

# LEAKY GUT

## What is Leaky gut?

Leaky gut, also known as increased intestinal permeability (IIP), is a condition where the gaps between the cells of the gut lining increase in size. This allows larger molecules, chemicals, and microbes to pass through the gut barrier and into the bloodstream.

A “leaky gut” is another name for **increased intestinal permeability**. This is a recognized condition in which the gaps between the cells of your gut lining get bigger. The lining of a healthy gut is semipermeable. It lets through water and nutrients from what you eat and drink.

The gut's mucous lining is designed to absorb nutrients and water from food into the bloodstream, but in people with IIP, the gut "leaks" more than just water and nutrients. This can lead to inflammation, which may contribute to a range of symptoms and health problems.

## Symptoms of leaky gut include:

- Diarrhea
- Increased gas
- Constipation
- Abdominal pain or discomfort
- Nausea or vomiting
- Blood in your poop
- A fever or night sweats
- Weight loss
- Fatigue
- Bloating

## Causes

**Some suspected causes of leaky gut include: Poor diet and Heavy drinking.**

**However there is speculation to certain food additives being a root cause, mainly synthetic additives.**



### **Associated conditions**

**Some studies suggest that leaky gut may be associated with other conditions, such as:**

**Autoimmune diseases, Chronic fatigue syndrome, Fibromyalgia, Arthritis, Allergies, Asthma, Acne, Obesity, and Mental illness.**

**Dysbiosis and the leaky gut promote the progression of liver disease and the development of hepatocellular carcinoma (HCC) via multiple mechanisms, including the release of cancer-promoting and senescence-promoting metabolites such as deoxycholic acid (DCA) from the dysbiotic microbiota, and increased hepatic exposure ...Jul 5, 2017**

**Alterations in the gut microbiota composition induce increased permeability of the gut barrier and immune activation leading to systemic inflammation, which in turn may**

**impair the blood-brain barrier and promote neuroinflammation, neural injury, and ultimately neurodegeneration.**

**Yes, leaky gut conditions can contribute to some cancers:**

#### **Colorectal cancer**

**Leaky gut conditions can cause systemic inflammation, increased hypercoagulability, and an activated coagulation system. A study found that colorectal cancer patients have higher levels of lipopolysaccharide (LPS), which can predict an increased chance of CRC.**

#### **Cholangiocarcinoma**

**A 2020 study found that a leaky gut barrier can lead to more immune-suppressing cells in the liver, called myeloid cells. Myeloid cells are often found near tumors and are known to suppress the immune system.**

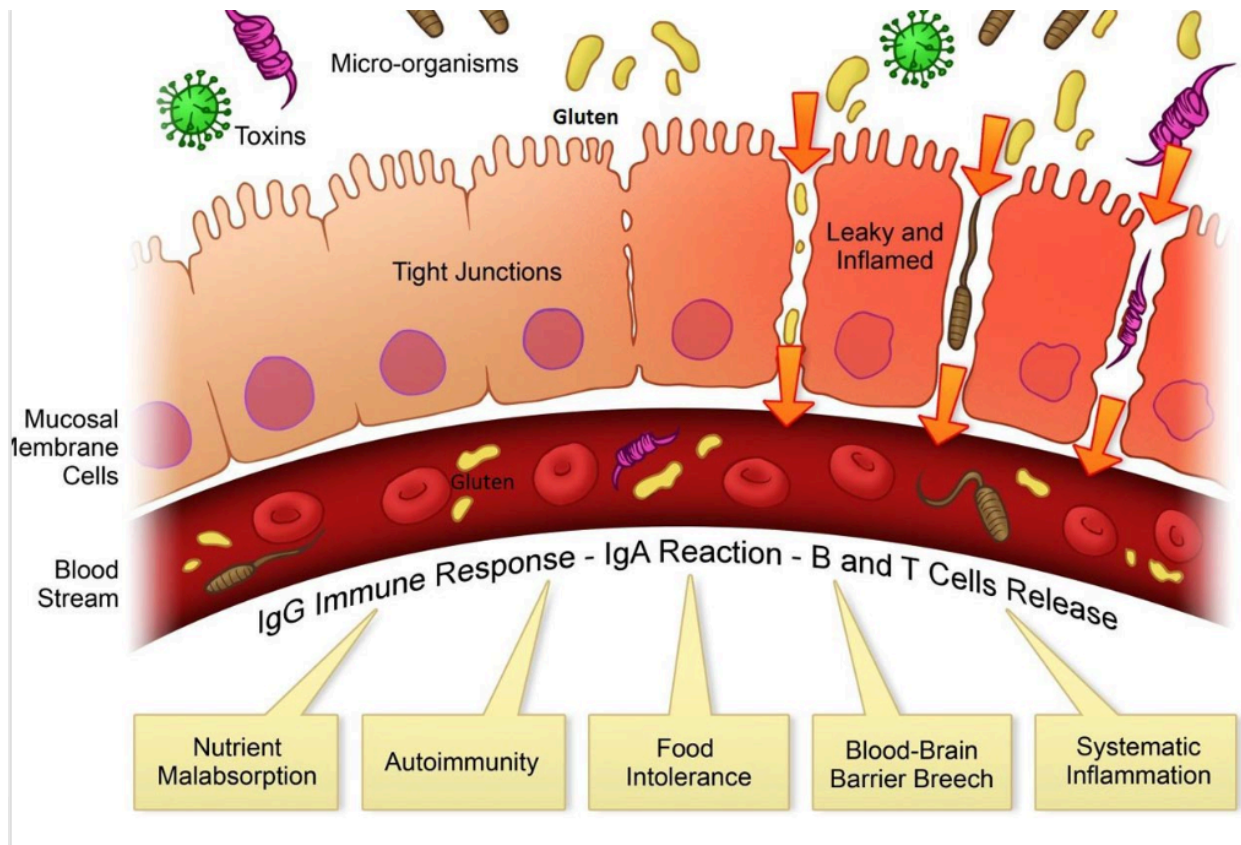
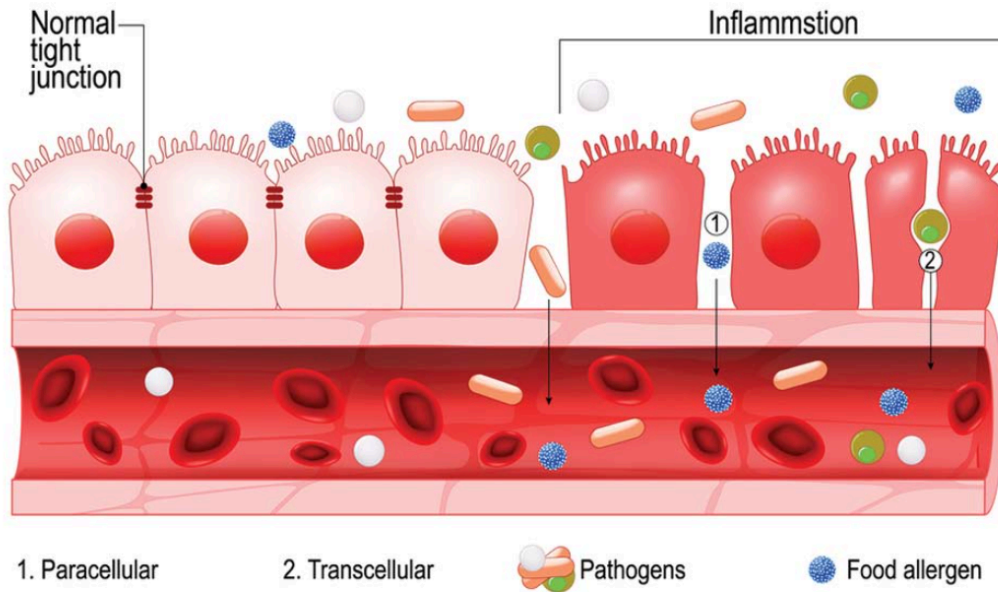
#### **Other cancers**

**A 2012 study suggests that a leaky gut may be the root of some cancers forming in the rest of the body. The study suggests that the hormone receptor guanylyl cyclase C (GC-C) plays a key role in strengthening the body's intestinal barrier, which helps separate the gut from the rest of the body.**

**Leaky gut syndrome can also lead to a range of mental health concerns, including depression, anxiety, and autism.**

## **Diagnosis**

**Leaky gut can be diagnosed based on symptoms or with a test that involves drinking a solution of sugars and collecting urine a few hours later.**



## Treatment

Modern medicine states there is no standard treatment for leaky gut, but dietary and lifestyle changes may help. However there has been older research and newer research with amazing findings. Below is a list of known herbs and supplements that have idealistic and/ or evidence backing the benefit of these natural products for leaky gut. Keep in mind that everybody's bodies are different and it takes a minimum of 2 months of supplementation to start reversing leaky gut and can take up to 2 years to completely reverse sense. It is considered an autoimmune disease and evidence shows 88% of Americans are known and suspected to suffer from this condition. It is also highly suggested to start avoiding fast & processed foods, foods that are non-organic, and monitor drug use intake whether recreational or prescription.

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## Natural Healing options and findings for Leaky Gut

### Types of herbs for leaky gut and digestion

There's a variety of herbs that can be integrated into a leaky gut healing protocol, alongside medical and functional nutrition interventions.

While everyone is different, if you're dealing with IBS and leaky gut syndrome you'll likely be able to benefit from at least a few (if not more) herbs from each of the following categories:

- [Digestive bitters](#)

- Vulnerary [astringents](#) for helping to tone and tighten the “tight junctions” of the gut wall
- Dispersive and pungent aromatics for reducing and managing symptoms such as nausea, gas, and bloating
- Herbal antimicrobials for dysbiosis – to help rebalance your gut microbes
- [Mucilaginous \(“demulcent”\) herbs](#) for supporting the mucous membranes of the gut lining
- [Prebiotic herbs](#)
- [Nervine herbs](#)

# TYPES OF HERBS FOR leaky gut:

 <div style="background-color: #c8e6c9; padding: 10px; border-radius: 10px; display: inline-block;">bitter herbs</div>	 <div style="background-color: #ffcdd2; padding: 10px; border-radius: 10px; display: inline-block;">astringents</div>
 <div style="background-color: #c8e6c9; padding: 10px; border-radius: 10px; display: inline-block;"><i>anti-microbial</i></div>	 <div style="background-color: #66bb6a; padding: 10px; border-radius: 10px; display: inline-block;">DISPERSIVE</div>
 <div style="background-color: #e57373; padding: 10px; border-radius: 10px; display: inline-block;">DEMULCENT</div>	 <div style="background-color: #43a047; padding: 10px; border-radius: 10px; display: inline-block;">vulnerary</div>
 <div style="background-color: #fff9c4; padding: 10px; border-radius: 10px; display: inline-block;">prebiotic</div>	 <div style="background-color: #81c784; padding: 10px; border-radius: 10px; display: inline-block;">nervine</div>

@wholeisticliving

## Bitter herbs for leaky gut and digestive health

Tinctures of bitter herbs for digestion are often referred to as “digestive bitters” and they have been used for hundreds if not thousands of years!

### Digestive health benefits of bitter herbs

Bitter herbs support digestion in that the bitter taste helps to stimulate the secretion of digestive juices (such as stomach acid) in the stomach before a meal, making it easier for the gut to break down foods and nutrients appropriately. (*Altered stomach acid levels are common among many people with IBS and leaky gut!*)

Digestive bitters are known to often stimulate liver function, which can mean more bile production for better emulsifying (breaking down) fatty foods in the gut (1).

Bitter herbs also support digestion and leaky gut by helping to control the overgrowth of bacteria in the gut, which translates to supporting a healthier gut microbiome (1).

### Which bitters are best?

There are infinite ways to make and take digestive bitters. The decision around which herbs and/or which combination of herbs to use may depend on what’s available, and what’s going on in the body from a constitutional standpoint.

Generally speaking, advised to take a dropperful (about 15 to 30 droplets) of digestive bitters within 10 to 20 minutes before a meal to help optimize digestion.

- Working with a [clinical herbalist](#) is a great way to narrow down and identify the best type and dosing of bitter herbs for supporting your individual digestive health needs!

### Types of bitter herbs for leaky gut and digestion

The most commonly used bitter herbs for supporting digestive health include but are certainly not limited to:

- Artichoke leaf (*Cynara cardunculus*)
- Burdock root (*Arctium lappa*)



- Cacao powder (*Theobroma cacao*)
- Chamomile flowers (*Matricaria chamomilla*)
- Coffee (*Coffea arabica*)
- Dandelion root (*Taraxacum officinale*)
- Gentian root (*Gentiana lutea*)
- Grapefruit peel (*Citrus Racemosa*)
- Lemon peel (*Citrus limon*)
- Milk thistle seed (*Silybum marianum*)
- Orange peel (*Citrus x sinensis*)
- Yellow dock root (*Rumex crispus*)

## Vulnerary Astringents

“Vulnerary” means containing wound-healing properties, and “astringent” means causing the contraction or tightening of cells/body tissues.

While vulnerary **astringent herbs** are more well known for topical use (such as in cases of Witch hazel for itchy skin), they work wonders for healing the gut as well! (*As within, so without.*)

Digestive health benefits of vulnerary astringent herbs

When it comes to leaky gut, *vulnerary astringent* herbs are known for their ability to heal, tone, and tighten the tight junctions of cells making up the gut! (2)

In other words, vulnerary astringent herbs help reduce the size of spaces or *gaps* in between cells that make up the gut lining, which are often referred to as the “tight junctions”.

- You may notice some of the herbs on this list will overlap with herbs listed as digestive bitters, and/or any of the other categories below. That is because herbs are all unique and not cookie-cutter! They each have their own personality and set of benefits, tendencies, uses, etc.

Tea vs capsules: which is better?

Since becoming a clinical herbalist and bringing herbal medicine into my clinic in 2018, I’ve observed that for upper-GI issues, vulnerary astringent herbs are best and most effective when made into tea, since tea covers exponentially more surface area of the gut compared to a tincture.



I've also found that capsules are better for cases of lower-GI issues, since capsules allow the herbs to travel farther down into the gut before getting released.

A list of vulnerary and/or astringent herbs for leaky gut

The most well-known and popular vulnerary astringent herbs for leaky gut (based on my experiences and findings) include:

- Calendula flowers (*Calendula officinalis*)
- Ceylon cinnamon (*Cinnamomum verum*)
- Gotu kola (*Centella asiatica*)
- Plantain leaf (*Plantago major*)
- Rose petals (*Rosa Centifolia*)
- Schisandra berries (*Schisandra chinensis*)
- Shatavari root (*Asparagus racemosus*)
- [Turmeric \(\*Curcuma longa\*\)](#)
- Violet leaves (*Viola spp.*)

**Dispersive and pungent aromatics for digestion and leaky gut**

When it comes to unwanted digestive symptoms such as gas and bloating, dispersive aromatic herbs make wonderful [herbal allies!](#)

Dispersive herbs have a tendency to be aromatic and pungent in nature. These types of herbs help to break up stagnant energy, which is essentially what's going on in cases of gas and bloating among people with IBS and/or leaky gut [\(1\)](#).

Gas and bloating symptoms are most often caused by stagnant waste and food particles which get fermented by unwanted "bad" pathogens (microbes such as bacteria or fungus) which produce methane as a by-product [\(3\)](#).

Dispersive, aromatic, pungent herbs (such as those listed below) contain essential oils which help to expel stuck gas/air, while also keeping those troublesome methane-producing microbes responsible for gas and bloating in check [\(1\)](#).

Pungent herbs may be effective when taken as a tea, tincture or capsules. *(Don't ever take any of these herbs in the form of essential oils internally – even organic or "therapeutic grade" – as it can be very toxic to the liver!)*

- Ceylon cinnamon (*Cinnamomum verum*)
- Fennel seeds (*Foeniculum vulgare*)
- Ginger root (*Zingiber officinale*)
- Lemon balm (*Melissa officinalis*)
- Oregano leaf (*Origanum vulgare*)
- Peppermint leaf (*Mentha × piperita*)
- Rosemary (*Salvia rosmarinus*)
- Thyme leaf (*Thymus vulgaris*)

## Herbal antimicrobials for dysbiosis and SIBO

Again, you'll notice a lot of overlap between the aromatic pungent dispersive herbs and the herbs listed below, which possess antimicrobial properties.

It's no coincidence! The "bad" pathogenic microbes have an aversion to pungent, aromatic herbs as those listed below, which makes sense that many of these help to manage gas and bloating [\(4\)](#).

These types of herbal antimicrobials listed below are also very effective in helping to reduce/manage cases of dysbiosis (an underlying root-cause of leaky gut and IBS), in that they help to keep the overgrowth of "bad" fungus and bacteria under control in the gut [\(4\)](#).

- Agarita/Algerita root (*Mahonia trifoliolata*)
- Bayberry bark (*Morella cerifera*)
- Ceylon cinnamon (*Cinnamomum verum*)
- Garlic (*Allium sativum*)
- Ginger root (*Zingiber officinale*)
- Oregon grape root (*Berberis aquifolium*)
- Oregano leaf (*Origanum vulgare*)
- Pau D'Arco / "pink trumpet tree" bark (*Handroanthus impetiginosus*)
- Rosemary (*Salvia rosmarinus*)
- Thyme leaf (*Thymus vulgaris*)

This list of antimicrobial herbs for leaky gut and dysbiosis is not exhaustive. To go more in-depth is far beyond the scope of what I can include in just an article!

- The third pillar of complete gut repair, which I refer to as a "Microbiome Makeover", is covered extensively in my [Complete Gut Repair Roadmap](#)

[online course](#) for those who are on a gut-healing journey and would like to learn more.

Either way, you'll want to keep in mind the specific types and combinations of herbal antimicrobials that will work (or not work) best for you will depend on what is going on in your gut microbiome, since certain microbes can become resistant to certain types of herbal antibiotics/herbal antifungals.

## Demulcent herbs for leaky gut repair

Wouldn't it be nice to have herbs that provide pretty fast relief for a leaky gut? Look no further! [Demulcent herbs](#) are slippery and slimy, making them great potential candidates for tissue that is raw, wounded and/or compromised. (5, 6)

Some of these are used more in western [clinical herbalism](#), while others are most popular in Traditional Chinese Medicine (TCM) or Ayurveda. Nonetheless, each of the herbs on this list can all do wonders for coating and supporting the mucous membranes of the gut!

Mucilaginous herbs are best taken as tea or capsules, versus tinctures – since alcohol does not extract the mucilage (slippery, slimy, healing constituents) very efficiently.

*Note: I included slippery elm bark on the list, since it's technically a mucilaginous herb. However, I've been taught by all of my mentors NOT to work with slippery elm since it's been overharvested the last few decades and is now at risk of going extinct in the wild. Please don't use slippery elm given all of these other wonderful options readily available!*

- Aloe vera leaf juice (*Aloe barbadensis*)
- Amla / Amalaki / Indian gooseberry (*Phyllanthus emblica*)
- Licorice root (*Glycyrrhiza glabra*)
- Plantain leaf (*Plantago major*)
- Marshmallow root (*Althaea officinalis*)
- Slippery elm bark (*Ulmus rubra*)
- Triphala (“three fruits”) – Amalaki (*Emblica officinalis*) + Vibhitaka (*Terminalia bellerica*) + Haritaki (*Terminalia chebula*)

## Prebiotic herbs

By this point, you'll notice the following prebiotic herbs were also listed in other categories – so there is a decent amount of overlap. The key attributes of prebiotic herbs are that they

contain special indigestible fibers and/or polyphenols which serve as a primary fuel source for probiotic microbes that support a healthy gut lining.

(Read more about the similarities and differences between [prebiotics vs probiotics](#) here!)

My favorite prebiotic herbs for leaky gut include:

- Burdock root (*Arctium lappa*)
- Cacao powder (*Theobroma cacao*)
- Licorice root (*Glycyrrhiza glabra*)
- Marshmallow root (*Althaea officinalis*)
- Slippery elm bark (*Ulmus rubra*)
- Triphala (“three fruits”) – Amalaki (*Emblica officinalis*) + Vibhitaka (*Terminalia bellerica*) + Haritaki (*Terminalia chebula*)

## Nervine herbs

Nervines are a class of herbs which soothe and settle a stressed-out nervous system.

With leaky gut and stress going hand-in-hand, it makes sense that nervine herbs would help to settle a nervous stomach and re-balance gut motility by turning off the “fight or flight” branch of the nervous system so that your “rest and digest” system can function optimally.

The best nervine herbs for leaky gut include but are not limited to:

- Chamomile flowers (*Matricaria chamomilla*)
- Gotu kola (*Centella asiatica*)
- Lemon balm (*Melissa officinalis*)

# Herbs for leaky gut: a complete list

Below is a comprehensive, alphabetized list of the herbs for leaky gut and digestion mentioned above, with their latin name included!

1. Agarita/Algerita root (*Mahonia trifoliolata*)
2. Aloe vera leaf (*Aloe barbadensis miller*)
3. Amla / Amalaki / Indian gooseberry (*Phyllanthus emblica*)
4. Artichoke leaf (*Cynara cardunculus*)
5. Bayberry bark (*Morella cerifera*)
6. Burdock root (*Arctium lappa*)
7. Cacao (*Theobroma cacao*)
8. Calendula flowers (*Calendula officinalis*)
9. Ceylon cinnamon (*Cinnamomum verum*)
10. Chamomile flowers (*Matricaria chamomilla*)
11. Coffee (*Coffea arabica*)
12. Dandelion root (*Taraxacum officinale*)
13. Fennel seeds (*Foeniculum vulgare*)
14. Garlic (*Allium sativum*)
15. Gentian root (*Gentiana lutea*)
16. Ginger root (*Zingiber officinale*)
17. Gotu kola (*Centella asiatica*)
18. Grapefruit peel (*Citrus Racemosa*)
19. Lemon balm (*Melissa officinalis*)
20. Lemon peel (*Citrus limon*)
21. Licorice root (*Glycyrrhiza glabra*)
22. Marshmallow root (*Althaea officinalis*)
23. Milk thistle seed (*Silybum marianum*)
24. Orange peel (*Citrus x sinensis*)
25. Oregon grape root (*Berberis aquifolium*)
26. Oregano leaf (*Origanum vulgare*)
27. Pau D'Arco bark (*Handroanthus impetiginosus*)
28. Peppermint leaf (*Mentha × piperita*)
29. Plantain leaf (*Plantago major*)
30. Rose petals (*Rosa Centifolia*)
31. Rosemary (*Salvia rosmarinus*)
32. Schisandra berries (*Schisandra chinensis*)
33. Shatavari root (*Asparagus racemosus*)
34. Slippery elm bark (*Ulmus rubra*)

35. Thyme (*Thymus vulgaris*)
36. Triphala (“three fruits”) – Amalaki (*Emblica officinalis*) + Vibhitaka (*Terminalia bellerica*) + Haritaki (*Terminalia chebula*)
37. Turmeric (*Curcuma longa*)
38. Violet leaves (*Viola spp.*)
39. Yellow dock root (*Rumex crispus*)

## Herbal medicine for health: additional resources

As I mentioned earlier, leaky gut often is often accompanied by IBS, dysbiosis, nutritional deficiencies, and immune system imbalance. If you’d like to learn more about how to support your health holistically with herbs, make sure to check out the resources below, and/or feel free to enroll in my [Complete Gut Repair Roadmap online course](#) where we can go down the gut-healing rabbit hole together at your own pace!

### REFERENCES & ACCREDITATIONS :

**I would like to thank the National Center for Biotechnology Information & National Institute of Health for the leaky gut information and resources given today.**

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6. <https://wholeisticliving.com/2022/04/30/herbs-for-leaky-gut/>

**\*\* Written and reviewed by John Barlow of JJ Medicinals Holistic outreach team.**