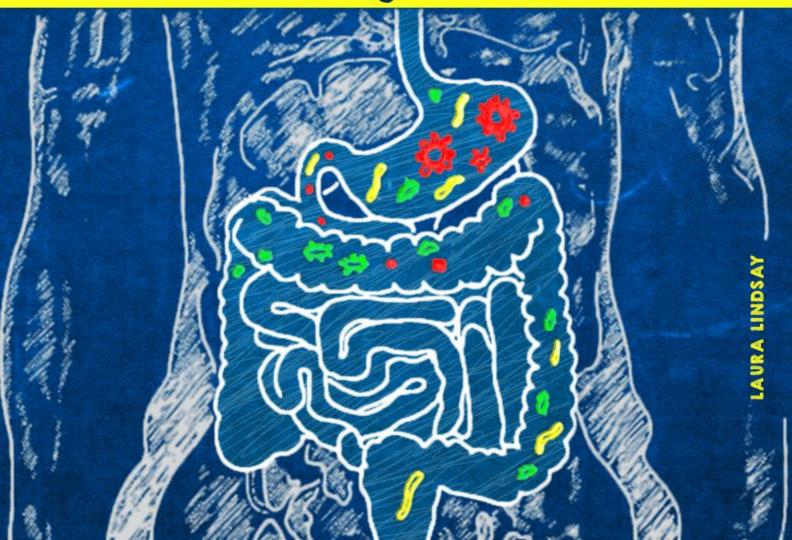


Your Ultimate Program to Tame IBS & Restore Digestive Health.



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## Introduction

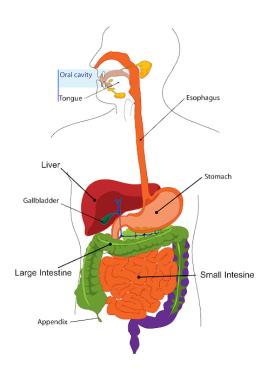
If you've been experiencing digestive issues recently, you could have a leaky gut or you might be suffering from Irritable Bowel Syndrome or IBS. Leaky gut is just now starting to come onto the radar for doctors as more and more people are developing gastrointestinal issues and other disorders like IBS, with no known and apparent cause.

In this guide, you will discover more about the leaky gut syndrome, the real root cause of IBS, the signs and symptoms you should look out for, and a list of proposed treatments and natural remedies that will not only relieve your symptoms, but will also make embarrassing bathroom moments a thing of the past.

# Chapter 1 - Your Digestive Tract: What You Need to Know

You probably take your digestive tract for granted, but it is an amazingly complex system with varied functions that extends from your mouth all the way to your anus.

You start digesting the moment you put food into your mouth. Your teeth and saliva start breaking down the food so it can travel down the esophagus to the stomach. Think of your digestive system as a finely-tuned conveyor belt, with the muscles within your stomach and intestines moving the food along to each important stage of digestion. This movement is called motility.



In the stomach are acids that digest the food even further so your small intestine will be able to remove the nutrients from the food and send them out to the rest of the body. The large intestine, or colon, will help get rid of the rest as waste products, which are removed through the process of urination (elimination) and excretion (stool, feces, excrement).

Digestive juices contain enzymes that break food down into different nutrients. The small intestine is responsible for 90% of your digestion, so a leaky gut can be a disaster for the body. In addition to releasing toxic substances, it will fail to absorb nutrients. Without essential nutrients, you will become ill.

The walls of the small intestine allow the nutrients into the bloodstream, which delivers them to the rest of the body. Therefore, we know the small intestine is permeable. However, if it is too permeable, your gut can leak into the body cavity. Hormone and nerve regulators control the digestive process, for example, signaling when you feel full, and when to release insulin.

Your food traveling from your mouth to your anus is a long journey of nearly 70 yards that involves a range of enzymes and digestive juices and about 1,000 different bacteria, many of them helpful, some of them harmful if they get out of control.

On such a long and complicated journey, a lot can go wrong. Therefore, taking a closer look at what you put in your mouth is the best way to decrease the risk of leaky gut and increase your digestive health. In the next chapter, we'll discover more about the **Leaky Gut Syndrome**, its causes, and how it is associated with an extensive range of illnesses and diseases.

## Chapter 2 - What is Leaky Gut?

Leaky gut, or leaky gut syndrome, is not actually an agreed-upon medical condition. The medical term for it is **intestinal permeability**. When something is impermeable, it does not allow liquid to pass through, such as water. On the other hand, if something is permeable, it allows liquid to pass through or leak.



Complementary and alternative medicine (CAM) practitioners have developed the theory that a leaky gut, the one that is overly permeable, releases various toxins, microbes, undigested food particles, and other potentially harmful substances into the body, leading to illnesses and serious diseases. They have speculated that a leaky gut might be connected with a range of health issues, including:

- Acne
- Anxiety
- Arthritis
- Autism
- Autoimmune disorders
- Bloating
- Cancer
- Cardiovascular disorders
- Celiac disease
- Constipation
- Crohn's disease
- Decreased immune function

- Depression
- Diabetes
- Diarrhea
- Eczema
- Gas
- Heartburn
- Hypothyroidism
- Intestinal pain
- Inflammatory bowel disease (IBD)
- Irritable bowel syndrome (IBS)
- Joint pain
- Metabolic syndrome
- Mood swings
- Muscle pain
- Osteoporosis
- Psoriasis
- Psoriatic arthritis

and more.

If we look at this list, some of these are known symptoms of a leaky gut. We might think some of the conditions are completely logical, such as leaky gut being connected with gastrointestinal issues, including:

- Bloating
- Celiac disease
- Constipation
- Crohn's disease
- Gas
- Heartburn
- Intestinal pain
- Inflammatory bowel disease (IBD) and
- Irritable bowel syndrome (IBS)

Even though there is no specific diagnosis of a leaky gut, doctors do know that certain things can affect the permeability of the intestines and throw the microbiome or gut flora out of balance. These include:

- Overuse of antibiotics
- Using nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin and ibuprofen
- Taking Proton-pump inhibitors (PPIs), which reduce gastric acid production
- A poor diet that damages the microbiome
- A poor diet that lacks the nutrients needed to maintain a healthy microbiome
- Too much sugar
- Genetically modified foods (GMOs)
- Stress
- Tap water
- Mercury, such as in canned fish
- BPA, such as in plastic bottles we drink from
- Pesticides
- Yeast infections (Candida)

Moreover, foodborne illnesses can also trigger leaky gut. Some of these foodborne viruses and infections include the ff:

<u>Norovirus</u>, a highly contagious stomach bug passed from person to person through bodily fluids such as saliva, vomit, diarrhea, and poor handwashing practices. It is known as the curse of cruise ships because of frequent outbreaks and the ease of transmission in confined spaces.

<u>Salmonella</u>, which comes from contaminated or undercooked foods, such as chicken and eggs, and from certain pets, including turtles, birds, and handling pet foods and then not washing your hands carefully afterwards.

<u>Giardiasis</u>, from the parasite Giardia, the most common stomach parasite in the US. It comes from water contaminated with fecal matter.

There are many more food-borne illness such as <u>E. coli, listeria, cyclospora, shigella</u> that can have a significant impact on your gut. Some of these will resolve on their own. In other cases, they may require antibiotics. In still other cases, doctors will give a broad spectrum antibiotic to cover all contingencies. The trouble with this is that antibiotics of any kind will change the gut flora, killing helpful bacteria as well as harmful ones.

And the list of leaky gut triggers and causes goes on... Studies are bringing us closer to an understanding of just how sophisticated our gut is. For example, did you know that 90% of our digestion takes place in our small intestine, and NOT in our stomach? Therefore, a leaky gut can have serious health implications if left untreated.

For the purpose of this report, we'll be focusing on the most common digestive problem in the country today -- the **Irritable Bowel Syndrome** or **IBS**. In the next chapter, we'll further examine what fundamentally causes IBS by understanding its symptoms.

## Chapter 3 – Irritable Bowel Syndrome

Irritable Bowel Syndrome or IBS is a chronic gastrointestinal condition, that, from the name suggests, is the irritation of the gastrointestinal (GI) tract. IBS is also considered as a functional gastrointestinal disorder, a condition when there is a dysfunctional connection between the brain and the gut.

There are 3 different types of Irritable Bowel Syndrome, and the particular type of IBS an individual falls under depends on the person's bowel movement patterns and behavior. The 3 forms of IBS are as follows:

#### 1. Constipation-Predominant or IBS with Constipation (C-IBS)

IBS sufferers who fall under this type experience discomfort and bloating due to delayed and infrequent bowel movements. The stool of individuals with C-IBS is described as hard and lumpy.

#### 2. Diarrhea-Predominant or IBS with Diarrhea (D-IBS)

People suffering from IBS with Diarrhea experience sudden sharp stomach pain because of the abrupt and insistent need to defecate. Unlike C-IBS, the stool of people with D-IBS is loose or watery.

## 3. IBS with Alternating Constipation and Diarrhea (A-IBS)

This particular type wherein individuals experience both constipation and diarrhea makes IBS all the more difficult to treat. However, this is, in actuality, a common case among IBS sufferers.

In addition, people suffering from IBS may experience symptoms like digestive problems, abnormal bowel habits, flatulence, gas, upsetting stomach cramps, and oftentimes having mucus present in stool.

IBS is not a life-threatening disease, although the effect on people is long-term and the symptoms could definitely get worse if left untreated. IBS sufferers usually experience recurring episodes of sharp abdominal pains and sudden (or delayed) need for bowel movement. Because of this, they require more frequent, lengthy bathroom breaks that can take a toll on their work, travels, and social life. As a matter of fact, research shows that IBS is the second most common causes of absenteeism in the workplace, with *common cold* topping the list. Reports also show that many people with IBS also experience psychological distress. Conversely, feelings of anxiety and stress are also known triggers to aggravate the symptoms of IBS.

According to the IBS Global Impact Report, IBS is the most common functional gastrointestinal condition worldwide, affecting 10% to 20% people in the United States alone. It is also thought-provoking that women are 2 to 3 times more likely to suffer from IBS, as per most epidemiologic studies. Although there are no known reasons why more females are afflicted with IBS than males, it is also worth looking into.

Now that we know what leaky gut syndrome and irritable bowel syndrome are, let's look at how the leaky gut syndrome is connected to IBS, and how it ultimately causes such functional disorders.

# Chapter 4 - Is Leaky Gut the Root Cause of IBS?

CAM practitioners are pretty sure that leaky gut syndrome exists. What they don't know is what effect that permeability has on one's overall health.

We would all love to be able to go to the doctor, get a definitive diagnosis, and be given a pill and told exactly what to do to cure ourselves. In the case of leaky gut, it is just one sign of many potential underlying medical disorders, one of which is the **Irritable Bowel Syndrome** or **IBS**. In this chapter, we'll discuss what most of our readers ask -- What causes my Irritable Bowel Syndrome?

For years, the real causes of IBS are open to question. Experts and research suggest that IBS are caused by different factors, including the ff:

- Bacterial overgrowth and infections in your digestive tract and intestines
- Digestion problems
- Certain foods and diet
- Genetic predisposition
- Menstrual period
- Stress, anxiety, past trauma

In the previous chapter, we discussed the 3 types of Irritable Bowel Syndrome - the C-IBS, D-IBS, and the A-IBS - and we've learned how the pattern of symptoms differs for each type. It is also important to carefully assess and understand each type individually based on various factors to be able to properly address the issues and evaluate for other conditions. Unfortunately, this is easier said than done.

While some of this might sound like weird science, until more research is done, CAM practitioners and mainstream doctors interested in the theory and in other gastrointestinal disorders have to work with patients to track their symptoms and note their diet, lifestyle, and habits. Nevertheless, even after innumerable research and studies, the cure for IBS is not definite and assured. The complexity of symptoms experienced by IBS patients makes it difficult for

doctors and health professionals to provide treatment to ultimately cure IBS. To do this, it is very crucial that we target the root cause, instead of trying to alleviate each symptom.

While some research suggests that IBS is a *psychosomatic* illness, meaning, the symptoms are just "all in the mind", recent scientific developments have also led to the conclusion that irritable bowel syndrome is, indeed, brought about by increased intestinal permeability due to weakened intestinal barrier function. In our discussion about the leaky gut syndrome earlier, we have mentioned that when a person has an impaired intestinal barrier function, it allows bacteria and other harmful substances to pass through this barrier, and this could lead to inflammation and various diseases.

In a recent study published in the scientific journal of Gastroenterology in 2017, it has been discovered that the intestinal barrier of IBS sufferers allows bacteria to infiltrate the intestinal *flesh* more freely and more rapidly compared to people without IBS. Tested with various triggers, leaky gut or increased intestinal permeability due to inflammation of the intestinal walls in IBS patients leads to diarrhea and constipation, the very symptoms of irritable bowel syndrome.



# Chapter 5 - How to Recover from Irritable Bowel Syndrome

Now that we have learned that increased intestinal permeability due to an impaired intestinal barrier is the root cause of IBS, we could now target our dietary habits, remedies, medications, as well as treatments to relieve leaky gut symptoms and ultimately repair our overall gut health.

Here are a number of steps that can help you recover from IBS. They are:

- 1. RECOGNIZE the symptoms
- 2. REMOVE foods and factors that damage the gut
- 3. REPLACE the damaging foods with healing foods
- 4. REPAIR your leaky gut with specific herbs and supplements
- 5. REBALANCE your gut flora with prebiotics and probiotics and helpful enzymes



## Recognize

Determine whether or not you have leaky gut. Unfortunately, at this point there is no test for it, and indeed, many doctors won't even look for it as an explanation. Trust your knowledge of your own body. If you've been feeling drained, lacking in energy and generally feeling unwell, clearly something is going on. In which case, it's time to recognize there is something wrong with your health, and it's time to track what's going on, and make a change.

Once you've recognized that there is an issue, it's time to try to resolve it. The best place to start is to remove foods that might be causing issues. You might consider fasting for a day or 2 and then reintroduce them one at a time. Working with an allergy specialist can help. So could a nutritionist and a CAM practitioner such as a DO.

There are a number of eating lifestyles that might help with leaky gut:

#### Clean eating

Clean eating is latest buzz phrase among health-conscious consumers and emphasizes eating healthy, whole, unprocessed foods. It's like getting back to basics, eliminating all convenience foods and cooking from scratch. They will cook their food in such a way as to get maximum nutrition from it, such as making soups and stews and steaming the food lightly.

#### Raw diet

In a raw diet, as the name suggests, you don't cook your food in any way. Instead, you consume a lot of vegetables, fruits, seeds and nuts.

### Organic diet

In some cases, people go organic, buying only products which are certified organic because they will not be exposed to pesticides, commercial fertilizer, and other chemicals that might get absorbed into the food and then into the body. Buying organic can be expensive, but shopping in warehouse clubs and growing your own food can help keep costs down.

#### Gluten-free

Many people are going gluten-free. Gluten is a protein found in wheat, rye and barley. It is like the glue that holds the food together. The food industry uses gluten for texture and consistency or 'mouth feel' of food. You will often see it on labels as starch or modified food starch.

## The Anti-inflammatory diet

Another promising way to deal with your leaky gut is to try an anti-inflammatory diet. This has been shown to be effective in relation to medical conditions that manifest with extreme inflammation, such as arthritis. If an anti-inflammatory diet can help arthritis pain, it could well be worth a try for your leaky gut.

There are 2 main principles to an anti-inflammatory diet. The first is to avoid foods believed to cause inflammation. The second is to add foods to your diet that are known to relieve inflammation. Swapping the good foods for the bad can keep you satisfied instead of miserable and deprived. They are tasty and could even help you lose weight.

### Your food journal

Many people with health issues keep a journal of symptoms and actions, so they can see if what they are eating, for example, has any effect on the way they feel. A food journal is a great idea if you think you have a leaky gut. Eat as you normally would for your first couple of days. Then fast for a couple of days, such as doing a juice fast with carrot and other juices, or a soup fast with bone broth or other clear homemade soups. Then start your anti-inflammatory diet, making changes and note down your results for each.

# Chapter 6 - The Top 10 IBS-Trigger Foods and Ingredients

The food you consume and your dietary habits play a major role in your gut health. Research and medical reports suggest that the food and liquid intake affect a person's intestinal barrier integrity and intestinal permeability. In this chapter, we'll learn about the various foods, liquids, and ingredients that could trigger IBS symptoms.

Here are the top 10 foods and ingredients that IBS sufferers should avoid:

## 1. Genetically Modified and Hybrid Foods

GMO and other engineered foods are bred to yield more, become sturdier, and become insect-resistant. This undoubtedly affects their make-up and digestibility. So to do the pesticides that are used on them and the water that helps grow them.

## 2. Salt, commonly listed as sodium on food labels

Salt makes food taste better. It is also used as a cheap preservative, for example, in cold cuts, cheeses, and smoked products such as salmon, bacon and ham. Cold cuts also have other preservatives such as nitrates and nitrites. If you are suffering from irritable bowel syndrome, aim for low sodium foods.

- 3. Standard Cooking Oils such as corn, safflower and vegetable oil
- **4. Red Meat** such as beef and lamb, game meats like bison, boar and venison, and organ meats, such as heart, brains, kidneys and liver (all connected with gout, a very painful form of arthritis)
- **5. Processed Meats/Cold Cuts** such as sliced roast beef or ham, because they are full of salt and chemical preservatives

- **6. Refined Carbohydrates** such as cake, cookies and candies, white bread, white pasta
- **7. Full-fat Dairy Products** such as milk, butter, cream, cottage cheese, yogurt and soft cheeses. Note that most cheese is very high in salt as well, which is used to preserve it.

Due to the food industry in the US and developed nations, many of these items are in the foods we eat without us even realizing them. Labels can be confusing and the manufacturers know all the loopholes. Cow's milk is used for taste and moisture. It is also powered, and therefore, highly concentrated, and it also is used in all sorts of foods as a thickener.

**8. Artificial Sweeteners and Flavorings**, such as aspartame (NutraSweet, Equal), and Monosodium Glutamate (MSG)

Artificial sweeteners are all man-made using chemicals. Stevia is a natural sweetener that is said to be safe and is far sweeter than sugar. In its natural form, it looks, smells, and tastes like alfalfa. Alas, this means it's not that versatile, so it gets heavily processed to make it look like white sugar.

Some nutritionists term processed cane sugar as 'white death' because of its damaging effects on the body. This has led people to turn to what they think are "healthier alternatives", such as honey, agave nectar, and brown rice syrup. Unfortunately, they are mistaken. The body still treats them as sugar. And brown rice syrup is heavily contaminated with arsenic due to the water in the rice paddies where the rice grows being contaminated.

Artificial coloring is yet another source of chemicals in the diet. Just think of the colors of Jell-O, Fruit Loops cereal, or Kool-aid, and you will get an idea of just how convenience foods are full of chemicals, and what America is feeding the younger generation, or even eating themselves.

**9. Alcohol**, due to the inflammatory effects on the body, plus chemicals such as sulfites that are used to preserve and stabilize wine

Alcoholic beverages are created via yeast turning sugar into alcohol. Both the sugar and yeast have been linked to leaky gut.

## 10. Trans fats, that is trans fatty acids.

There are two types of trans fats found in foods: naturally-occurring and artificial trans fats. Naturally-occurring trans fats are produced in the gut of some animals and foods made from these animals, such as milk and meat products.

But the main source is man-made, that is created artificially through the process of adding hydrogen molecules to liquid vegetable oils in order to make them more solid.

Trans fats are commonly labeled partially hydrogenated oils. They are added to convenience foods like cookies, crackers and other snacks to make them shelf-stable so they won't spoil. They also add texture and what is termed mouthfeel to these foods in order to make them tastier.



Now that you know several of the most harmful foods in relation to leaky gut, what can be done to improve your digestion? Let's now look at the top 10 foods that heal your gut.

## Chapter 7 - Top 10 Foods that Heal Your Gut

Now that we are familiar with the foods and ingredients that trigger IBS, let us now explore the top 10 foods that can help heal your gut and alleviate the IBS symptoms like diarrhea and constipation:

- 1. Olive Oil (Extra virgin if you don't mind the stronger taste). It is a fat so it should be used sparingly, but it has no cholesterol. Regular olive oil can be used as a substitute for most recipes calling for butter or margarine.
- 2. Cherries, sweet, and tart (highly recommended if you have arthritis)
- 3. Walnuts and other tree nuts (if you are not allergic)
- 4. Bell peppers, such as green, red and yellow
- 5. Ginger, fresh root or dried great in Indian and Chinese food
- 6. Berries such as blueberries, raspberries and strawberries
- **7. Probiotics** such as yogurt with live cultures and kefir, a cultured and fermented beverage made from dairy
- 8. Salmon and Other Fatty Fish with Omega-3 fatty acids

Salmon is just one fatty fish that is rich in Omega-3 fatty acids, which are said to be heart-healthy and reduce inflammation. Popular fish that are family- and budget friendly include:

- Alaskan Salmon, Wild, not farmed
- Arctic Char
- Atlantic Mackerel
- Bass
- Catfish

- Flounder
- Haddock
- Halibut
- Herring
- Pollock
- Red Snapper
- Sardines
- Sole
- Swordfish
- Trout

Some of these can have more than 1500 mg per 3 ounce serving. The daily allowance is 2,000 for ordinary people, up to 4,000 for athletes. Here's a handy chart of Omega-3 content in mg per 3 ounce serving: <a href="http://www.seafoodhealthfacts.org/seafood-nutrition/healthcare-professionals/omega-3-content-frequently-consumed-seafood-products">http://www.seafoodhealthfacts.org/seafood-nutrition/healthcare-professionals/omega-3-content-frequently-consumed-seafood-products</a>

Other sources like shark, king mackerel and tilefish are rich sources, but tend to be high in mercury and other toxins, so eat sparingly.

Fish can be expensive, so check your local warehouse store. Steer clear of anything with a lot of breading on it or salty sauces.

Not dying about fish? Non-fishy sources of Omega-3s include:

- canola oil
- flaxseed-a tiny, crunchy, nutty seed that adds taste and texture to salads and baked goods
- flaxseed oil
- mustard seeds and greens, with the seeds used in Indian cooking and the greens boiled up like collard greens
- pumpkin seeds
- soybeans (tofu, edamame)
- soybean oil
- spinach
- walnuts
- wheat germ (found in whole grain wheat)

You can also get Omega-3 fatty acid supplements. The recommended daily allowance is 2000mg, so try to get it mainly from the food you eat. There's no need for megadoses. In fact, too much has been linked with heart health issues.

Fish oil supplements can also be expensive and not always very pure. Look for US or Canadian products. Krill oil and salmon oil should be very pure and safe and with the highest levels of Omega-3s.

## 9. Green Leafy Vegetables and Cruciferous Vegetables

All vegetables are good for us because of the fiber and moisture helping us feel full, but there are a couple of classes that are most beneficial, green leafy vegetables and cruciferous vegetables.

### Green leafy vegetables

There's a craze for kale these days as a green leafy food. It's being put into everything from soup to snacks. But there are lots of other options, some with an even better nutritional profile than kale. Add these to your menu too:

- Beet Greens
- Chickory
- Endive
- Iceberg lettuce
- Napa Cabbage
- Parsley
- Radicchio
- Romaine Lettuce
- Swiss Chard
- Spinach

## Cruciferous vegetables

Cruciferous vegetables take their name from the cross shape they tend to grow in. Here are some tasty ones you will find easy to add to your meals. They are also quite filling and full of flavor, so they may help you lose weight.

- Arugula-this has a spicy, peppery taste and is great in salads
- Bok choy (Chinese cabbage, great in stir fries)
- Broccoli
- Broccoli rabe
- Brussels sprouts
- Cabbage
- Cauliflower
- Collard greens
- Daikon (Japanese radish, nice with fish)
- Horseradish, such as in shrimp cocktail sauce
- Kale
- Mustard seeds, such as black mustard seeds (often used in Indian cooking)
- Mustard leaves
- Radish
- Rutabaga (Swedish turnip, or swede, orange in color)
- Turnips, root and greens
- Watercress this has a peppery taste and is great in salads and with egg salad sandwiches

#### 10. Vitamins and Minerals

#### Vitamins and Minerals

Since leaky gut affects the absorption of nutrients from your food, it can start to lead to deficiencies, which can in turn worsen your leaky gut, creating a vicious cycle. When planning your meals, try to focus on natural sources of the following nutrients.

- Vitamin A
- Vitamin B, including B12
- Vitamin C
- Vitamin E
- Magnesium
- Iron
- Zinc

Here are a few suggestions regarding the main sources for each:

#### Vitamin A

Vitamin A is fat soluble, so it can be stored in the body. If you are looking for natural sources, think deep green, or orange foods.

- Butternut squash
- Beef liver
- Cantaloupe
- Carrots
- Kale
- Mangoes
- Pumpkins
- Spinach
- Sweet potatoes

### Vitamin B, including B12

B vitamins are important because they are water-soluble, which means they can't be stored in the body. They are also important if you smoke cigarettes or are under a lot of stress, because these make you use up B vitamins even faster. B can also be tricky because they are an entire family of vitamins from B1 to 12. The most notable ones are

- Vitamin B1 (thiamine)
- Vitamin B3 (niacin)
- Vitamin B5 (pantothenic acid)
- Vitamin B6 (pyridoxine)
- Vitamin B7 (biotin)
- Vitamin B9 (folic acid)
- Vitamin B12 (cobalamins)

#### **B9**

The most well-known is probably folic acid, since it is connected with healthy pregnancies. Main sources of B9 are:

- Asparagus
- Avocado
- Beans, such as black-eyed beans

- Broccoli
- Lentils
- Lettuce
- Mango
- Oranges
- Spinach

#### **B12**

B12 is not well-absorbed when a person suffers from leaky gut.

Mains sources of B12 include:

- Fortified Cereals (but watch out for too much sugar)
- Mackerel
- Milk
- Salmon
- Sardines
- Soy (tofu, edamame)
- Swiss cheese
- Yogurt

It is important to note that excessive amounts of B9 and B12 in pregnancy have recently been linked with a significantly greater risk of autism, so remember, supplement, but don't overdose or treat vitamins as if they are a substitute for a healthy diet.



#### Vitamin C

Vitamin C is also water-soluble, so you need to replenish your supply every day. Fortunately, this is pretty easy to do, with a range of tasty foods. Here are a few natural sources:

- Bell peppers, yellow
- Berries, such as strawberries
- Broccoli
- Guava
- Kale
- Kiwi fruits
- Oranges (try to focus on the fruit, not a lot of juice)
- Papaya
- Peas
- Tomatoes

#### Vitamin E

Vitamin E maintains the walls of your cells and keeps skin healthy. It might contribute to maintaining the gut so it doesn't leak.

- Almonds
- Avocado
- Broccoli
- Kale
- Nuts like peanuts
- Olives
- Parsley
- Papaya
- Pumpkin seeds
- Spinach
- Swiss chard

## Magnesium

Magnesium is an essential mineral used in many bodily function. Top sources include:

- Avocados
- Bananas
- Brown rice
- Dark chocolate
- Low-fat dairy
- Dried figs
- Mackerel

- Pollock
- Pumpkin seeds
- Soy beans
- Spinach

#### Iron

Iron is essential for healthy blood and circulation. Top sources to try include:

- Beans
- Beef or chicken liver
- Broccoli
- Clams
- Halibut
- Haddock
- Lentil
- Oysters
- Pumpkin seeds
- Spinach
- Salmon
- Sardines
- Spinach
- Tofu
- Tuna
- Turkey



#### Zinc

Zinc is required by many tissues and bodily functions. It also works in conjunction with magnesium to keep the brain sharp, which can help those with leaky gut who complain about a brain fog. Main sources include:

- Almonds
- Baked beans
- Beef
- Cashews
- Cheese, Swiss
- Chicken
- Chickpeas
- Crabmeat
- Flounder
- Kidney beans
- Oatmeal
- Peas
- Pork
- Pumpkin seeds
- Yogurt

A good multivitamin can help cover anything missing from the food you eat, but again, don't overdo it, as too many vitamins and minerals can lead to overdose and other health issues. An age-related formula like Centrum Silver for seniors can also help keep you in balance. You can buy many types relatively inexpensively through a warehouse club.

# Chapter 8 - Top 10 Natural Remedies to Repair Gut Lining

There are a number of herbs and supplements that have been suggested as able to help a leaky gut. Many of them focus in healing, and on firming up the gut in order to increase its impermeability. Suggestions include:



#### 1. Aloe Vera

Aloe vera is a healing plant often used to treat cuts, scrapes and burns. It is a spiny plant that can be grown almost anywhere, even in your home. When the spikes are cut, they exude a clear thick liquid/gel which can be applied to the skin. There are a number of drinks available on the market, but watch out for sugar. You can grow it yourself and add the gel to water or fruit juice in order to enhance internal health and healing.

## 2. Butyrate

Butyrate comes from the Greek for butter, so it will give you an idea of the main source of this particular fatty acid that promotes healthy digestion in the small and especially the large intestine.

We all know fiber is supposed to be healthy for us, but it will work best in the right microbiome. You could consume more butter or goat cheese, but they will have an impact on your cholesterol levels. There are supplements, but they are expensive and poorly absorbed.

A better plan is to eat foods that encourage your body's own production of butyrate. These include:

- Dark leafy greens
- Vegetables

Insoluble fiber in grains such as:

- Amaranth
- Buckwheat
- Millet
- Oats
- Quinoa

Low-fat dairy with active cultures can also help. Some experts also suggest coconut water and kefir. Fermented vegetables like kimchi (Korean pickled vegetables) and sauerkraut can also help.

These foods not only boost the microbiome, they decrease inflammation, offering double the benefit for the same number of calories.

## 3. Collagen

Collagen is a building block for cell structures and maintains firmness, such as that of your skin. Therefore, CAM practitioners speculate that collagen could also help improve the impermeability of the intestines. Bone broth is an extremely popular way to get collagen in the food you eat. It's easy to make and full of nutrition. Boil up and then simmer some bones, such as from a rotisserie chicken, with apple cider vinegar, for about 8 hours. Then drink as is or use in soups and stews.

## 4. Ginger

Ginger has been used in ancient medicine for thousands of years. It has warming and healing properties and has been associated with relief of arthritis and other inflammatory disorders. Use the fresh root or the dried and powdered form in a range of Indian and Chinese-style recipes.



#### 5. L-Glutamine

<u>L-glutamine</u> is an important amino acid that the body uses in large amounts. It contributes to health in a number of ways, including:

- → Improves gastrointestinal health because it is a vital nutrient that rebuilds and repairs
- → Helps heal ulcers and leaky gut by boosting impermeability
- → Serves as an essential neurotransmitter within the brain that helps with memory, focus and concentration, thus combatting 'memory fog', which often accompanies autoimmune disorders and arthritic conditions like fibromyalgia
- → Improves IBS and diarrhea by balancing mucus production, which results in healthy bowel movements
- → Promotes muscle growth and decreases muscle wastage, which happens as we age
- → Helps maintain endurance during workouts

- → Boosts metabolism
- → Helps detoxify the body all the way down to the cellular level
- → Improves athletic performance and recovery from endurance exercise
- → Cuts cravings for sugar and for alcoholic beverages
- → Improves blood sugar levels, important in relation to metabolic syndrome, pre-diabetes and diabetes

Natural sources include meat and poultry. Vegetable sources include:

- Beets
- Brussels sprouts
- Cabbage
- Carrots
- Kale
- Lentils, peas, beans and legumes
- Soybeans, tofu
- Spinach

Other main sources of L-glutamine include:

- Eggs, especially the whites
- Whole grains including oats, wheat germ and products made from whole wheat, quinoa, millet and brown rice.
- Nuts and nut butters, such as peanuts and peanut butter, almonds, pistachios, walnuts
- Seeds, such as pumpkin seeds and sunflower seeds

In most cases, people get more than enough L-glutamine via their ordinary diet. However, supplements are available and are recommended for people who have had surgery, especially gastrointestinal surgery. They are also given to people with extensive traumatic injuries and to cancer

patients. High-endurance athletes will also use amino acid supplements that include L-glutamine.

If you are going to use a supplement, be sure to read the instructions and contraindications. Those with cirrhosis, liver disorders, epilepsy, and manic disorder should avoid it.

#### 6. Licorice Root

<u>Licorice root</u>, which gives its flavor to black licorice, helps balance cortisol levels in the body and improves acid production in the stomach. It is also said to support the maintenance of the mucosal lining of the stomach. This herb is especially beneficial if someone's leaky gut is being caused by emotional stress. It is also used to treat diabetes.

However, it is important to note that licorice is a powerful herb which can have side effects even in small amounts. If you have heart health issues, high blood pressure, are on blood thinners, have kidney or liver issues, or are planning to have surgery, taking licorice can be risky.

### 7. Omega-3s



As we discussed above, Omega-3s are anti-inflammatory and can soothe the gut. Oil also helps form an impermeable barrier, which can prevent leakage.

Omega-3s should not be taken if you have heart issues or are allergic to fish or shellfish. If you have the following health issues, you should avoid fish oil supplements:

- Bipolar disorder
- Depression
- Diabetes

- Heart issues
- High blood pressure
- HIV/AIDS
- Immune system disorders
- Liver disease

#### 8. Quercetin

Quercetin is a plant pigment (flavonoid) which is found in many plants and foods, including:

- Apples
- Berries
- Buckwheat
- Green tea
- Gingko biloba
- St. John's Wort
- Onions
- Red wine

It is used for heart disease, diabetes, hay fever, peptic ulcer, inflammation, asthma, gout, viral infections, and chronic fatigue syndrome (CFS). Quercetin is also used to increase endurance and improve athletic performance. Large doses can cause kidney damage.

#### 9. Turmeric

Turmeric is a bright yellow spice that has been used in Ayurvedic (traditional Indian) medicine for about 5,000 years. Turmeric is tasty, and adds an interested flavor to Indian foods and rice dishes. It can be used in its fresh form, as a root, or dried and powdered.

## 10. Enzyme-Rich Foods

Digestive enzymes and organic salts can also promote healthy digestion.

## Digestive enzymes

There are eight primary digestive enzymes, each designed to help break down different types of food:

1. Protease: Digests protein

2. Amylase: Digests carbohydrates

3. Lipase: Digests fats

4. Cellulase: Breaks down fiber

5. Maltase: Converts complex sugars from whole grains into glucose

6. Lactase: Digests milk sugar (lactose) in dairy products

7. Phytase: Helps with overall digestion, especially in extracting B vitamins

8. Sucrase: Digesting most sugars

Your saliva is mainly made up of amylase. As the food passes through your system, protein is broken down by protease. Then the food passes to the small intestine, where the other enzymes do the rest.

In a normally functioning small intestine, the nutrients from your food are absorbed into your bloodstream through millions of tiny villi in the wall of your gut. Think of them as the pile of a shag carpet.

However, in a leaky gut with low levels of enzymes, you will experience various symptoms, such as gas, bloating, acid reflux and more. Even if you do not have a leaky gut, your digestive enzyme production diminishes with age. This being the case, boosting your enzyme levels is a good idea and can also take the burden off your leaky gut.



Enzyme-rich foods include:

Avocado

- Bee pollen
- Coconut oil
- Dairy products with live cultures
- Extra virgin olive oil
- Grapes
- Kiwi
- Mango
- Papaya
- Pineapple

If you've ever tried to make a Jell-O salad with kiwi or pineapple, you will know it doesn't work. This is because the high level of enzymes break down or basically start to digest the gelatin before it ever sets, so you can see how powerful these foods can be.

Other suggestions for boosting your enzymes are to:

- Eat a range of raw fruits and vegetables
- Don't overeat
- Chew slowly and thoroughly
- Avoid chewing gum, which stimulates enzyme production because it thinks the body is getting food, but then they go to waste

## **Organic Salts**

Organic salts, or tissue salts, are vital minerals that perform many functions in the body. They are commonly referred to as electrolytes and need to be replenished regularly for the body to perform all of its essential functions.

Organic salts include calcium, sodium, potassium, magnesium and phosphorous, on their own and in various combinations with one another. Phosphorous helps repair cells and tissues and could be very beneficial for leaky gut syndrome. A homeopath can help you with organic salts, but always try to get them through the food you eat first, rather than supplements.

If your stomach is very acidic, try:

- Apples
- Apricots
- Asparagus
- Carrots
- Grapes
- Peaches
- Raspberries
- Strawberries

If you often get cramps or heartburn, try:

- Bananas
- Figs
- Green leafy vegetables
- Lentils
- Oranges
- Walnuts

If you tend to have a nervous stomach, try eating more:

- Apples
- Broccoli
- Cauliflower
- Dates
- Garlic
- Guavas
- Lemons
- Oats
- Olives
- Onions

## **Hydrochloric Acid Supplements**

The stomach produces hydrochloric acid to help digest food and also kill many potentially harmful bugs that could be in it. However, if acid levels aren't strong enough, it will be harder for the food to break down, leading to poor absorption of nutrients. It can also mean delayed emptying of the

stomach, which can lead to a range of uncomfortable digestive symptoms.

If you think you might have a low level of hydrochloric acid, avoid drinking liquids with your meals. If that still doesn't work, try a supplement. Apple cider vinegar is commonly used to help lose weight but it can also aid digestion and relieve arthritis symptoms.

If you still don't seem to have enough stomach acid, there are a number of supplements available on the market that you can take with each meal. Finding the optimal dose can take some time and experimentation. You can take it one pill at a time until you get to the point where you start to feel like you have heartburn. In this case, take one less pill and track how you feel in your food diary.

#### Pure water

We should drink 8 eight-ounce glasses for fresh water every day. The trouble with this is that not all water is created equal. Tap water has a variety of minerals in it depending on where you live. Some water is 'hard', with a great deal of minerality, while other water is termed soft.

In addition, tap is often treated with chlorine and fluoride, the former to prevent bacteria in the water, and the latter added to improve dental health. Both of these minerals have been suggested as possible causes of leaky gut, malabsorption of nutrients, and damage to the metabolism. Scientists who compared countries which did not fluoridate the water with those which did had far fewer obese people and ones suffering from digestive disorders.

Plus, if you have a leaky gut, drinking a lot of liquid will only increase the chance of leakage. Having said that, water is your best beverage of choice compared to soda, fruit juice, or other sugary drinks, and is definitely better for you than energy drinks and alcohol.

The trouble with bottled water is that some of it can be even less pure than what's already coming out of your tap, plus you have to lug it back and forth from the market. Invest in a filter like Pur that you put on your tap, or a couple of filtering jugs. Change the filters regularly according to the instructions. When

used correctly, the filters can remove nearly 100% of the impurities in the water.

Save large 2-liter bottles and keep a supply of filtered water ready any time you need it. Buy a stainless steel water bottle for each member of the family so they can always have filtered water with them. Drink a little throughout the day to stay hydrated. Don't drink too much as one time, especially before or during a meal.

For people trying to lose weight who fill up on water to try to feel full so they will eat less, do it 2 hours after a meal so you don't interfere with your digestion.

Drinking before bedtime can be problematic because you may have to wake up several times in the middle of the night to urinate, so judge your consumption accordingly. If you have to urinate often at night, consider avoiding liquids after 9pm and try bladder training.

Water is an essential part of blood, filtration of the blood to remove toxins, and the digestive process, but impurities could be contribution to your leaky gut. Start drinking more water which you have filtered and note any changes in your symptoms in your food journal.

# Chapter 9 - Other Ways to Ease the Symptoms of IBS

### **Reducing stress**

One other really key aspect to improving your digestive health is to reduce strategy in your life. There are a number of ways to relieve stress and improve your health, body, mind and spirit. Here are 15 top ones to try:

- 1. **Set priorities.** Focus on what's important and let go of the other stuff.
- 2. **Identify tasks that you can share or delegate**, then ask for help. Don't try to do everything yourself.
- 3. **Get organized.** Disorder can eat up time and make things tough to remember.
- 4. **Don't try to multitask.** There's no such things. It is just your brain switching back and forth between tasks. This leads to a lot of stress. Things take twice as long to do in the end compared to just doing one thing at a time from start to finish.
- 5. **Set short-term goals you can reach.** Then reward yourself when you meet them with something fun and relaxing.
- 6. Learn how to say no gracefully but firmly so you don't overextend yourself. Only agree to obligations that align with your priorities and inner truth.
- 7. **Maintain a positive attitude.** Choose to look for the good in others and yourself. Choose to make the best of any challenge you face rather than looking on the dark side.
- 8. **Avoid perfectionism.** Remember, things don't have to be perfect. Sometimes "good enough" is just fine.

- 9. Set aside some time, even 5 to 10 minutes, for yourself each day, to just sit and do nothing, or do something you love.
- 10. Laugh more. Look for humor in your everyday life, or watch a funny movie.
- 11. Listen to music. Choose tunes that relax or make you feel uplifted.
- 12. **Get things off your chest**. Talk to a counselor or a friend.
- 13. **Get regular exercise.** Find something you like doing that you can work into your schedule.
- 14. **Eat well**. You can't put in your best performance if you're running on an empty fuel tank.
- 15. Take a time-out for meditation, visualization, mindfulness, deep breathing, yoga, tai chi, and other stress-relief techniques.



#### Meditation

Meditation is a practice in which an individual trains their mind, or induces a different mode of consciousness, with the goal of either achieving a particular benefit, or clearing their mind from a lot of the 'clutter' that can prevent them from living their best life..

There are different forms of meditation. Some attempt to empty the mind of all conscious thought. Other forms encourage contemplation of a particular topic, such as the nature of human life. Still others encourage visualization.

## Visualization / Guided Imagery

Visualization means to summon up a mental image, to see it in the 'mind's eye', as the common phrase goes. Research has shown numerous benefits to visualization, also referred to as guided imagery. Benefits include controlling pain, getting ready for athletic or other kinds of performances, relieving stress and anxiety, and more. Guided imagery can transform a negative mindset to a positive one, and therefore alter mood and perceptions.

Meditation and visualization are therefore two methods of training the mind to relieve stress and can be done separately or together.

#### **Mindfulness**

Mindfulness is a form of awareness in which you focus on the present moment. It can be used in meditation and visualization.

Most people live in the past, hung up on things that happened to them that they feel they can't move beyond. They also live in the future a lot of the time, making plans for their careers, families and so on, even though no person has any guarantee that they will even be alive tomorrow. As the saying goes, everyone dies with a to-do list.

Mindfulness enables you to slow down and live in the present for a short time. It also helps improve your focus so you can be present in each moment, such as when you are spending time with loved one. If you're washing the dishes, focus on the task as if it is the most important thing in the world. If you're spending time with loved ones, be mindful, and you will see that 30 minutes together can be more meaningful than hours in the same room not connecting with each other.

## **Deep Breathing**

Deep breathing is one way to relax and slow down the body, or energize it. Short breaths when you are stressed make you ready for 'fight or flight'. Long, deep breaths help you become steadier and give you time to make a thoughtful decision rather than react on the spur of the moment.

It can be used on its own, or as a preliminary to meditation and/or visualization. Deep breathing is also part of yoga, which can be a great stress reliever.

### Yoga

Yoga is a combination of meditation, visual imagery, deep breathing and physical movement and postures. It also teaches you to be mindful, such as of your body. All forms of exercise can relieve stress. Yoga uses your own body weight to tone and trim. It increases flexibility, lowers blood pressure, and promotes better sleep.

#### Tai chi

Tai chi is a martial art which is low impact and slow and meditative. It is great for improving the circulation, balance, strength and flexibility.

### **Quality Sleep**

One final stress-relief technique is to aim for high-quality sleep. Every adult should have 8 to 9 hours of sleep per night. Quality sleep also means Rapid Eye Movement (REM) sleep, a deep form of sleep that helps you rest and rejuvenate more efficiently.

A balanced diet, stress relief, exercise and a good night's sleep are all foundations of a healthy lifestyle and disease prevention. They can also help strengthen the digestive system and maintain the permeability of the gut.

One other important aspect is to maintain proper nutrition and regulate your eating habits. Treat your food as fuel. Crash diets, anorexia and bulimia can all have serious consequences, just like overeating.

## Conclusion

Leaky gut has only recently been started to be recognized by mainstream doctors, in the same that they ignored Lyme disease and fibromyalgia for decades until there was enough medical evidence to demonstrate that these symptoms were not all in people's minds, but were actually a sign of a genuine medical condition.

Given the complexity of our gut and our digestive system, it is not surprising that conditions such as Irritable Bowel Syndrome or IBS are tricky to diagnose, let alone to treat. Through decades of research, clinical trials and experiments, and recent developments in the field of IBS, it has been concluded that leaky gut or increased intestinal permeability due to dysfunctional intestinal barrier is the root cause of IBS.

Now that we know what ultimately causes IBS, this could pave the way for research advances to further understand the complex human digestive system, come up with additional insights on the varying and unpredictable pattern of symptoms, and finally, to prevent and cure IBS once and for all.

In the meantime, what we can do is to manage the symptoms right away before they could lead to serious and more severe diseases. As mentioned in the previous chapters, targeting the root cause would serve as a holistic approach that could relieve a number of symptoms. If you've been struggling with a range of digestive issues and unexplained symptoms, start a food journal. Then review what you've learned in this guide and start putting it into practice. Note down the foods you've added to your menus, and the ones you've removed. Try an anti-inflammatory diet and healing foods. Then see what a difference they make to your health.

To your best self!

## Resources

#### Leaky Gut Syndrome

http://www.webmd.com/digestive-disorders/features/leaky-gut-syndrome

#### Leaky Gut Syndrome

http://www.nhs.uk/conditions/leaky-gut-syndrome/Pages/Introduction.aspx

#### Irritable Bowel Syndrom

https://www.physiology.org/doi/full/10.1152/ajpgi.00155.2012

#### Fish Oil Side Effects and Interactions

http://www.webmd.com/vitamins-supplements/ingredientmono-993-FISH+OIL.aspx?activeIngredientId=993&activeIngredientName=FISH+OIL&source=2

#### L-Glutamine

http://www.webmd.com/vitamins-supplements/ingredientmono-878-glutamine.aspx?activeingredientid=878&

#### Quercetin

http://www.webmd.com/vitamins-supplements/ingredientmono-294-QUERCETIN.aspx?activeIngredientId=294&activeIngredientName=QUERCETIN&source=2

#### Butyrate

http://bodyecology.com/articles/add-these-fiber-rich-foods-to-your-diet-to-fight-in flammation

#### Licorice Root

http://www.webmd.com/vitamins-supplements/ingredientmono-881-Licorice+root+ LICORICE.aspx?activeIngredientId=881&activeIngredientName=Licorice+root+(LICORI CE)&source=2