods are plentiful, many people turn to supplements to meet their daily requirements of this essential micronutrient.
- It is easy to add it to smoothies and other drinks.

PEPPERMINT AND THYME

Peppermint is a popular aromatic herb from the mint family. Native to Europe and Asia, peppermint is well-known for its refreshing and reenergizing scent, and also for a wide range of benefits. Peppermint leaves contain essential oils, including menthol, menthone, and limonene, which give this plant its minty scent and cooling effects.

Peppermint benefits health in many ways as an effective tool for digestive concerns because it can relax the digestive system and ease the pain.

Peppermint prevents the contraction of smooth muscles, thus relieving spasms in the gut. Peppermint exhibits antioxidant and immunity-boosting⁵⁹ effects as well. Consumption of peppermint improves gastrointestinal scores⁶⁰, which makes it a promising natural remedy for a distressed digestive system.

Evidence shows that peppermint oil can relieve abdominal pain and aid in the management of symptoms associated with IBS (which include constipation, diarrhea, bloating, etc.). Peppermint oil helps repair leaky gut in multiple ways, including through its anti-inflammatory effect. This oil affects esophageal, gastric, small bowel, gallbladder, and colonic physiology.



The same way that peppermint scent can make you feel calm, the plant does the same for your gut and, thereby, helps reduce the severity of symptoms. Besides peppermint and peppermint oil, you may want to use thyme to repair a leaky gut. You probably have it in your kitchen already, or consider getting thyme oil. This wonderful herb significantly increases the value of your total antioxidant status and strengthens intestinal integrity. But that's not all: thyme supports good bacteria in your gut too⁶¹. Strengthening intestinal integrity is the most important mechanism in repairing a leaky gut and its symptoms.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

TIPS:

- Both peppermint and thyme can be used in a variety of ways, with fresh or dried leaves, to complement a variety of dishes.
- They can both be ingested in oil form in teas, smoothies, or other beverages. Topically, they can be used as a form of aromatherapy.
- Blend four drops of peppermint essential oil with 1 oz of carrier oil (coconut, almond, jojoba, etc.). Apply over the stomach area three times a day.
- Peppermint oil is beneficial when inhaled too. Thyme oil can be used in the same way as peppermint oil.

SELENIUM

Selenium is an essential mineral that supports cognitive function, the immune system, fertility, thyroid function, and many other processes in the body. Improved antioxidant capacity⁶² is an important effect of proper selenium intake.

We keep mentioning the antioxidant roles of various compounds, because the impact of oxidative stress on the gut, especially in people with leaky gut, is largely underestimated. As an antioxidant, selenium neutralizes free radicals and alleviates oxidative stress and the damage it causes in the body, including the gut.

The antioxidant role of selenium improves cognitive skills, such as verbal fluency and other mental functions. If you're dealing with weak memory and a loss of concentration due to a leaky gut, selenium could help improve it.

The proper consumption of selenium, either through selenium-rich foods or supplements, enhances the gut's response to inflammation and improves gut microbiota. Selenium also supports wound healing⁶⁵, which could support gut repair.

With decreased levels of selenium in the body, levels of inflammatory compounds increase. This fact points to this mineral's anti-inflammatory effect and its significance in the management of conditions linked to inflammation.

TIPS:

- Enrich your diet with selenium-rich foods such as nuts, seeds, lentils, brown rice, or mushrooms.
- You can also increase your selenium intake through supplementation.
- Some breakfast cereals are fortified with selenium

MAGNESIUM

Magnesium is one of the most important minerals in the body. In fact, magnesium is essential for over 300 enzymes that control various biochemical reactions, ranging from protein synthesis to muscle and nerve function, blood pressure regulation, and blood glucose control⁶⁴.

How can it help people with leaky gut? A magnesium deficiency contributes to inflammation in the small intestine and induces a vascular macromolecular leak. Magnesium reduces gut inflammation and its consequences. For a person with leaky gut, insufficient levels of magnesium in the body can impair the small intestine through induced inflammation and, therefore, aggravate your symptoms.



TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

Consumption of magnesium also increases the diversity of gut microbiota while a magnesium-deficient diet harms good bacteria in your gut. Just like fiber, magnesium produces butyrate⁶⁵ in your digestive system and, thereby, helps manage leaky gut and its symptoms.

By supporting gut integrity and diversity, and thanks to its anti-inflammatory role, magnesium can be an effective ally in the repair of a leaky gut.

TIPS:

- Add more magnesium-rich foods to your diet from a wide range of foods, including spinach, green leafy vegetables, legumes, nuts, and seeds.
- Generally speaking, you'll find more magnesium in foods with greater fiber content. Remember that fiber intake is crucial for the management of a leaky gut.
- You can opt for magnesium citrate supplements because the body absorbs it better than other forms of magnesium.
- A blood test is the best way to determine your magnesium level.

OMEGA-3 FATTY ACIDS

Omega-3 fatty acids are vital for good health and wellbeing; they are necessary to support the heart and brain, but they do much more than that. In fact, people with a leaky gut should consider increasing their intake of Omega-3s, because of the anti-inflammatory properties⁶⁶ that make them capable of reducing inflammation in your gut.

What many people don't know is that Omega-3s exert significant effects on the intestinal environment, and they also modulate gut microbiota composition. That's why they can be considered prebiotics⁶⁷.

The potential of Omega-3 fatty acids to promote healthy gut microbiota explains their role in the management of many chronic diseases. They also promote the production of butyrate, the major source of energy for the colonic mucosa.

Since Omega-3 fatty acids can reduce mucosal damage⁶⁸, alleviate inflammation, and support gut microbiota integrity you should consume more Omega-3-rich foods.

TIPS:

- Omega-3s are available in many plant-based foods: chia seeds, hemp seeds, flax seeds, walnuts, edamame, kidney beans, soybeans, seaweed, and algae.
- One bowl of lightly cooked soybeans contains more Omega-3s than some cold water fish.
- If you choose Omega-3 supplements, make sure you buy high-quality products with excellent purity.

QUERCETIN

Quercetin may seem unfamiliar, but you come across this compound every day. As a natural pigment, quercetin is present in many grains, fruits, and vegetables.

The prominent trait of quercetin is its long-lasting anti-inflammatory function. The compound also possesses gastrointestinal cytoprotective activity⁶⁹; i.e., it protects cells in the digestive tract.

Research shows that quercetin improves the function of the intestinal barrier and also exhibits a favorable impact on claudins — major constituents of the tight junctions that regulate the permeability of gut lining cells.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

More precisely, the anti-inflammatory, antioxidant, and intestine barrier-strengthening properties of quercetin make this compound a practical addition to any effort to improve a leaky gut and its many unpleasant symptoms.

TIPS:

- Some of the best sources of quercetin are apples, cherries, berries, kale, onions, tomatoes, peppers, asparagus, shallots, tea, and grapes and drinks that contain any of these. It is found in wine and black tea.
- Besides quercetin-rich foods, you can consume quercetin in supplements often combined with bromelain since both compounds have antioxidant and anti-inflammatory properties.
- Quercetin has low bioavailability, so supplements often contain other ingredients such as vitamin C and bromelain to increase absorption.
- It is also found in herbal remedies, such as ginkgo biloba and St. John's wort.

DIGESTIVE ENZYMES

Your body produces digestive enzymes that break down carbohydrates, proteins, and fats. This is important for the absorption of nutrients and to maintain optimal digestive and overall health.

Since some people have insufficient amounts of natural enzymes, digestive enzymes supplements are available. They are simple and easy to use. Considering that digestive enzyme supplements are formulated to mimic the activity of natural enzymes, you need to take them before you eat.

Supplementation with digestive enzymes is usually only necessary for people who consume animal products.

The lack of enzymes in the digestive tract contributes to malabsorption of nutrients, impaired digestion, food intolerance, food allergy, autoimmune conditions, and bacterial overgrowth⁷⁰.

All these things worsen the symptoms of a leaky gut.

People with a leaky gut are prone to nutritional deficiencies, which impact your symptoms, thus creating a vicious cycle.

TIPS:

- If you're vegan, you probably don't need digestive enzyme supplements, but it is a good idea to eat foods that contain them.
- Digestive enzymes are present in pineapples, mangos, papayas, bananas, honey, avocados, ginger, and kiwi.
- They are also found in fermented foods such as water kefir, kimchi, sauerkraut, miso, and tempeh.
- Most supplements are safe, but in some people, bromelain, a digestive enzyme supplement made from pineapples, interferes with platelets in the bloodstream.

VITAMIN D

Vitamin D, the sunshine vitamin, promotes calcium absorption in the gut and it is required for strong bones and joints. Although taking vitamin D through diet or supplements for bone health is a well-known practice, most underestimate the body's ability to make this vitamin.

The benefits of vitamin D are truly impressive. Improved digestion is one of the benefits. Evidence shows that vitamin D impacts tissues throughout the digestive system⁷¹. In other words, this vitamin improves digestive health and the absorption of nutrients.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

Moreover, vitamin D exhibits immune-regulating actions during the onset of inflammatory bowel diseases. Vitamin D maintains the integrity of the gut lining in the large intestine, and it is crucial for preventing the development of digestive problems. Additionally, vitamin D stimulates the migration of gut lining cells and is involved in improved wound healing⁷². This is the way that vitamin D supports the healing of a leaky gut.

TIPS:

- Few vegan foods are sources of vitamin D.
- Be sure to get plenty of sunshine. Walk outside for a few minutes every day.
- Alternatively, purchase vitamin D-fortified almond or soy milk. If you're unsure whether you need it, ask your doctor to do a simple blood test to check your vitamin D levels.
- Supplements are available for those who do not dwell in a sunny climate.

CAPRYLIC ACID

Caprylic acid is one of three fatty acids present in coconut oil. This medium-chain fatty acid holds strong health benefits. However, we need to be careful of joining the “let's consume lots of coconut products” trend for several reasons. Firstly, coconut contains a lot of calories, which can lead to excessive weight gain. On top of that, many come in the form of saturated fats, which are not good for our cardiovascular system.

Yet caprylic acid is capable of suppressing inflammation⁷³. Through its anti-inflammatory role, caprylic acid can promote good gut health and relieve symptoms of leaky gut worsened by inflammation. The antibacterial⁷⁴ and anti-inflammatory roles of caprylic acid make it a suitable natural remedy for people with leaky gut provided they use it carefully and in moderate amounts.

This is because bad bacteria and inflammation are big threats to gut health and may worsen the symptoms.

TIPS:

- Consuming caprylic acid is achieved by adding a little coconut oil to one's diet.
- Supplements are widely available in variable quantities as well anywhere vitamins and the like are sold.
- The product can treat yeast infections, skin conditions, digestive disorders, and high cholesterol.

GINGER

Ginger is probably one of the most useful spices in the world. Not only is it used to enhance any cuisine, but also great for medicinal purposes. The benefits of ginger are, indeed, numerous, even if you have leaky gut syndrome.

The benefits of ginger on leaky gut are due to its antioxidant and anti-inflammatory properties. In one study, ginger reduced the severity of colitis and improved intestinal barrier integrity. Scientists concluded that ginger can be effective for the prevention of irritable bowel diseases⁷⁵.

Ginger also has the potential to positively influence gut microbiota and, thereby, prevent or aid the management of obesity.

For a person with leaky gut syndrome, ginger can be an easily accessible, natural remedy as it works to neutralize oxidative stress, fight inflammation, and improve gut health, all of which are crucial for reduced leakiness and management of symptoms.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

TIPS:

- Ginger is readily available in grocery stores, supermarkets, and health food stores, as well as online.
- Ginger is versatile and easy to consume. You can add it to tea, soup, stir-fries, vegetable curries, and even desserts.
- Besides ginger root, you can also buy grated or powdered ginger.
- Ginger root supplements allow you to consume this spice in capsule form.

N-ACETYL-GLUCOSAMINE (NAG)

N-Acetylglucosamine is an amide derivative of the monosaccharide glucose. It is a secondary amide between glucosamine and acetic acid.

NAG is a form of glucosamine, one of the building blocks of joint and other connective tissues. Studies show that NAG effectively improves intestinal mucosal barrier dysfunction, by enhancing cellular metabolism and exhibiting favorable effects on tight junctions⁷⁶.

The intake of NAG proves to be effective for people with irritable bowel disease as it improves symptoms such as diarrhea, pain, and bleeding. It is touted, but unproven for osteoarthritis, aging skin, and knee pain.

In other words, NAG can support gut functions and wellbeing, but it also helps manage uncomfortable symptoms you experience.

The easiest way to consume NAG is to buy a dietary supplement.

TIPS:

- Most supplements use NAG obtained from shellfish and aren't suitable for vegans and vegetarians.
- It is possible to find vegetarian NAG supplements.
- It appears to be safe for most people to ingest a dosage of 1,500 mg per day but may cause mild side effects.
- check with your doctor before taking the supplements if you have diabetes, kidney disease, heart disease, bleeding disorders, or high blood pressure.



CONCLUSION

Nature has blessed us with a wide range of vitamins, minerals, healthy fats, herbs, and spices that improve our health in many ways.

If you have a leaky gut, the best way to repair it and manage its horrible symptoms is to turn to nature. In this book, we focused on 23 natural remedies you can use and the best thing is that science supports their favorable effects on your gut health.

Be proactive and start adding these wonderful natural medicines into your life today.

ABOUT JONATHAN OTTO



Jonathan Otto is an investigative journalist, natural health researcher, documentary filmmaker, and humanitarian.

Throughout his career, Jonathan has turned his attention to seeking truth and exposing errors in conventional medicine.

He has created and produced several groundbreaking self-hosted docuseries — ***Depression, Anxiety & Dementia Secrets, Autoimmune Secrets, Natural Medicine Secrets, and Women's Health Secrets*** — covering innovative, effective natural remedies for cancer, autoimmune disease, neurodegenerative disease, mental health, and heart disease.

These docuseries represent Jonathan's unceasing quest to discover the true root cause of debilitating diseases by gathering stories and protocols from world-renowned natural medicine doctors, health experts, and their patients.

In response to this life-saving knowledge, Jonathan created **Well of Life**, a line of doctor-formulated, 100% natural supplements specially designed to detox and fortify the body.

Jonathan's greatest reward has been hearing the testimonials from people whose lives have literally been saved with the natural medicines and protocols he discovered.

His work has been featured in international TV broadcasts, print media, national news, and radio broadcasts. He received the awards, ***Young Citizen of the Year and International Volunteer of the Year***, by the Australian government for international humanitarian contributions, which he continues to support.

Jonathan and his wife, Lori, welcomed their first son, Asher, in January 2019.

TOP 23 NATURAL MEDICINES TO REPAIR LEAKY GUT

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