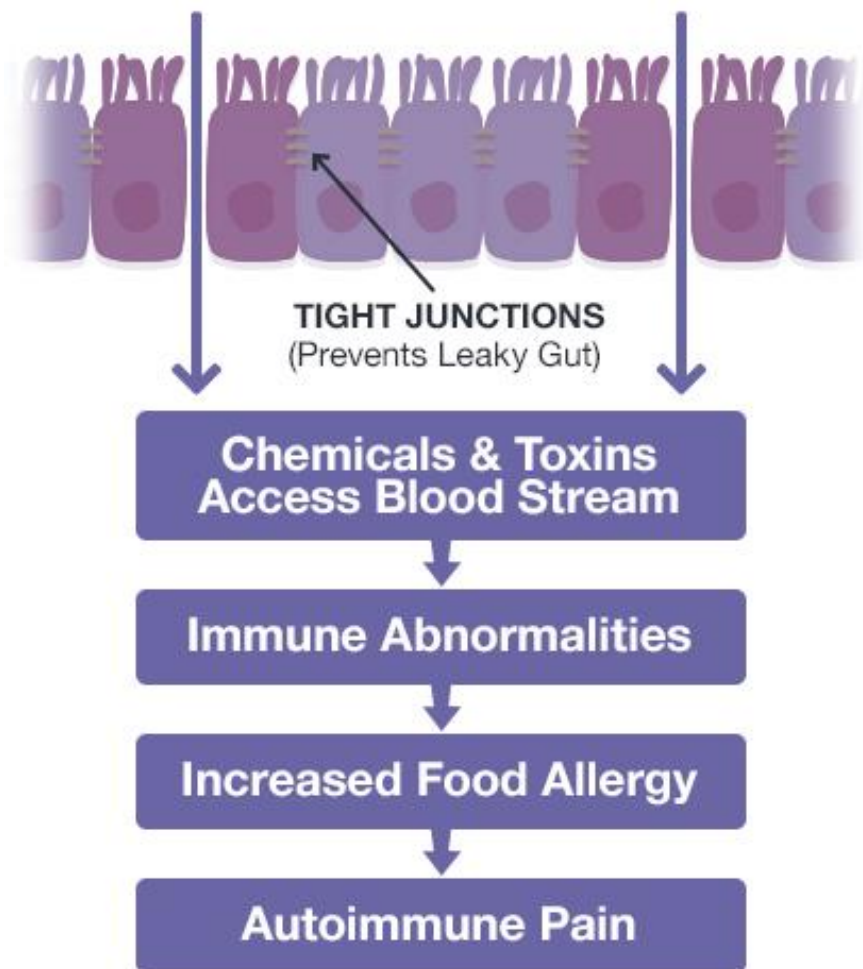


# Dr. Osborne's Leaky Gut Solutions Guide



# Leaky Gut Solutions Guide

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## Introduction

Welcome and congratulations on your first step to learning about *leaky* gut, gluten and healing and recovering from damage already done.

In this book, I talk about leaky gut, gluten, good and bad foods, dangerous items to avoid, supplements, and how to recover and heal. This is such a pervasive and prevalent problem in our society today, so I really want you to get a great understanding of what leaky gut is, how it can be caused, and what you can do to fix it and prevent it in the future.

Leaky gut (AKA – intestinal hyper-permeability) is one of the most common problems contributing to persistent autoimmune pain and disease.

Intestinal hyper permeability happens when tight junctions in the gut, which basically control what passes through the lining of the small intestine do not work properly. As a result this could allow bad material to leak into the bloodstream.

Leaky gut is somewhat of a medical mystery to many doctors and often times goes undiagnosed or misdiagnosed. This is why it is extremely important to be properly educated on gluten and leaky gut. It's important to work with a doctor that is familiar with the condition, the tests and proper recovery.

You will gain an in depth understanding of all this within the book.

It is my hope to educate you enough and get you on your way to healing.

Enjoy,

Dr. Peter Osborne

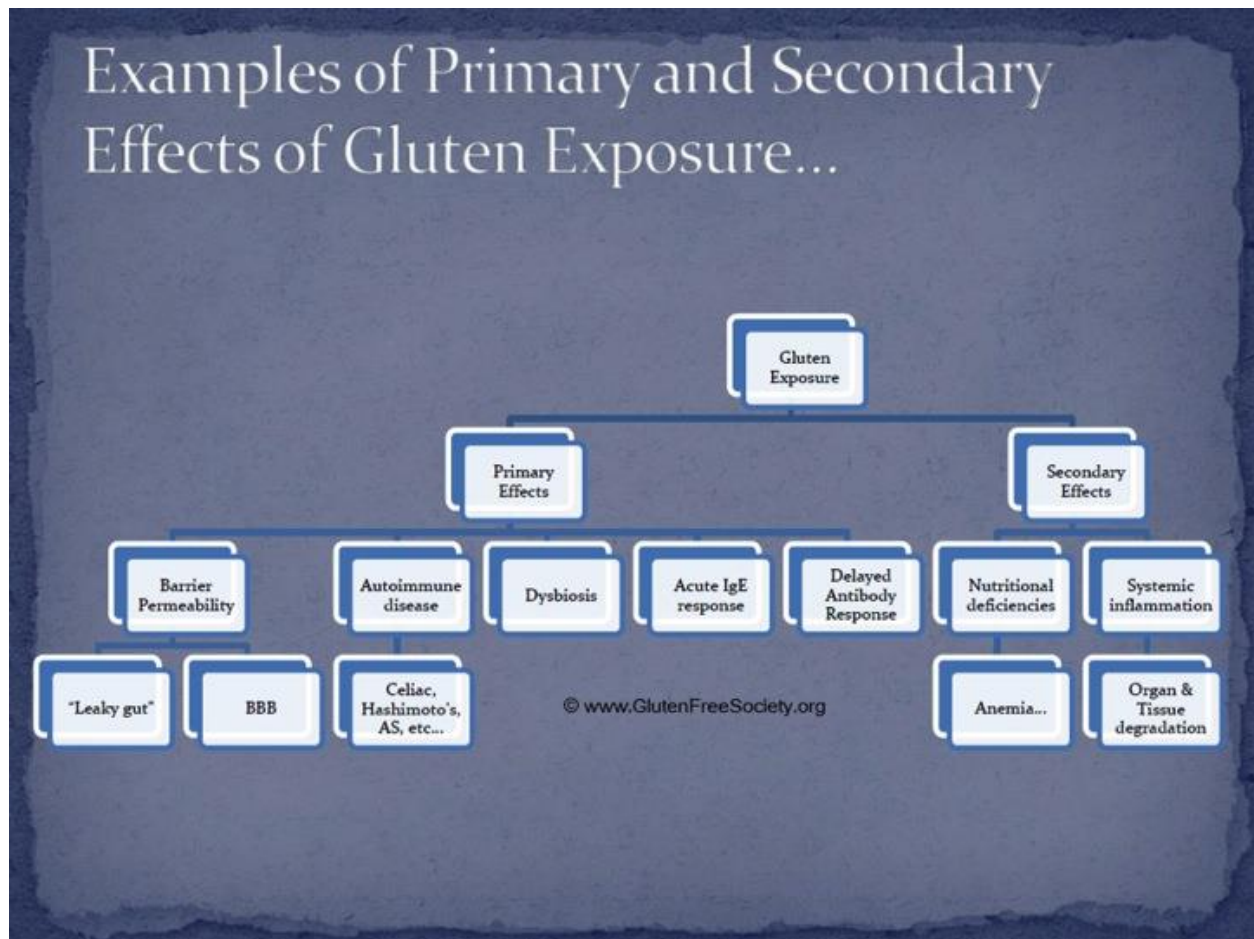
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## Primary and Secondary Effects of Gluten Exposure

Let's begin with a little bit of information about gluten. So many people are familiar with gluten and gluten sensitivity, but so few people are really aware of how detrimental it can be and of all the different types and ways that gluten can create an impact or an effect on our health.

In the diagram below you are looking at gluten exposure and what's referred to as primary effects and secondary effects.



The primary effects mean direct effects as a result of gluten exposure. As gluten comes in, these effects are created directly as a result of gluten damage. As you can see, barrier permeability, meaning leaky gut or intestinal hyper permeability, or permeability of the blood-brain barrier (BBB) is one aspect of a primary impact or effect of gluten.

But there are also many other aspects such as **Auto Immune Diseases**. You can get direct auto immune diseases within the gut like **Celiac Disease**,

**Crohn's** and **Ulcerative Colitis** as an impact of gluten exposure.

**Hashimoto's**, which is thyroid disease, is another form of auto immune diseases highly associated with gluten sensitivity.

Then there's the effect of gluten on the micro biome. This term here, **dysbiosis**, refers to abnormal bacterial growth within the gut. This toxic bacteria literally infest the intestinal tract causing digestion to be compromised. There are also some people who have an acute allergic response to gluten, an acute IgE response, which can create intestinal pain and diarrhea, some of the classic allergy based symptoms. (Note: IgE is an antibody produced by the immune system usually found in the lungs, skin and mucous membranes.)

The last primary effect is called a **delayed antibody response**. These are the things that can occur and accumulate over time. It's like a slow smoldering fire that does damage to the body over time. It's not acute in the sense that we even recognize the damage happening, but what does happen is this subtle underlying damage over time builds and builds into a hyper inflammatory state that can trigger all types of tissue problems.

Those are all primary effects that gluten can do directly to an individual. But it doesn't stop at primary effects. Gluten exposure can cause secondary effects as well. In other words, when these primary things go wrong then there are some other consequences that may follow.

One of the main secondary effects that we see is **nutritional deficiencies**. A lot of that has to do with the changes in the gut and can lead to diseases like **anemia**. Iron deficiency, as an example, can create anemia. Vitamin [B12 deficiency](#), as an example, can create a different kind of anemia. There are other nutritional deficiencies that can be created as well, but this is one example.

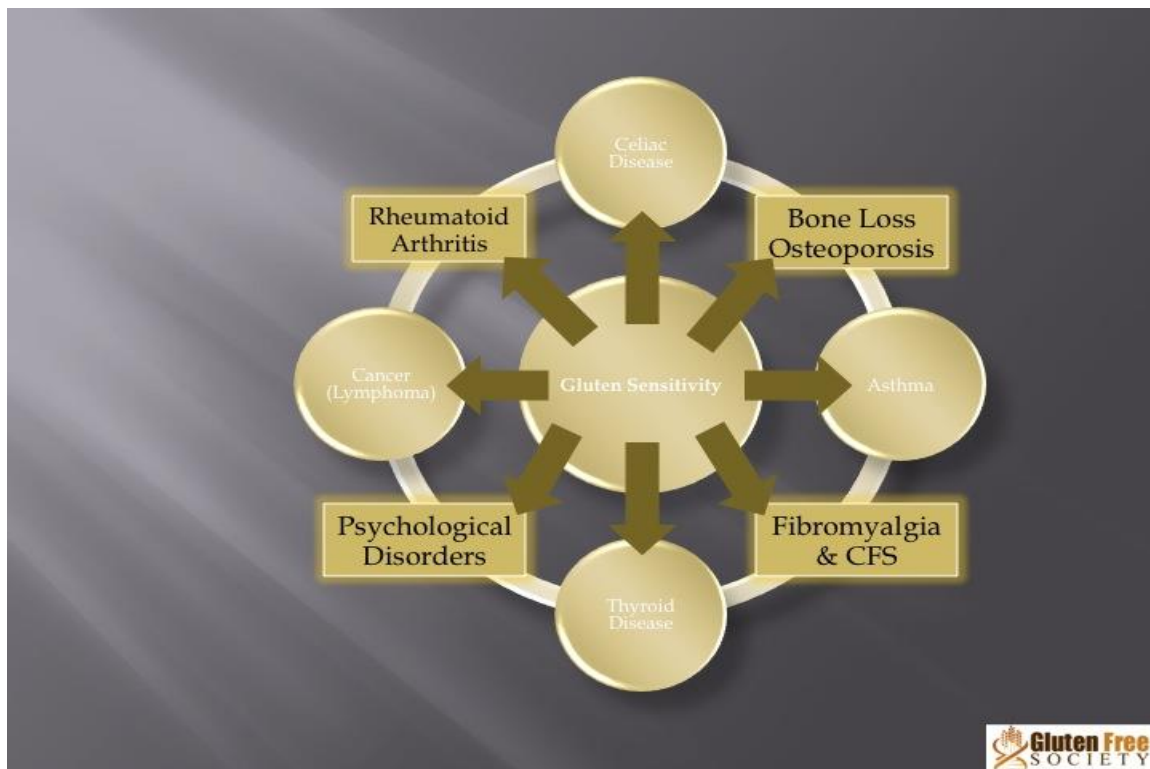
Then we have the **systemic inflammation impact**. As a secondary effect when gluten damages the barrier and allows for chemicals to leak into the bloodstream, the immune system will then begin the attack on those chemicals creating an inflammation that has access to your bloodstream and subsequently can create organ and tissue degradation and damage.

It's important to understand that gluten can play a huge role in a big piece of this leaky gut puzzle. If you're currently not sure whether to go gluten free, if you're not following a gluten free diet or even if you're kind of

following a gluten free diet, I want you to understand that gluten plays a huge role in the development of leaky gut. It's one of the primary causative factors.

A lot of people think of gluten sensitivity as this disease state. In actuality, gluten sensitivity is not a disease at all. Gluten sensitivity is a genetic state. In other words, a person either has genetic markers for gluten sensitivity or they don't. Those with gluten sensitive genes will react to gluten. Those different kinds of reactions we just discussed in the primary and secondary effects are just some of the possible outcomes of gluten exposure.

In other words, gluten sensitivity is not a disease, but when people get exposed to gluten it can cause diseases such as: Celiac Disease, bone loss, asthma, Fibromyalgia, chronic fatigue, thyroid disease, psychological diseases like schizophrenia and bipolar, cancer (specifically lymphomas), as well as joint pain like rheumatoid arthritis and Lupus. A lot of different conditions have been linked or associated, or have been shown to be caused directly as a result of gluten sensitivity.



## Terminology and Definitions

As we continue to move forward with understanding what a leaky gut is about I think it's also important that you understand some fundamental differences in terminology and definitions.

Today, we hear a lot about gluten and then we typically hear the word allergy follow. We hear different terms like gluten allergy, gluten intolerance, or sometimes we hear gluten sensitivity. I want to define what these things are.

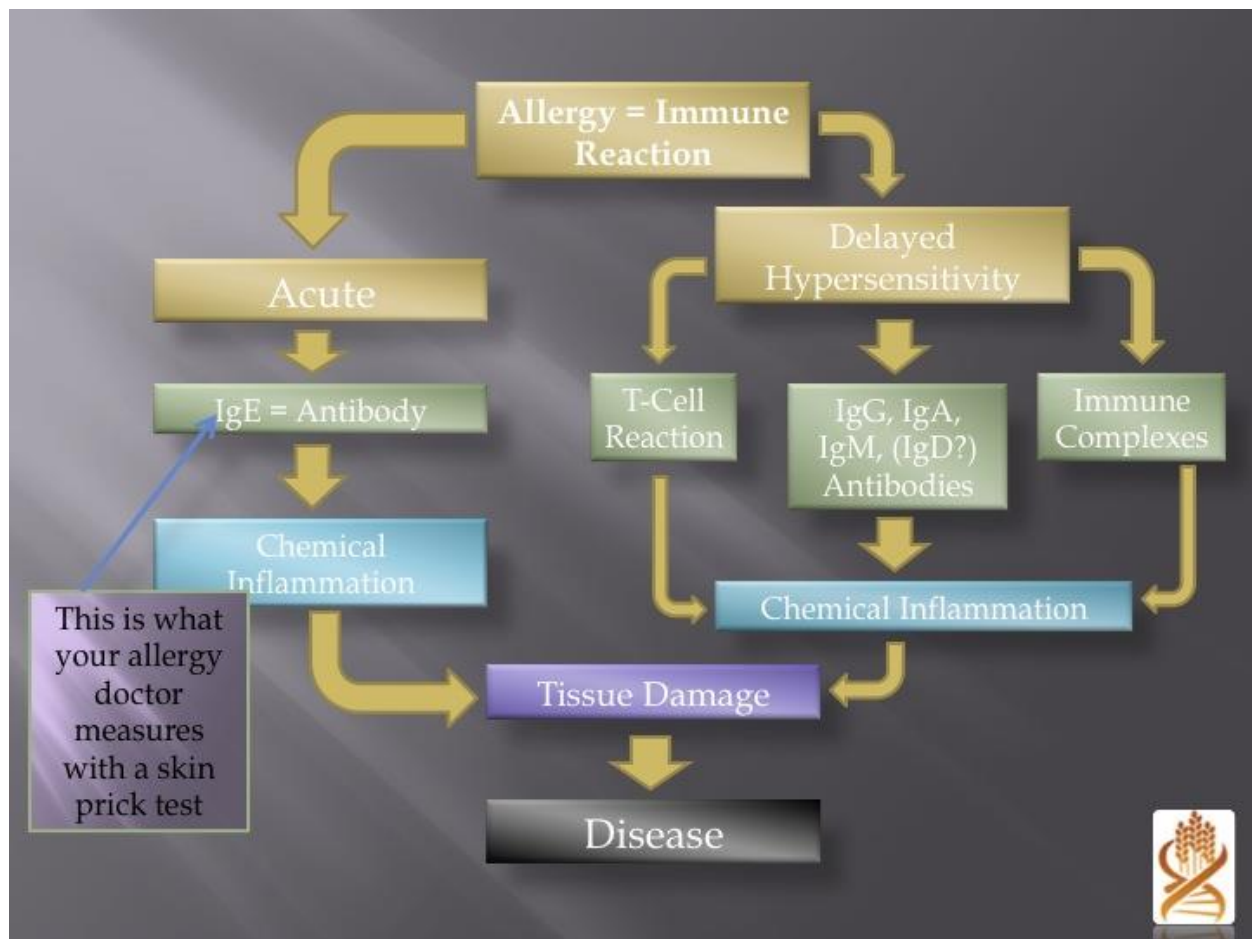
### *Allergies – Immune Reaction and Testing*

An allergy is a type of immune reaction. Traditionally you have two kinds of main allergies. There's an acute allergy, which is this IgE antibody response. If you go to the allergist and they do a skin prick test that's typically what is being measured. If you've had this type of testing done, understand that your doctor was testing for acute allergies. Acute allergies lead to chemical inflammation or can lead to a systemic chemical inflammation that causes tissue damage. Some of the more common symptoms here would be breaking out in hives, your lips swelling, your throat constricting, or having watery, teary, itchy eyes, etcetera. Those are acute symptoms.

Then we have this whole other side of the equation as it relates to allergies. There is something called, delayed hyper sensitivity response. Understand that these are time differentials. An acute allergy occurs generally within 30 minutes of exposure, whereas a delayed hyper sensitivity can occur anywhere from three hours to three weeks after exposure, so they can be a lot harder to identify.

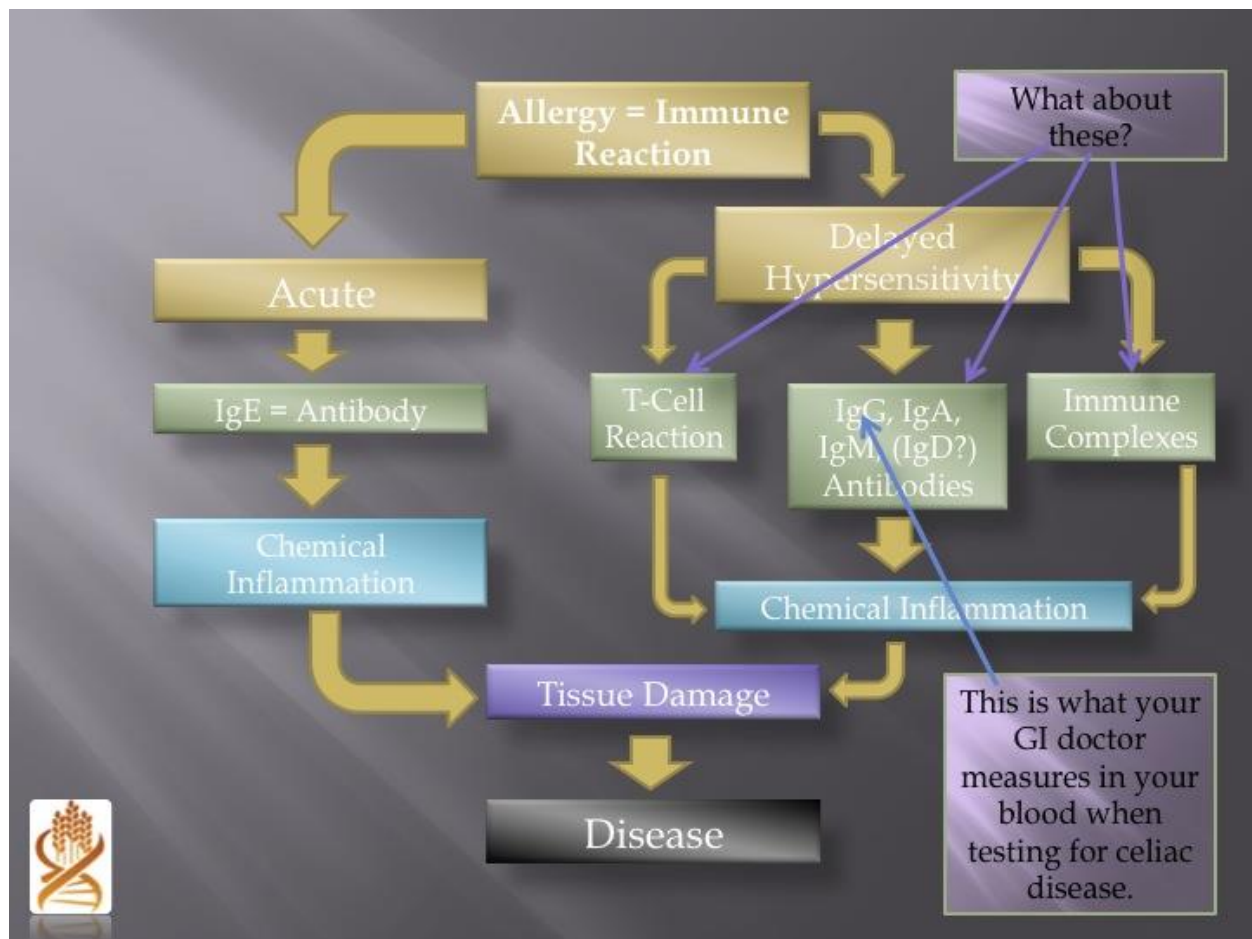
If you've ever been tested for Celiac Disease, you've actually only been tested for that one IgG type of reaction. Typically they're measuring something called an antibody to gliadin, which is a type of gluten. So they're measuring an IgG antibody to alpha gliadin. That's what the Celiac tests measure. Understand that if you have been tested for Celiac Disease in that way and tested negative in your blood, it doesn't necessarily mean you don't have gluten sensitivity. It just means you don't have the particular antibody to the particular type of gluten found in wheat, barley, and rye. That's all that means.





There are more than 1,000 different forms of gluten. If we only measure one potential way that you can react to one type of gluten, we're not really being comprehensive.

I share all of this because these other things that I'm pointing out now are items that are very rarely tested. Not many doctors are actually measuring IgA and IgM and IgD. Not very many doctors are measuring immune complex reactions or T-cell reactions. This is one of the reasons why in the laboratory so many people will get tested for gluten and the results come back negative, yet they go on a gluten free diet in the meantime and start to feel better. Some people automatically think they feel better because the test results are negative but in reality the test was either wrong or not accurate enough and they truly have a gluten sensitivity and that is why the diet is working and they feel better.



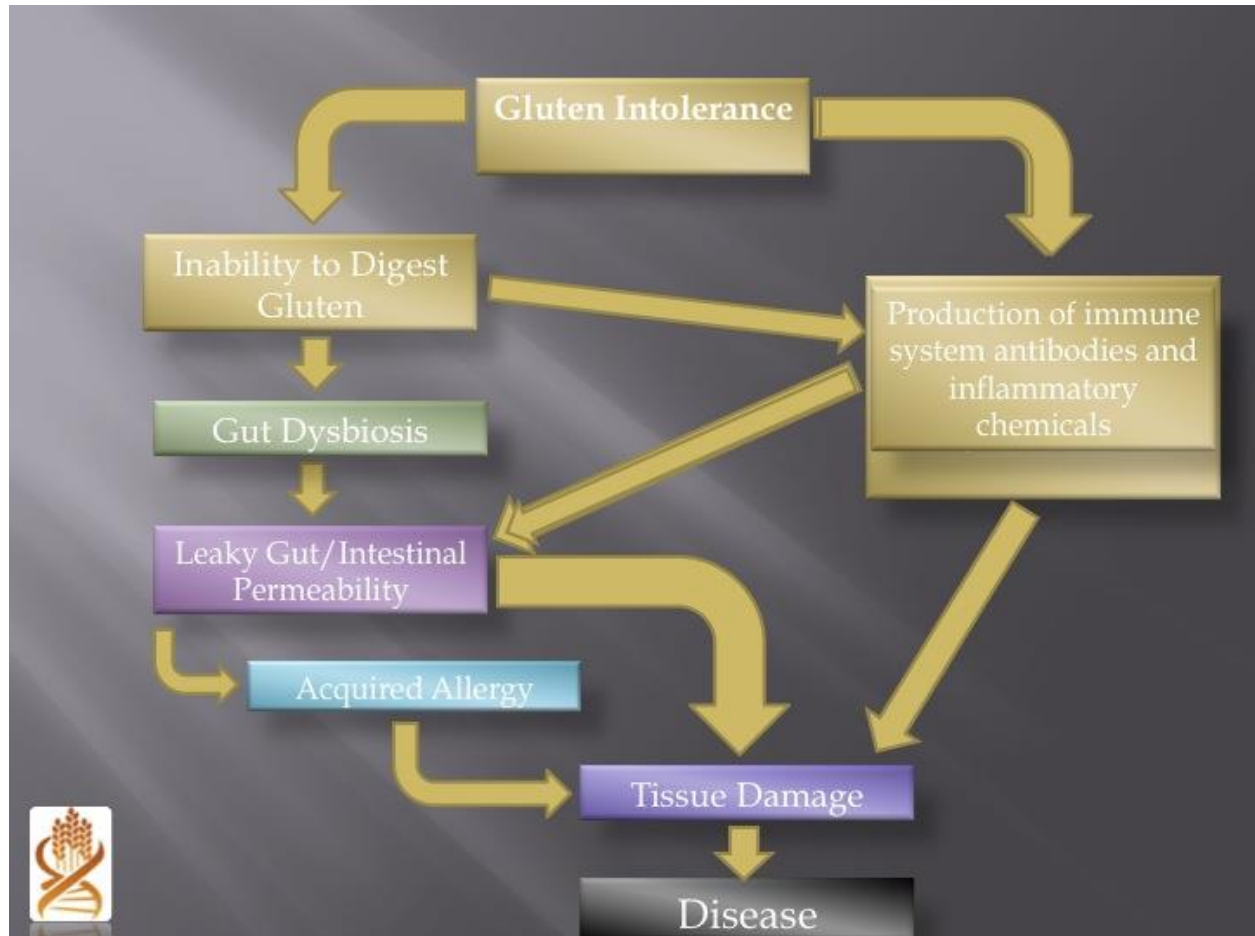
### *Gluten Intolerance*

We have this other terminology of gluten intolerance and I think it's important to define what intolerance actually means. An intolerance means that you don't digest something. An intolerance is not an immune reaction. Remember, allergy is an immune reaction. Very specifically, an intolerance is an inability to digest.

Most people are familiar with lactose intolerance. Lactose is a type of sugar in dairy that can be very difficult to digest. Gluten intolerance you want to think of much in the same way. What happens here is that inability to digest gluten leads to a fermentation process within the gut causing changes in gut bacteria, but also can lead to a leaky gut or an intestinal permeability.

Gluten intolerance in and of itself can cause a leaky gut, but leaky gut can be a secondary condition caused by having gut dysbiosis, which I explained earlier is bad bacteria infesting the intestinal tract.

Leaky gut can also be developed by gluten dismantling a very important protein that seals the gut lining called zonulin. When gluten dismantles these tight junctions it can also create this permeability. When this happens the gut is permeable and you acquire allergies.



I want to reiterate about the onset of allergies especially later in life. You don't necessarily have to be born with a lot of food allergies, but if you develop a leaky gut then you can start to acquire a number of different food allergies. It's important to understand that an acquired allergy can develop as a result of a leaky gut. The more problems we have with a permeable gut the more allergies we develop over time, and the more allergic we become.

One of the classic stories I hear in my clinic is, "Dr. Osborne, I've been eating these foods my whole life and it was only three years ago that I actually started to develop all of these food allergies. Why is that?" One of the reasons why has to do with the development of leaky gut. Remember,

our guts are strong, our guts are resilient, and they don't just become leaky all of a sudden. They become leaky because of years of damage.

Leaky gut can be caused by a number of different things and gluten is part of that group. Years of damage can contribute to a leaky gut so much so that you can hit a threshold where the gut breaks open and start to develop allergies later in life as opposed to developing them earlier in life. Remember that allergies create tissue damage, and if they're there long enough subsequently they create disease.

There's one other kind of complex reaction that can occur with this process as well. That has to do with the gluten intolerance leading to an inability to digest the gluten, which then leads to the production of immune system antibodies and inflammatory chemicals, and as a result can cause a leaky gut. They can also independently cause tissue damage.

### *Perspective*

Now let's talk a little bit about perspective. Many people struggle with leaky gut, so let's start from the premise of perspective. That is disease. Remember what disease is; it's the accumulation of years of damage. You don't just wake up one day perfectly healthy and then the next day and have a disease. You develop chronic degenerative diseases and auto immune diseases over an accumulation of years of damage.

This damage is a conglomeration of environmental bludgeoning – environment, meaning chemicals in the environment, pesticides, eating the wrong foods, not sleeping well enough, not exercising, and being under too much stress. These are all environmental processes that can weaken our body's immune system and that can weaken our body's resources.

Once this damage has happened don't think it heals over night. Repairing years of damage takes time. Many people are impatient with leaky gut and want it fixed in a month and some are so impatient they want it in a week. This just isn't going to happen. Now, you can see some changes within the first month of the healing process. Some of you may have already gone gluten free and you're still suffering with this leaky gut issue. Removing gluten does not repair the damage. It only stops one of the many poisons that are entering the body.

It doesn't repair the damage. It only stops the persistent damage that is ongoing. It's important to understand this, so I'm going to use an analogy to help with the understanding.

If you roll over a nail and pop your tire you can remove the nail from the tire but the damage to the tire is still done. Removing the nail doesn't repair your tire, just like removing gluten doesn't repair your leaky gut. Although stopping the poison is certainly going to be helpful and it's a critical first step, it won't address all of the other potential environmental factors that are contributing to poor health and leaky gut.



The above picture is a great example of your gut after years of gluten exposure. It's on fire; it's damaged. This is you when you're first going gluten free. It's like pouring small buckets of water on a raging fire. Initially in order to gain traction to put the fire out you have to start with one small bucket and then you have to move into bringing in hoses and bringing in



helicopters full of water. This fire is an example of when your gut is initially inflamed and you're very sick. This is where most people are.

What's important is that you understand there is a way to come back from this. But the way to come back isn't just throwing small buckets of water on the fire. We have to be comprehensive in our approach. Removing gluten is only one aspect of the comprehensive approach that I'll discuss.

## Gluten – The Path to Disease



Undiagnosed – People with gluten sensitivity is not something that they necessarily developed, it's something they have always had; it's genetic. Either your body likes gluten or your body doesn't like gluten. The issue is that the body is strong and resilient, so you might get gluten exposure early on in life and be just fine with it or at least not get sick over it. The more exposure over time you get, the more damage that exposure does. This is where undiagnosed little symptoms, the gluten induced damage combined

with other poor choices is in the early process of building. Then over time we get this progression to what is called subclinical problems.

Leaky gut – leaky gut is not always symptomatic. Intestinal hyper permeability is not always symptomatic. What usually happens first is some holes are broken in the gut and over time those holes allow things to leak through and do more damage. That's why leaky gut begins as a subclinical issue. We develop and we acquire more and more allergies to the environment, and more and more allergies to food.

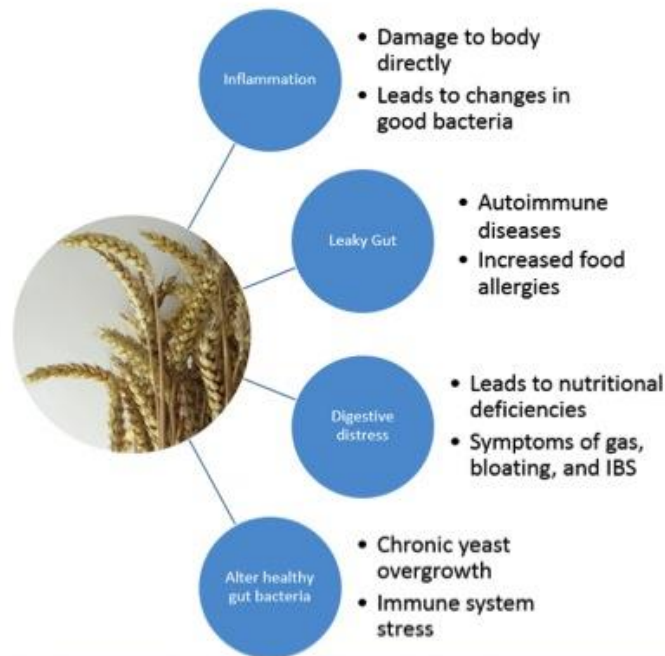
Then as that problem festers and manifests stronger and stronger you begin to recognize that there is a problem. You begin to recognize the following list of symptoms: fatigue, brain fog, hair loss, chronic stomach pain, chronic joint pain, Hashimoto's, thyroid pain, all these different forms of pain. By the time you get a diagnosis you have been clinically progressing along the path to disease for years.

Remember, this progress can take 20 to 30 years. I want you to understand that because your body is so smart, it's so intelligent, and it's so resilient, it won't just kick over and be sick automatically. It can take 30 years for you to get sick. And this is where you need to understand that because it took 20 to 30 years to get sick, you're not going to heal overnight. This is years of progressive damage. It's important to have a realistic expectation as you move forward.

Once symptoms and problems set in and your illness is properly diagnosed, we typically find that it's auto immune in nature and it's diagnosed because of inflammatory changes and inflammatory symptoms.

As it relates to gluten and grain, there are four classic mechanisms of damage that occur. One of them is inflammation directly. Gluten in and of itself can cause direct inflammation. That damages the body and weakens the body's reserve. Gluten itself can lead to changes in good bacteria. In other words it can alter our micro biomes. Our micro biomes are absolutely critical for our immune systems to function, for us to be able to make vitamins, and for us to be able to process and digest food. This bacteria is very critical.

## Grain – 4 mechanisms of damage



One of the other mechanisms of grain induced damage is this process called leaky gut. It has to do with those anchoring proteins within the gut becoming dismantled as a result of grain exposure. With a leaky gut we can develop auto immune diseases and develop increased food allergies that then lead to other problems.

Another of these mechanisms of grain induced damage has to do with the intolerance of it. The inability to digest that can lead to gut damage and nutritional deficiencies, symptoms of irritable bowel syndrome, gas, bloating, etcetera. Previously, I explained about altered changes in good bacteria, but now those altered healthy gut bacteria become susceptible to chronic yeast, and we become susceptible to more immune system stress.

These are those primary mechanisms and are one of the reasons why going gluten free is not enough. Going grain free is going to be the next step in the success to your process of healing and recovery.



Remember that disease is always multifactorial. Once you become ill, healing may require more than just the removal of gluten and grains. In my experience at my clinic, it's always that way. Going gluten free is the beginning of the process, it's the initial water buckets going on the fire, but it's not the sole solution.

Remember the toxic burden, the years of toxic buildup and burden impact the function of multiple tissues in your body so that by the time you develop disease and illness your liver is compromised, your immune system is compromised, your gut is compromised, your skin, and your lungs. All of these tissues are compromised and none of them are working at full capacity. When tissues like these are compromised it's just not possible to heal overnight which is why it's imperative you understand the process and have patience.

If you were to look at the National Library of Medicine research on gluten and leaky gut you would see quite a bit of information on the topic. The picture below is an example of such. I share this picture because it's amazing to me how many people go to their doctor to discuss leaky gut and they seriously get laughed at. But just look at the number of results on this website. Even if you mention intestinal permeability, a lot of GI doctors will tell you that it just doesn't exist. Shame on those guys. It's like they don't read their own literature, they don't read their own research. This is an image coming directly from the National Library of Public Medicine, so anybody in the world can get access to this, especially doctors. You can see over 207 studies that have been performed showing a connection or correlation between gluten and intestinal permeability. Similar research findings can be found on gluten and acid reflux or Gluten and irritable bowel syndrome. There's a number of studies showing a correlation.

# National Library of Medicine Research on Gluten and "Leaky Gut"

The screenshot shows the PubMed website interface. At the top, the search bar contains the text "gluten and intestinal permeability", which is circled in red. Below the search bar, the "Results: 1 to 20 of 207" is also circled in red. The page displays a list of search results, with the first four items visible. Each item includes a checkbox, a numbered list item, a title, authors, journal information, and a PMID. The first result is titled "Novel Role of the Serine Protease Inhibitor Elafin in Gluten-Related Disorders" by Galipeau HJ, et al. The second result is "COLOSTRO NONI administration effects on epithelial cells turn-over, inflammatory events and integrity of intestinal mucosa junctional systems" by Cardani D. The third result is "Are 'leaky gut' and behavior associated with gluten and dairy containing diet in children with autism spectrum disorders?" by Navarro F, et al. The fourth result is "Alteration of Tight Junction Gene Expression in Celiac Disease" by Jauregi-Miguel A, et al. The page also features a left sidebar with filters for article types, text availability, publication dates, and species. The top navigation bar includes links for NCBI, Resources, and How To.

NCBI Resources How To

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**Results: 1 to 20 of 207** << First < Prev Page 1 of 11 Next > Last >>

☐ 1. [Novel Role of the Serine Protease Inhibitor Elafin in Gluten-Related Disorders.](#)  
Galipeau HJ, Wiepjes M, Motta JP, Schulz JD, Jury J, Natividad JM, Pinto-Sanchez I, Sinclair D, Rousset P, Martin-Rosique R, Bermudez-Humaran L, Leroux JC, Murray JA, Smecuol E, Bai JC, Vergnolle N, Langella P, Verdu EF.  
Am J Gastroenterol. 2014 Apr 8. doi: 10.1038/ajg.2014.48. [Epub ahead of print]  
PMID: 24710505 [PubMed - as supplied by publisher]  
[Related citations](#)

☐ 2. [COLOSTRO NONI administration effects on epithelial cells turn-over, inflammatory events and integrity of intestinal mucosa junctional systems.](#)  
Cardani D.  
Minerva Gastroenterol Dietol. 2014 Mar;60(1):71-8.  
PMID: 24632769 [PubMed - in process]  
[Related citations](#)

☐ 3. [Are 'leaky gut' and behavior associated with gluten and dairy containing diet in children with autism spectrum disorders?](#)  
Navarro F, Pearson DA, Fatheree N, Mansour R, Hashmi SS, Rhoads JM.  
Nutr Neurosci. 2014 Feb 12. [Epub ahead of print]  
PMID: 24564346 [PubMed - as supplied by publisher]  
[Related citations](#)

☐ 4. [Alteration of Tight Junction Gene Expression in Celiac Disease.](#)  
Jauregi-Miguel A, Fernandez-Jimenez N, Irastorza I, Plaza-Izurieta L, Vitoria JC, Bilbao JR.  
J Pediatr Gastroenterol Nutr. 2014 Feb 14. [Epub ahead of print]  
PMID: 24552675 [PubMed - as supplied by publisher]  
[Related citations](#)

☐ [Celiac disease: the search for adjunctive or alternative therapies.](#)

I just want you to see that piece because I know a lot of you are up against doctors who are telling you that you're crazy and it's all in your head. I'm here to tell you that you're not crazy and that it's not in your head. It's absolutely scientifically validated.

## Toxic Exposures

# Toxic Exposures

- Food
- Medications
- Household Products/Indoor Air
- Water
- Heavy Metals & Bio toxins



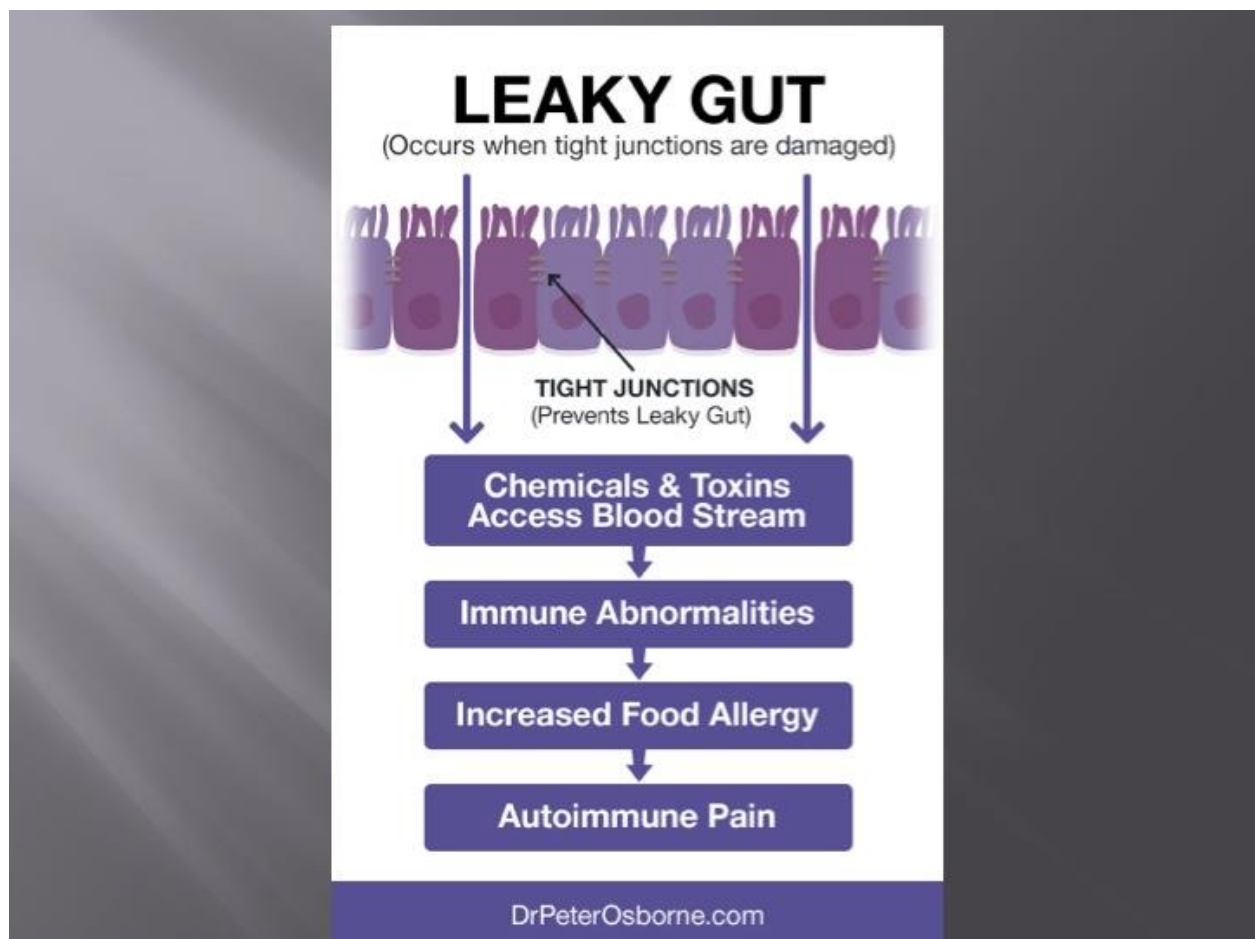
One of the biggest toxic exposures once leaky gut develops can be food. It can even be healthy food. In defining food I have to be really clear on what I mean. I mean real food. I mean food that is grown without the use of chemicals. I'm not talking about processed food product. I'm talking about actual real food such as: fruits, vegetables, nuts, and meats that are real and untainted.

Now some people have food allergies because of the leaky gut, so food can become a toxic exposure even though maybe it wasn't originally the cause of the illness, it becomes a perpetuator of the illness.

Medications. There are a number of different medications that can disrupt gastrointestinal function and contribute to leaky gut. We'll talk more about those shortly.

Household products and cleaners and the quality of the indoor, are all potential toxic exposures. Toxins like fluoride and other chemicals can be found in the water depending on your community and where you live. Heavy metals in the environment like lead, mercury, arsenic, and cadmium and biotoxins are emitted in the environment. A perfect example of biotoxin is a micotoxin, a form of mold toxin that is emitted in a lot of our foods.

These are examples of toxic exposures that once you have leaky gut you're even more susceptible to these things. It's not that these things are necessarily causing the disease, it's that the leaky gut is already there and these things make it really hard to heal. If you don't know how to address these issues, or if you're not addressing them at all then the road to healing becomes much slower and much more challenging.



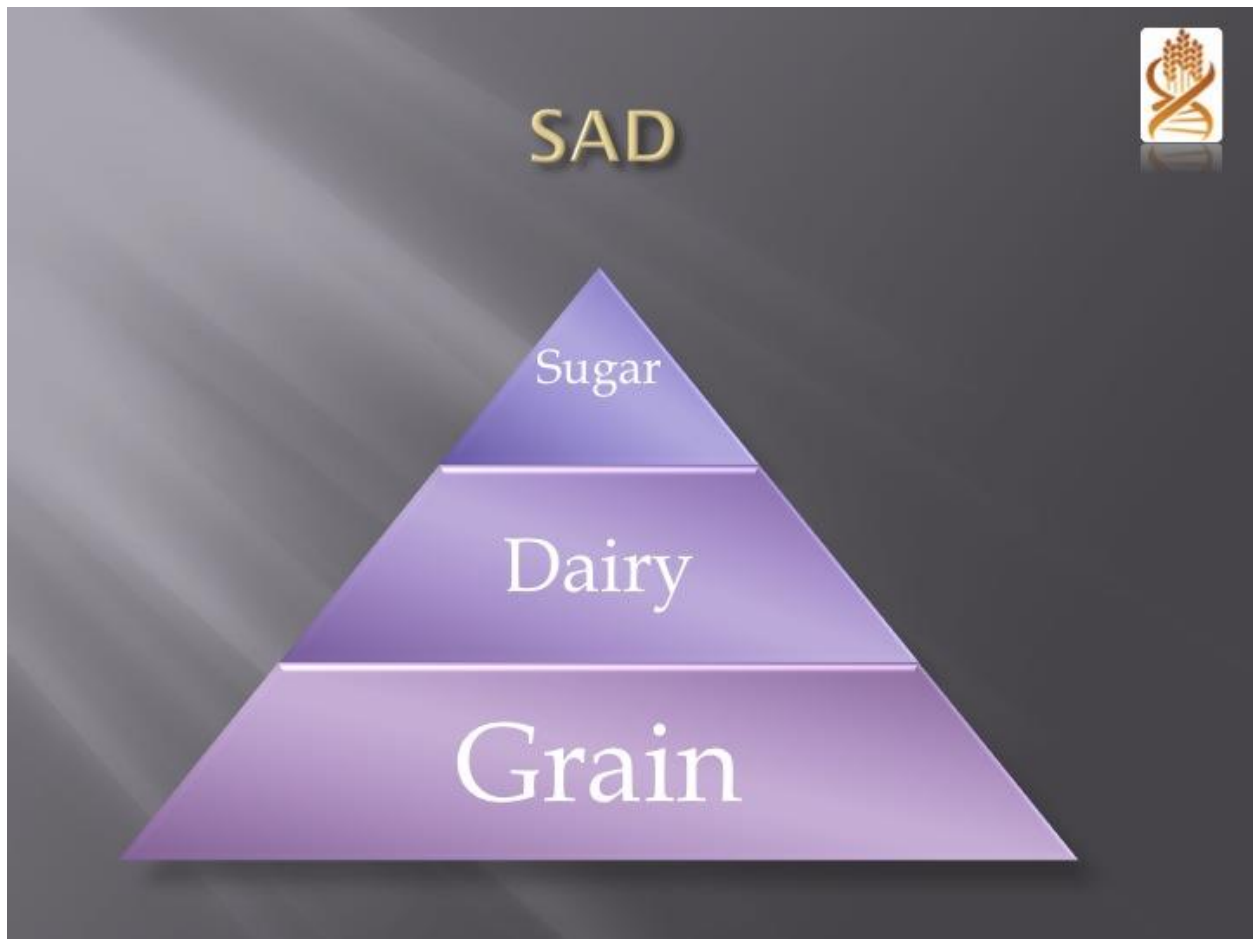
Back to a Leaky gut and what it is. Leaky gut occurs when tight junctions are damaged. Toward the top of this diagram is what tight gut cells look like. You can see these little lines or dashes there. These are the tight junctions,

the proteins that snap the cells together that prevent big gaps from forming in between the cells. Remember your bloodstream is right there so when things can leak through chemicals and toxins can access your bloodstream leading to immune abnormalities that lead to increased food allergy, and lead to auto immune pain.

Healing and recovery is a process. Step one of the process is to remove the things that can contribute to the leaky gut or that can cause the leaky gut itself. These are some of those environmental factors previously mentioned.

However, gluten is a perfect example of something we know can cause leaky gut. But just removing gluten from the diet doesn't guarantee recovery. We need to look at food allergies and determine what caused them in the first place. That's kind of the catch 22 with food allergies. If gluten was what originally caused the leaky gut and you develop food allergies as a result, then the leaky gut never goes away until we address the food allergy piece. That's the piece of information that so many people are missing; addressing where the problems actually came from.

Remember, there's also pollution, stress, GMO (genetically modified organisms), and medications as examples of environmental factors that increase gluten sensitivity symptoms but also perpetuate that process of a leaky gut. This is why testing is so important and working with a professional that understands exactly what leaky gut is and what kind of tests need to be performed and what questions need to be asked in order to get down to the bottom of the disease.



Let's discuss food a little more. This is a diagram of the Standard American Diet. Maybe you're on this type of diet now and you're looking for a solution and an answer to what is the best way to divide up your food intake. Most people's food guide pyramid looks very much like this. Grain is the staple, dairy is the sub-staple, and sugar comes a close third. If this is what your diet currently looks like, just know that you're in for some big changes and improvements in your health. What you really want at the base of this pyramid is meats and healthy vegetables. Those are going to be some of the staple core foods that are going to help you get healthy.

So now let's talk a little bit about why we eat. A lot of people look at food as a social thing because we celebrate with food. It's a very entrenched social element. However, sometimes to get healthy we have to step outside of that element and we have to be very stoic about our behavior if we want to get better. The years of accumulated damage requires a little bit more of an aggressive action on our part.

So why do we eat? We eat to generate energy. We eat to promote normal tissue repair, growth, and balance. We eat to maintain nourishment and something called homeodynamics, or homeostasis for many of you who took biology in college. The bottom line is we eat for the healthy function of the body.



These are what I call the four horseman of the GI apocalypse. These are the things that we get the most exposure to in our modern day environment that do the most damage contributing to leaky gut; chemicals, gluten, infections, and genetically modified organisms. I'm going to go through these and talk in a little more detail about this.

### *Frood*



Frood. This is part of that chemical category. I call it frood or frankenfood because it's not really food. When we eat something that's packaged or wrapped up in a box the last thing most of us want to do is look at those ingredients and look at the food label. But if you're not doing that then what



you're missing is that a lot of those items and ingredients are preservatives and chemicals and not food at all. This is a necessary change if you want to heal your gut. A big part of this is just re-educating yourself.

## Frood...

- Aside from the possibility of reacting to real food...
- The FDA has approved approximately **3,000** food additives, preservatives, and colorings.
- The average person ingests **150 lbs.** of additives every year.
- Many commonly eaten foods are genetically modified or contain genetically modified ingredients.



Understand this:

- The FDA has approved approximately 3,000 food additives, preservatives, and colorings.
- The average person ingests 150 pounds of these additives every year.
- Many commonly eaten foods are genetically modified or contain genetically modified ingredients.

First you have to understand what some of these additives are. Below is a chart or a diagram listing what a lot of these common processed foods contain. These are a number of the different chemicals you can find within



# Frood...

Sodium propionate

Sodium metabisulphite

Sodium benzoate

Sodium benzoate

Aspartame

Cyclamate

Sulphur dioxide

Sunset yellow FCF

Allura red AC

Brilliant blue FCF

Tartrazine

Sunset yellow FCF

Carmoisine

Brilliant blue FCF

Sunset yellow FCF

Allura red AC

Brilliant blue FCF

Sodium sulphite

Potassium metabisulphite

Annatto

Tartrazine

Sunset yellow FCF

Carmoisine

Ponceau 4R

Annatto

Monosodium glutamate

Erythrosine

Cyclamate

Saccharin

Sunset yellow FCF


Allura red AC

Brilliant blue FCF

## Pesticides

Let's move on to pesticides. Pesticides are a big part of our food today. There's three million tons of pesticides used every year worldwide, and more than 16,000 chemicals used in the production of pesticides. Most have not been tested for their toxic effects in humans. Testing consists of small scale

mice studies. There's only very short term human studies, but not all of these chemicals have actually been tested for their safety.



## Pesticides

- **3 million tons of pesticides** are used each year worldwide -- More than **1,600 chemicals** are used in the production!
- **Most have not been tested for their toxic effects on humans.** *Exposure has been linked to:*

Nervous system disorders	Reproductive damage
Immune system suppression	Hormone problems
Childhood Cancer	Asthma -ADHD - Autism
Breast Cancer	Migraine Headaches
Diabetes	Developmental delays

We do know that pesticide exposure has been linked to things that are not safe, like: nervous system disorders, immune system suppression, cancers, diabetes, reproductive damage, hormone issues, hormone problems like thyroid problems and estrogen problems. We know asthma, ADHD, autism, migraine headaches, and developmental delay disorders in children, are all things that have been linked to chronic pesticide exposure.

There are so many known toxins in food that it's truly frightening. It's a known fact that the following toxins are in many foods, especially processed foods: pesticides, steroids, hormones, antibiotics, exitotoxins; these are bad, bad chemicals.



Here's the thing, it takes five to eight pounds of chemically sprayed grain to produce one pound of beef. Sit back and think about that seriously. This is one of the reasons why I'm such a big advocate of grass fed beef versus grain fed beef, because grass fed beef does not contain anywhere near the quantity of chemicals. Remember just to produce the grain you're spraying it with fungicides and other chemicals that mimic estrogen, that increase the risk of cancer, that damage the health of the animal, that change the nature of the type of fat in the meat, and that make the meat inflammatory. When ingesting that type of animal you will ingest considerably more cancer causing chemicals than you ever would from fruit and vegetables.

That's not to say that I'm an advocate for the vegetarian diet. It's simply to say that if you're eating meat you need to be eating quality meat. If it's beef it needs to be grass fed. If it's fish it should be wild-caught, not farm-raised. Remember, these industrial farms are feeding these animals chemically sprayed grains in large quantities. Those are things that are ingested into the animal's tissue and then are ingested into your tissue as you eat them. You want to do your best to avoid that.

On average, one glass of inorganic store bought milk contains a residue of about 100 different antibiotics and once in your body these antibiotics will weaken your immune system, they'll crush the probiotic environment or the micro biome within your healthy gut, and they'll contribute to a breakdown in your gut function. They'll ultimately lead and contribute to intestinal permeability, or a.k.a. leaky gut.

There's also excitotoxins in the foods, the hidden toxin in packaged foods, things like MSG (monosodium glutamate). These things act as neurotransmitters. Your gut is a nervous system and generally speaking it actually has more neurons than your entire spinal cord. There are more

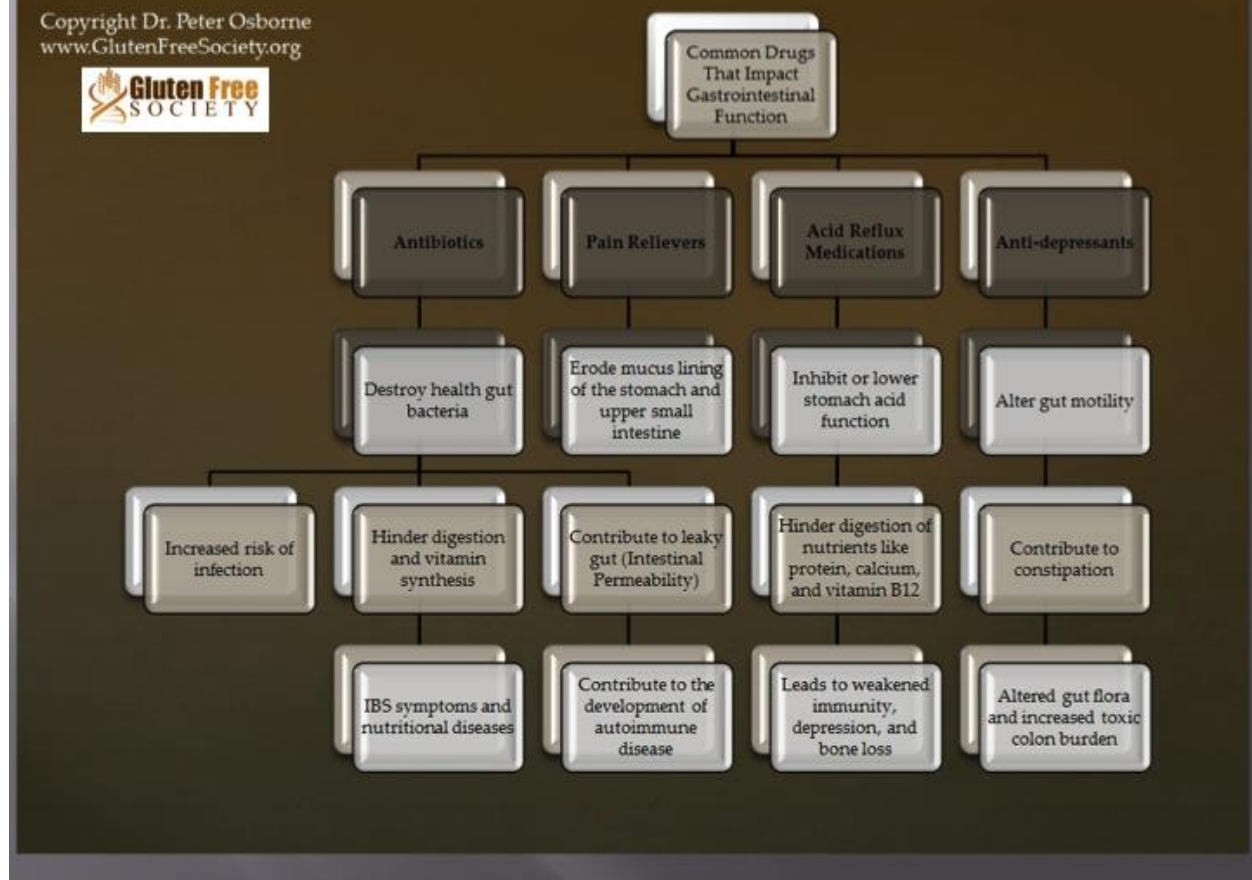
nerves in your gut than in your entire spinal cord. It's the second biggest conglomeration of nerve tissue in our body, second only to the brain. These excitotoxins in the food will affect the nervous system within the gut as well and that can create and contribute to endocrine and exocrine disorders, diabetes or obesity, and to reproductive disorders. These are the types of toxins you don't want in your food.

### *Medications*

I discussed earlier how medications are another big piece of the "leaky gut" puzzle. There's a great book written by Ross Pelton and his group called, *Drug-Induced Nutrient Depletion Handbook* listing the effects of many medications. I suggest you grab a copy and read up on it. In other words, the things that your doctors don't tell you about when you're starting that statin drug to lower your cholesterol is that the drug will also lower your Vitamin D and it will lower your enzyme Q10, causing muscle fatigue and increased blood pressure, congestive heart failure, and a weakened immune system. You don't want to be the victim of the unintended consequences of drug induced nutritional loss.

Remember when you get into that medical model of treating disease with drugs you're not really treating anything, you're actually artificially manipulating chemistry without impacting why the disease is there in the first place. That never works. As a matter of fact, there are only a couple of scenarios where drugs are definitely the right move. One is if you have a life threatening infection and you need an antibiotic. By all means, don't die; take the antibiotic. Another is if you're in a life threatening scenario that requires surgery and you need pain medications in order to not go into shock and have your life saved. We have great emergency medicine in our country, but when it comes to chronic disease we have the worst healthcare in the world. You don't want to get into that trap of medicating chronic disease.

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This is a chart and example of some of the most common drugs that impact your gut function and that contribute to leaky gut. If you look over on the left, antibiotics destroy good gut bacteria. Even in their best intention they still destroy good gut bacteria. That can hinder digestion, can hinder vitamin synthesis, lead to irritable bowel problems and nutritional diseases.

Also, when you destroy your good bacteria you're increasing your risk of future and subsequent infections. Long term you're weakening that immune system. Anytime you want to go on an antibiotic, if it's there to save your life and you absolutely need to take it then by all means do so, but know that you need to replace those good bacteria. That requires a couple of months of taking anywhere from 200 to 400 billion colony forming units of lactobacillus, bifidobacteria, and other healthy probiotics. Don't ever get stuck with an antibiotic where you don't follow through with a good probiotic at very high doses.

One of the other most common drugs are pain relievers. One of the reasons I wrote the book *No Grain, No Pain* is because pain is such a prevalent problem in our society, grain being one of the main causes of it and pain relievers being one of the main ways that we treat it.

Realize that pain relievers like ibuprofen, naproxen, and Celebrex erode the lining of the stomach. They rip the lining of the stomach out and erode the mucosal layer. What then happens is that opens the gut to potential damage and it contributes to the leaky gut process. If you're chronically in pain, you've gone gluten free but you're still in pain and you're using ibuprofen a couple of times a week, realize that you're never going to heal that leaky gut because you're basically eroding your mucosal barrier. It's one of the primary barriers within your gut that prevents it from becoming leaky.

That in and of itself long term is going to contribute to auto immune disease. Pain relievers also contribute to vitamin, mineral and folate deficiency. Vitamin C and iron deficiency are also caused by taking ibuprofen and aspirin.

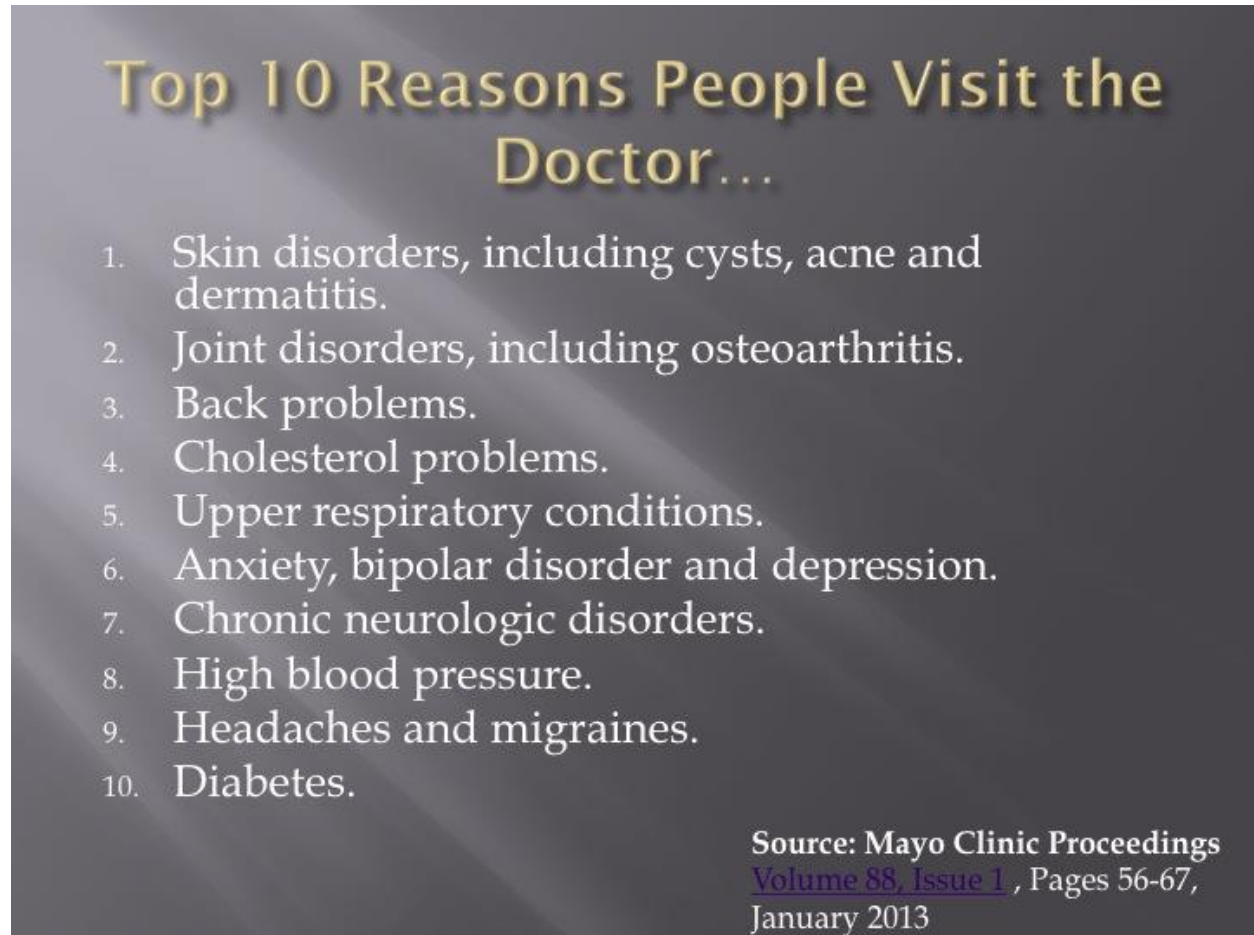
Then there's the category of acid reduction medications, which cause our stomach acid function to be minimized, which hinders the digestion of nutrients – protein, calcium, Vitamin B12. Again, you need those nutrients for a strong immune system. Those nutrient deficiencies tend to cause a lot of bone and muscle pain, and a lot of anemia. This happens when you don't get enough oxygen because you become anemic and can't get enough oxygen to your tissues so your muscles become more tense and more tight, you develop pain syndromes and joint problems. These are the long term consequences of being on these medications for longer than a couple of months. These drugs weren't designed to be taken for the rest of your life. They were really designed to be used in the short term while you took action and changed your lifestyle so that you didn't need them anymore.

Another widely used medication that people don't understand can cause a multiple of problems is Antidepressants. They can actually alter gut motility because they affect serotonin. 90% of serotonin is made in our gut, so when we take an antidepressant a lot of times people's guts are affected more than their brains. That process can oftentimes contribute to constipation, which leads to altered gut flora and increased toxic colon burden.



These are just some examples of some of the most common drugs and how they impact the GI tract and contribute to leaky gut problems.

Take a look at the image below. These are the top 10 reasons people visit their doctor.



## Top 10 Reasons People Visit the Doctor...

1. Skin disorders, including cysts, acne and dermatitis.
2. Joint disorders, including osteoarthritis.
3. Back problems.
4. Cholesterol problems.
5. Upper respiratory conditions.
6. Anxiety, bipolar disorder and depression.
7. Chronic neurologic disorders.
8. High blood pressure.
9. Headaches and migraines.
10. Diabetes.

Source: Mayo Clinic Proceedings  
[Volume 88, Issue 1](#) , Pages 56-67,  
January 2013

I point that out because if you look at those 10 conditions and then you look at these four classes of drugs we discussed, you're going to see there is a lot of overlap between the top 10 reasons people visit their doctor and four of the most common classes of drugs that are prescribed. The trend there is if people go to the doctor with those conditions and receive these drugs, they are treating one thing but the medication is wrecking their gut. You're really in a catch 22 scenario and you can never heal. Remember, as long as the gut is leaking, you're not going to heal.

Again, this is why it's important to understand as much as possible about the medication and the reason the doctor is prescribing it. Is it absolutely necessary? Is it life threatening if you don't take it? Is it temporary? What

are the side effects? Are they worse than the condition you are treating? All of this is so important to understand.

On a special note, there are a couple of new studies that have come out in the last couple of years on blood pressure medications that I think you should be aware of. Researchers have found an alarming discovery with Olmesartan, a type of blood pressure lowering drug. This medication has actually been found and shown to create the exact same kinds of symptoms and damage as Celiac Disease. People are now being diagnosed with Celiac Disease who actually have Olmesartan toxicity not Celiac Disease.

This is just one of those types of drugs that has been shown to mimic the classic presentation of gluten sensitivity. Dr. Murray from Mayo Clinic, quotes,

*"We thought these cases were Celiac Disease initially because their biopsies showed features very like Celiac Disease, such as the inflammation. What made them different was they didn't have the antibodies in their blood that are typical for Celiac Disease."*

These patients are being treated for blood pressure problems and as a result are developing leaky gut and Celiac Disease symptoms.

The image below shows the top six prescription drugs at our immediate dispense. Doctor's prescribe medication on a daily to treat these symptoms. Again, it's these classes of drugs that impact the gastrointestinal tract.



# Top 6 Prescription Drugs Dispensed

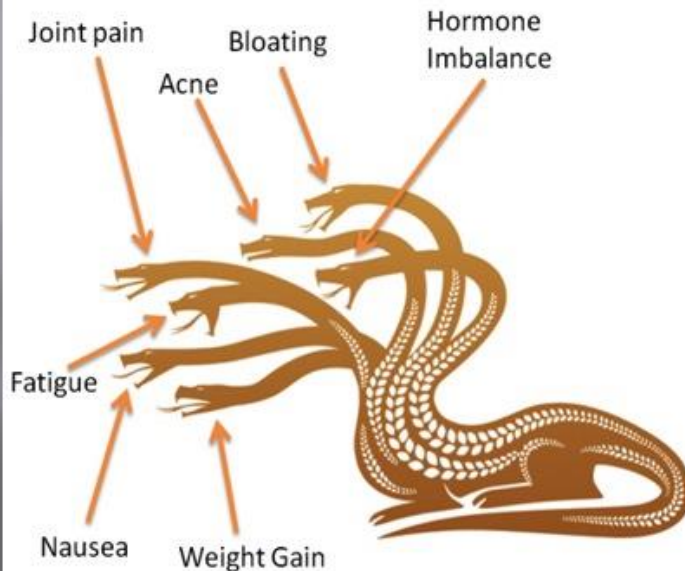
1. Pain
2. Cholesterol
3. Blood Pressure
4. Hypothyroid
5. Acid Reflux
6. Antibiotics



Source: *Prevention Magazine*  
Natural Alternatives To The Top 10 Most  
Prescribed Drugs  
By Holly C. Corbett

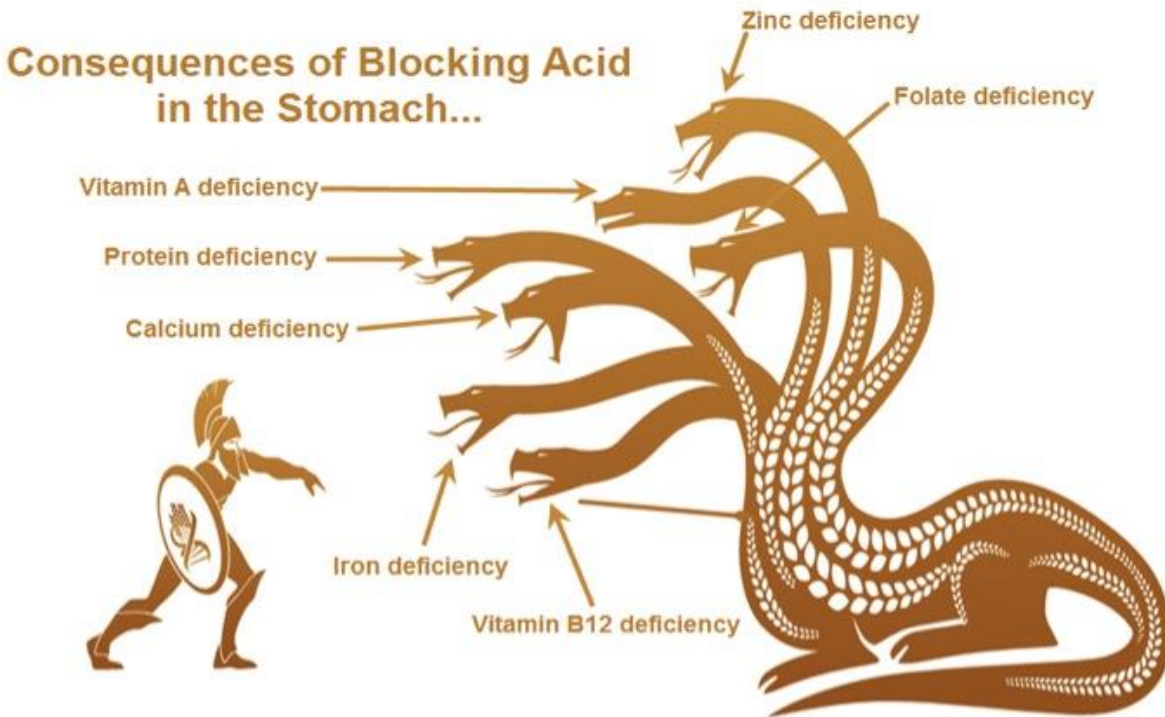
Another important note on a popular medication, Synthroid (used to treat thyroid problems) is that if you're trying to be grain free, Synthroid actually has corn starch and dairy in it. This is one of the patterns that I see in many people who are going grain free and take thyroid medication. They begin to feel so much better going grain free but they can never shake their thyroid medication. Unfortunately, the thing that they're taking to help their thyroid is actually the thing that's continuing to destroy their thyroid, just in smaller doses.

# The Gluten Sensitivity *HYDRA*



*Treating these symptoms with medicine does not resolve the origin of a patient's problem...*

I call an example like this the gluten sensitivity hydra because if we focus on symptomatic treating – again, the focus in mainstream medicine is “see symptom, treat with drug” – if we focus and we use that philosophy what typically ends up happening is the drug ends up creating a secondary or a tertiary set of problems. Maybe the drug helped with the pain, but now it created a leaky gut that led to a different kind of pain, or a different kind of disease, or a different type of problem. Just like in Greek mythology, if you chop off one head of the hydra it sprouts two new heads in its place, if you chop off one of these symptoms using a medication you’re just going to get two new hydra heads in place of it because of the medication side effects, the unintended consequences of medications.



This is another diagram using an example of taking acid blocking medications and the impact that it has nutritionally. Again, imagine you're treating acid reflux using an acid blocking medication, so in essence the analogy is you're chopping off one of those symptomatic heads of the hydra, but look how many more heads you're creating in the process; zinc deficiency, folate deficiency, vitamin A, protein, calcium, iron, Vitamin B12 deficiencies, all very common manifestations of being on acid blocking drugs.

These create a compounding damage effect. There are four billion prescription drugs ingested in the U.S. each year, 70,000 chemicals used commercially in our foods and commercial industries, 3,000 chemicals added to our food supply directly, 10,000 chemicals used in food processing, preserving, and storage, and the EPA estimates that our homes are now 5X to 100X more toxic than outdoor air because of the tighter seals on the windows, and because of the chemicals that are being used to produce a number of the things that we take advantage of.

**"95% of all cancer is due to diet and the accumulation of toxins."  
~ University of Columbia School of Public Health**

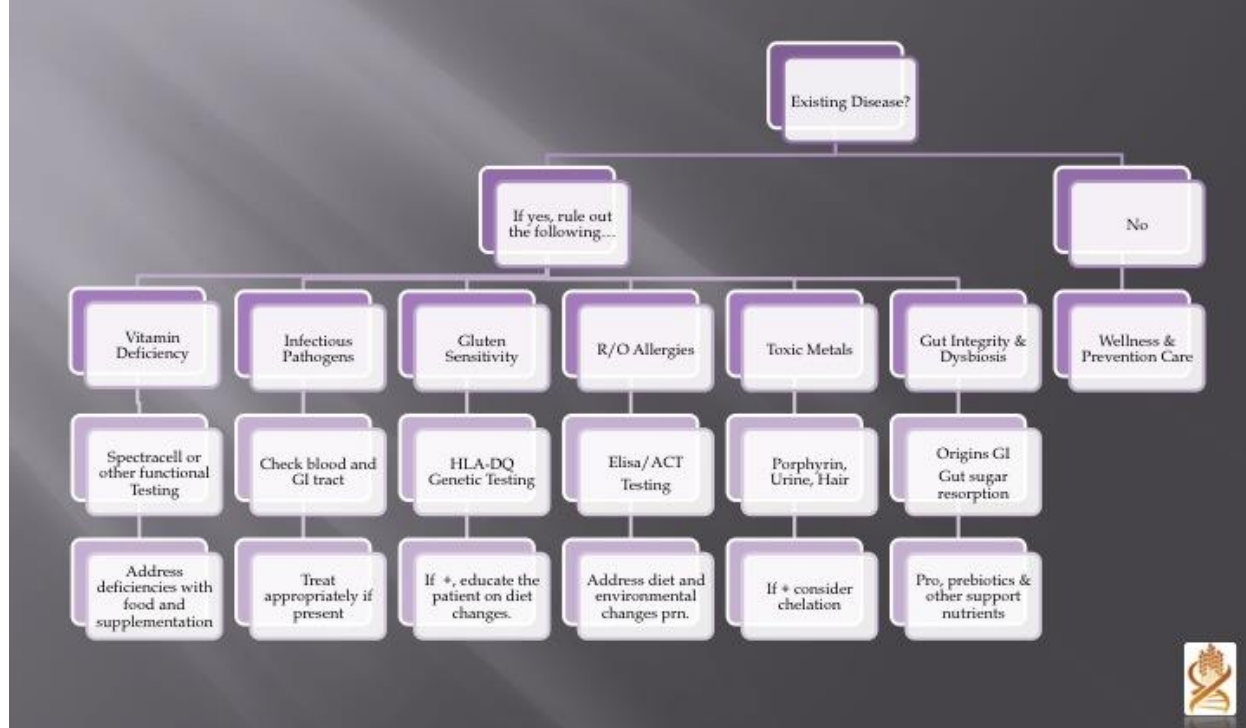
That's a lot of compounding damage. So what do we do? How do we figure out this puzzle?

## **Fundamentals**

Starting with fundamentals is the first piece. If we're going to cure a leaky gut we have to begin with fundamentals. If you've changed your diet and you're feeling better but you still have existing disease, then it's time to dig in deep and find out what's truly behind the disease. How did it start?

This is a flow chart I developed and use in the training of doctors across the world. Take a look at everything under "If yes, rule out the following." That is a ton of investigating that needs to be done and if you're not working with the right professional then most likely you will continue on the path of leaky gut syndrome.

# You Have to Start With Fundamentals...

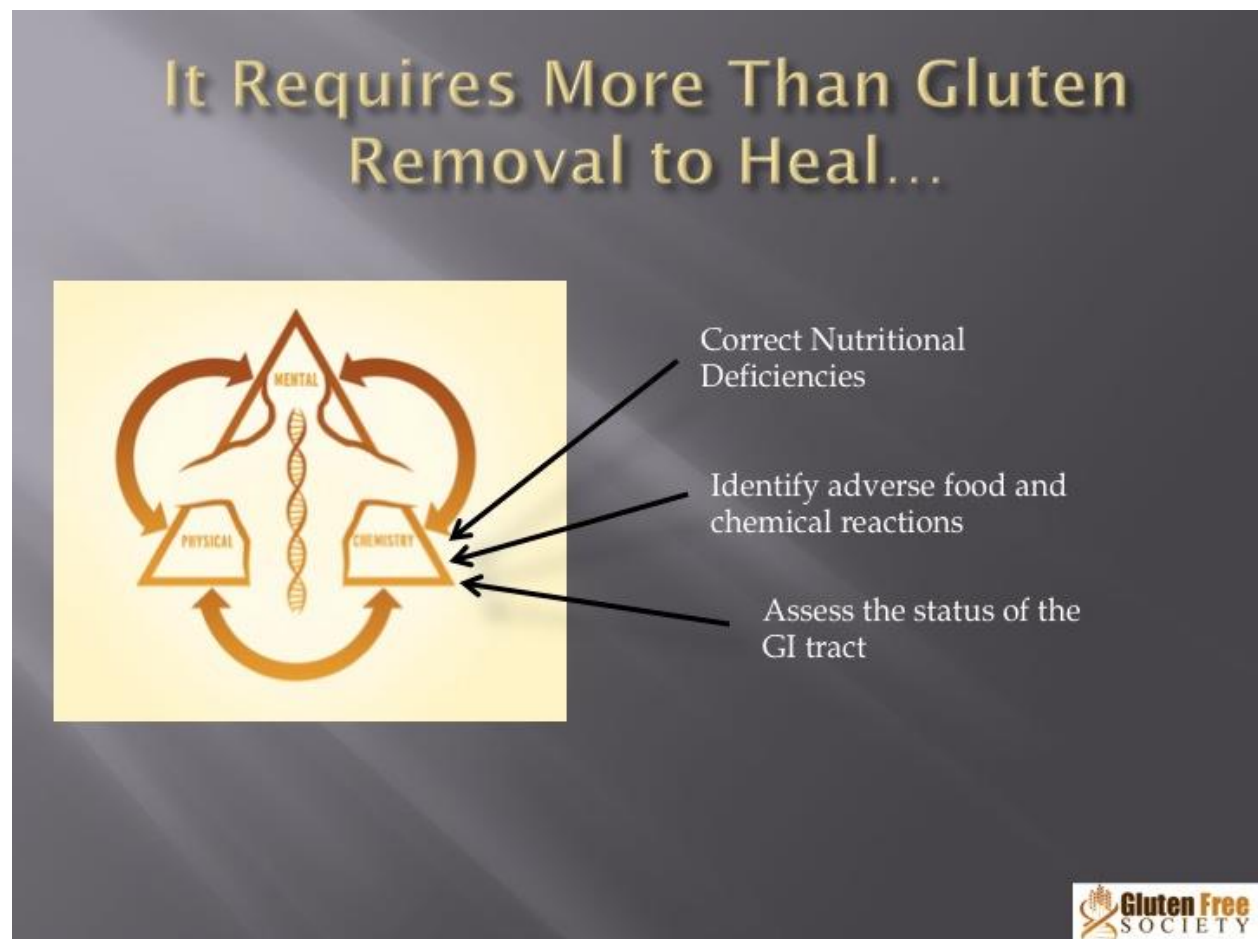


There are ways that we can fundamentally investigate these processes. A good functional medicine doctor should have an arsenal, a tool belt where he can run specific and specified types of labs that will help give you the answers to many of these questions so that you can address each issue as it relates to you.

How many times have you watched a summit or listened to another doctor talk about “do this, do that, take these four steps, these three steps, these five steps,” and you did it and felt better but you still had problems? The reason why is because on any of these summits or webinars doctors have to “generalize.” They can’t be specific to you as a unique individual. They’re generalizing and trying to give best practice information to large groups of people because they’re trying to make the biggest impact and the biggest change possible. They can’t work with you one-on-one in a webinar format or in a summit format. The information might be great, but some of the information might not apply to you.

My point is starting with fundamentals means finding out what is unique to you, what is unique to your body, what does your body need, versus trying to guess. In other words, guessing can be effective to a point and many people do get better when they guess, but they don't fully recover and fully heal. If you're one of those people, you need to take this diagram to heart and you need to get in touch with a good quality functional medicine doctor who is versed in being able to use these lab diagnostics to help develop a blueprint that you can follow as opposed to guessing about what to do next.

The key here is that you need to have this information simultaneously. You can't start at one place, try that for a little while and then try something else for a little while, and then come over here and try that for a little while. Make sense? It has to be done simultaneously because if it's not you're just going to be chasing your tail, and chasing the next symptom.



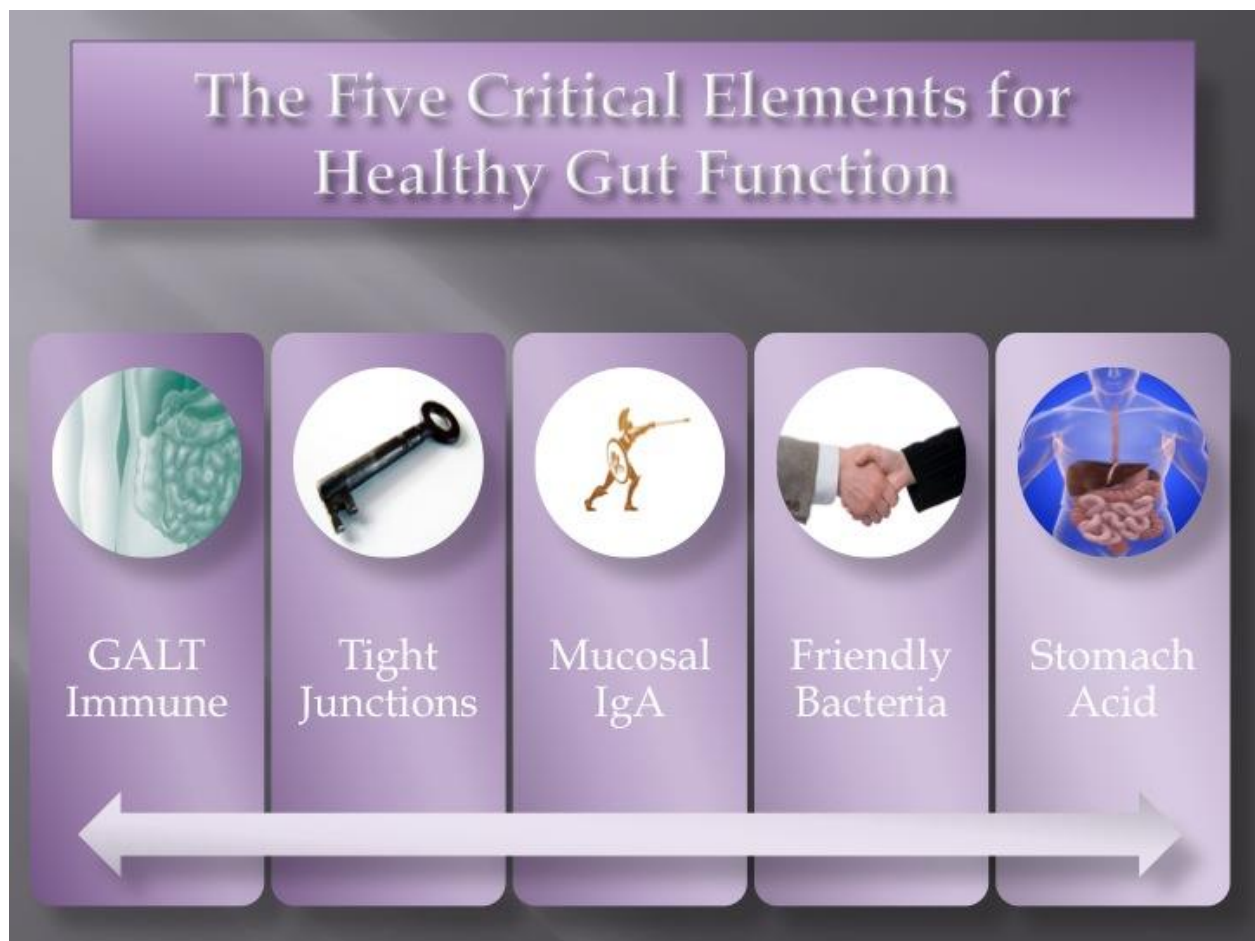
Healing requires much more than just removing gluten. You have to correct nutritional deficiencies and identify adverse food and chemical reactions and



avoid them. You have to assess the status of the GI tract, whether there's a GI infection or a yeast overgrowth and it has to be dealt with. These are all fundamental things that have to be investigated, and like I said they have to be done simultaneously in order to truly heal your gut. These things can't be done in pieces.

### *Healthy Gut Function*

The image below shows five of the critical elements for healthy gut function. In essence, if you want a healthy GI tract, and a gut that is not leaking then these five primary barriers are a must that protect the integrity of your gut function.



Let me explain what all this means. GALT stands for gastro associated lymphoid tissue. It's almost like a set of tonsils that wraps around your intestines. It represents 70 – 75% of your entire immune system. GALT is ultra critical for your immune system's overall function and it's concentrated right behind your gut wall.

The next barrier is the tight junction barrier. Tight junctions in this barrier are what prevent things from leaking through into your GALT. Remember, the GALT is the last barrier, the last man standing. If things are leaking into your GALT it's like you're at war. Every time you eat there's a battle that ensues because the food and the chemicals in the food are just leaking right into your immune system triggering immune reactions. If the tight junctions are breached, the immune system is on high alert and it's chronically on edge and chronically attacking the things that are coming in.

This is one of the processes that occur in auto immune disease that has to be stopped. We have to calm the immune system down by being able to seal the gut. In order to seal the gut we have to recognize that tight junctions can be dismantled by a number of different things. I'm going to talk a little bit about what things you need to be avoiding within your environment so that you can maximize the integrity of your tight junctions.

The third barrier is your mucosal barrier. This is the lining of mucus and inside that lining of mucus over your cells in your GI tract. Here, you make an antibody called IgA (Immunoglobulin A) and it's your first line of defense. You actually make this antibody in your saliva as well. This antibody is a lot like handcuffs. It will bind the things that it sees as a potential threat so that your immune system doesn't have to attack them. It will bind them and push them out into your stool.

The fourth barrier is the friendly bacteria. The friendly bacteria are very critical. They basically talk to your immune system. The friendly bacteria talk to your GALT about what is good and what is bad. They send messages back and forth to each other. If you don't have the right kinds of friendly bacteria then there's a miscommunication and your GALT becomes over-reactive. Remember, an over-reactive immune system is a precursor to auto immune disease.

The fifth barrier is the stomach acid. The stomach acid is very critical for defending you from infections. When you eat, you eat all kinds of bacteria, parasites and yeast; it's a normal part of our food. Just because it's there doesn't necessarily mean that we have to be impacted by it in a negative way. Part of how we're not impacted by it in a negative way is that our stomach acid can kill a lot of those things before they're able to get down into our intestine. Stomach acid is also very critical for the absorption of



nutrients that are necessary for our immune system to function appropriately.

These five primary barriers need to be evaluated in order to heal and be treated properly. This is one of the things that if you haven't had it evaluated and you're still struggling then you need to have a doctor evaluate those five barriers before doing anything else.

## Healing the Gut

Previously I spoke about perspective and said that generally when people have auto immune disease it's the accumulation of decades of damage. You want to have a realistic expectation of how long it might take to heal. Healing fully can take three years. For most people we're going to see dramatic change and improvement within the first couple of months, but we're not going to see full repair and full recovery for up to three years.



If most people are super compliant with their diet and with their protocols, they can get better within about 18 months. So there's this range of 18 months to three years that you're actually realistically looking at if you're doing things correctly.

Step one is to remove the bad. If you're trying to recover the gut we have to remove the things that are affecting the gut in a detrimental way; food allergies, toxins in the environment, infectious micro organisms, and GI altering medications have to be removed if you're ever going to make an impact or a dent in your long term health.

We have to replace and repair. We have to replace good bacteria and put good food in so that we're replacing the lost nutrients. We also need to replace the environmental nutrients. By this I mean environmental nutrients like clean air and sunshine. Those are environmental nutrients. Things that you don't necessarily eat but that you need to get exposure to because the nutrients you get from those are critical in your gut's ability to heal and repair itself.

Part of repair is calming the inflammation. Removing the bad takes away the fuel for the fire, but it doesn't put the fire out. One of the things that has to be done is to put the fire out. For some people that takes certain types of supplementation, or certain types of food, or certain types of fasting. There are a number of different mechanisms and a number of different action steps that you can take to do that.

The last step is the restoring and maintaining of the healed GI tract. During the healing phase you have to work on building a solid foundation of health. We have to do the things that are necessary long term to maintain what we're setting out to achieve. Exercise, rest, sunshine, stress management, and positive thoughts are all critical fundamental foundational things and they have to be in place if you expect to maintain the health once you actually start to repair and heal your body.

Let me explain again what the healing essentials are if you're going to heal a leaky gut. Number one, we have to test for specific food and environmental toxic exposures, we have to find out what they are for you as a unique person. Think back to the earlier diagram that showed all of the different mechanisms of allergy. You have to be tested for all of these to truly know

how to heal. I have so many patients come to my clinic that have been tested for food allergy but they've only been tested for IgG and IgA.

IgG, IgA, IgM and IgD and immune complex and T-cell responses are all things that need to be tested. You can't just stop at IgG and IgA. Those are limited tests and they're not going to give you all of the knowledge that is required to remove what you need to remove. We need to identify what those things are and we need to remove them.

You also want to test for and address any type of underlying infection. Yeast overgrowth is common, but so is bacterial infection. I see bacterial infection in GI tracts all of the time in my clinic. It's extremely common. You want to make sure that gets tested for.

Under the same type of aspect, you want to test to make sure that you're producing digestive enzymes. Sometimes your pancreas and gut is so damaged and they're not making enzymes. You could be doing everything right, eating all of the right food, but not able to process the food because you're not making enzymes. If you're not making enzymes you can't get the nutrients from the food and you can't correct nutritional deficiencies with food, so it's important to test for gut function. Part of testing for gut function is testing for gut infection, and for digestive capacity.

It's important to identify nutritional deficiencies because certain nutrients are critical for the healing process. Maybe you have heard about taking L-glutamine as a nutrient to help heal a leaky gut. For some people L-glutamine is not necessary. We can actually test for L-glutamine deficiency. You shouldn't take fists full of supplements just because you think that's the smart thing to do because you heard something was good for your "said" condition. By testing we can be very specific and know the correct things you need to take so that you target the problem properly.

Knowing what you need to take and targeting that saves you tons of money, but also helps you avoid taking tons of unnecessary pills and potentially saves a ton of time in the healing process. Identifying very specifically what you're deficient in is a very important part in the process of healing.

Sometimes it will be necessary to perform detoxification, repair, and support protocols. Again, we want to do these things in a manner that is unique to you, not in a manner that is generalized. Not in a manner that says, "take this formula and it will fix all of your problems." The formula is not going to

fix all of your problems. We can identify the unique aspects of you as a person and we can create a protocol unique to you that way you get results that actually work.

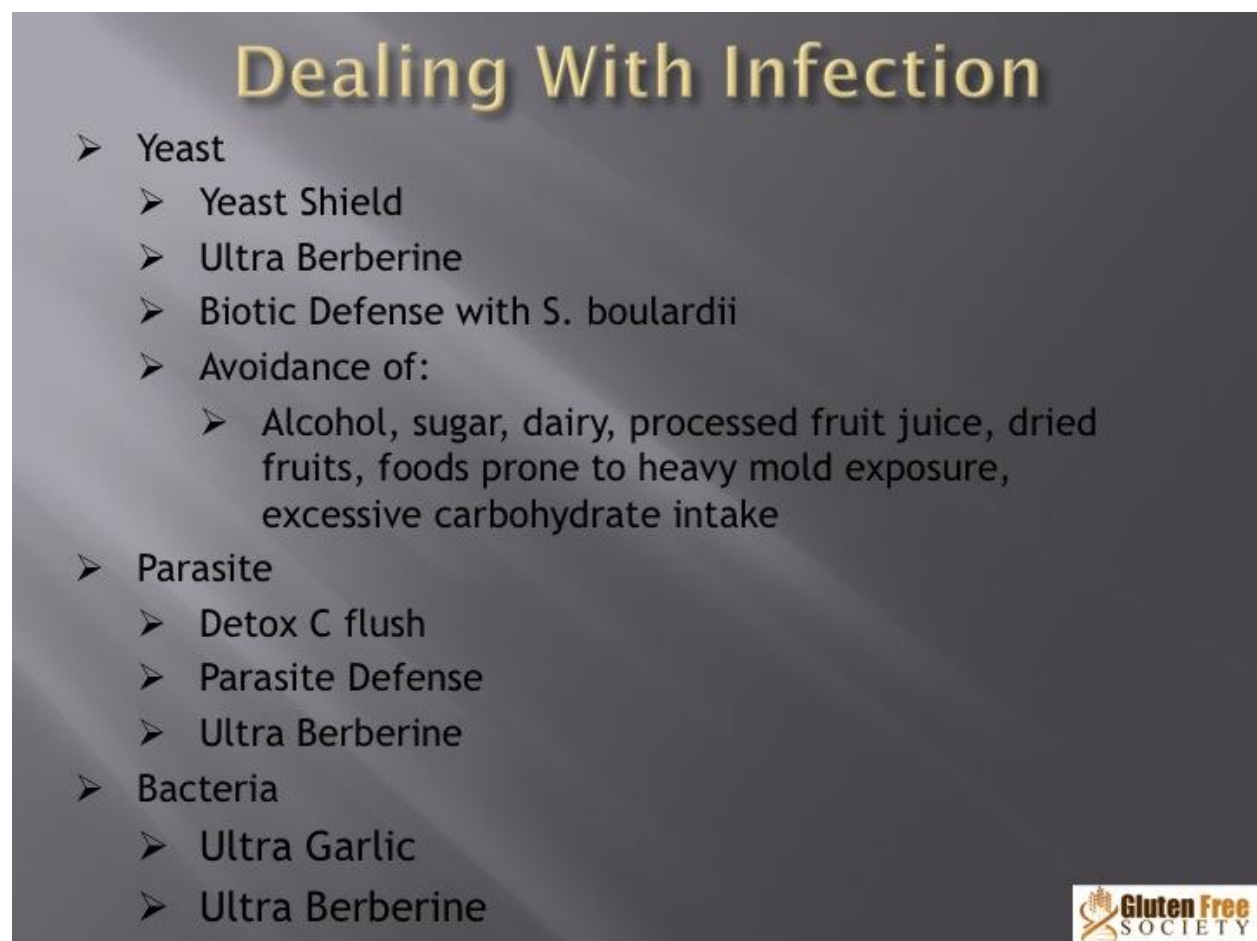
## Known causes of leaky gut...



The image above reveals the known causes of leaky gut. If we look at medical research these are the things that have been scientifically documented to create and cause leaky gut. And yes, gluten is one of them along with GMO foods (genetically modified organisms), plastics (heating up food in plastic, drinking or eating out of plastic), pesticides, and aggressive exercise. Now, I'm not talking about regular normal exercise. I'm talking about the kind of exercise where you get to the end of the workout and you want to pass out or throw up. That type of exercise has actually been shown to cause intestinal hyper permeability.

I've also already discussed a number of medications earlier that can contribute to leaky gut. Infections, yeast, bacteria, parasitic infections, prion infections, like Lyme Disease or [H-pylori](#) infection are all known causes.

We can forget food allergies as a contributor to leaky gut but for this section I put potatoes separately. We could say food allergies and potatoes, but potatoes have actually been tested and there's a compound in them that actually have been shown to contribute to leaky gut. One of the things that we're trying to do when we want somebody to heal in the initial interim is to remove white potatoes from their diet even though they may not be allergic to them. The reason for this is because the compound in white potatoes can actually cause a breakdown in your gut barriers. This is just one of those things that research has shown to contribute to leaky gut. Not because it's an allergic reaction, but because it's a particular compound in the potato itself.



## Dealing With Infection

- Yeast
  - Yeast Shield
  - Ultra Berberine
  - Biotic Defense with *S. boulardii*
  - Avoidance of:
    - Alcohol, sugar, dairy, processed fruit juice, dried fruits, foods prone to heavy mold exposure, excessive carbohydrate intake
- Parasite
  - Detox C flush
  - Parasite Defense
  - Ultra Berberine
- Bacteria
  - Ultra Garlic
  - Ultra Berberine

Gluten Free SOCIETY

There is a number of different ways to deal with infection as you can see in the image above. Some of these are specific formulas that I've developed over the last 15 years to address these particular types of things. If you've been tested and you're looking for something that might be beneficial or helpful take a look at what's in the image as examples. [Yeast Shield](#) and

[Ultra Berberine](#) are great examples. I also have a form of [Biotic Defense](#) with a type of agent called *saccharomyces boulardii*, which is very effective for yeast overgrowth.

The dietary piece to this is the avoidance of alcohol, sugar, dairy, processed fruit juice, dried fruits, foods that are prone to heavy mold exposure like peanuts, and excessive carbohydrate intake. When I say excessive I mean more than 15 grams of carbohydrate in a single sitting and not complex carbohydrate, but simple carbohydrates. So for example, more than 15 grams of simple carbohydrates in a single sitting is going to be one of those things that allows yeast to continue to grow and prosper. Remember that the byproduct of yeast and sugar is alcohol. You don't want your gut to be a distillery because alcohol is one of those things that can also contribute to leaky gut.

For parasites there are a number of things that can be done but here is a couple of different formulas that are very helpful. Using [Vitamin C](#) to do gastrointestinal flush outs can sometimes flush out large balls of worms, and large bodies of parasites if you should happen to be diagnosed with a parasitic infection.

There are also a number of helpful things for bacteria infections. [Ultra garlic](#) and [berberine](#), are a couple of compounds and formulations you can use for bacteria infections. There are also a number of foods like sage, thyme, and oregano that work wonderfully. These are all different kinds of foods that have antibacterial and antifungal actions. Things CAN be done with food in conjunction with supplementation.

My advice to you, as I've said several times, is get tested. If you have yeast and you know it because you were tested then you can have an approach that is very systematic and regimented and targeted, as opposed to "I think I might have a yeast infection because seven of my symptoms match what I read on the internet." Test it. Make sure if you have the infection to follow through with what you need to do to be able to get rid of it. If you're guessing and not getting better, you have to learn the lesson at some point to quit guessing and get specific. Test!

There are a number of things that you can do to help repair inflammation. If you're trying to heal a leaky gut, remove the things that you know can create it, but also take the necessary steps to repair the damage. Healing

broths and organic foods are a big part of that. Food in and of itself is a big part of how we repair leaky gut. Remember that 40% of the nutrition that your gut cells receive doesn't come from the bloodstream, it actually comes from the lumen or from the intestine itself. The way your gut gets a good majority of its nutrients is from the food that you eat, so the food becomes very critical.

Broths like bone and vegetable work really well as well as juicing. One of reasons why is because it's less for your gut to digest. In other words, your gut is in disrepair, it's not capable of functioning the way a normal gut functions and so you don't want to bombard it with a lot of difficult to digest foods if it's not working properly. You want to give it things that are easy for it to digest, and easy for it to assimilate. This is why broths and organic juicing and pureeing can be so effective.

I have some of my patients do what's called intermittent fasting so we can give the gut a prolonged break. Remember, the GI tract needs a break too. Think of the gut like you would think of your muscles. If you worked out seven days a week, twice a day and never gave your muscles a break, you would eventually have training failure, injury and you would sustain damage that was long lasting, and it would hinder your ability to train in the future. Your gut is the same way. If you're eating six meals a day and you never give your gut a fast, then it has a hard time recovering and healing.

The simplest way to do intermittent fasting is to pick an eight-hour window in the course of your day and eat all of your meals within that eight-hour window, and then the rest of the 16 hours is a fast. This gives your gut a prolonged period of time where it's not being asked to work. Instead it's actually being allowed to heal, sleep, and repair itself.

## **The Right Kind of Supplements**

The following is a list of supplements that clinically work. There's a lot of information out there on the internet stating, "use this product" or "use that product," but I want to give you some actual things that are tried and true, that are clinically tested and work for healing.



# Helping Repair Inflammation

- Healing Broths and organic foods
- Intermittent Fasting
- Supplements that clinically work on inflammation
  - Detox C Cleanse with maintenance dose of vitamin C (5-10 grams daily) Be aware that most vitamin C formulations are made from corn.
  - Vitamin D 5,000 - 10,000 IU per day plus sunshine exposure.
  - Ultra Turmeric (4 caps daily)
  - Inflammation Repair (4 caps/daily)
  - Ultrimmune IgG (6 caps/daily)
  - Biotic Defense 200-400 billion CFU/day



One of them is Vitamin C. It's one of the most potent and powerful ways to heal the inflammation within the gut. There's a number of studies – both clinical studies as well as research studies – that show the efficacy of using high doses of Vitamin C to heal your gut. One of the things that you have to be aware of though is that 90% of Vitamin C on the market is actually derived from corn. This is one of the reasons why I actually designed my own [Vitamin C](#) product in the first place.

If you're trying to avoid grain product and you're unaware of corn in vitamin C then you suffer the unfortunate cross-contamination of grain when you're trying to heal. This can cause you to get stuck in a paradigm loop of not healing. You have to make sure that it's a corn-free Vitamin C and 5 to 10 grams a day is a good dose to start with.

[Vitamin D](#) is critical for bolstering and regulating the immune system. It is also a very potent anti-inflammatory. One of the most free and cheapest ways to get Vitamin D is sunshine. If you live above 27 degrees north

latitude it's harder to get enough Vitamin D, especially in the winter months. From a dosing perspective, 5,000 to 10,000 international units per day is a good place to start.

[Ultra Turmeric](#) is a product I designed because a lot of turmeric supplements are also cross-contaminated with corn. Turmeric is a very potent herbal that has strong anti-inflammatory properties. I mentioned before that ibuprofen as an anti-inflammatory will actually break a hole into your mucosa of your gut lining. Turmeric has a similar mechanism of action like ibuprofen, but it doesn't cause the leaky gut process. And Turmeric can be used at higher doses, about 1.5 grams of concentrated curcuminoid (that's the compound in turmeric that's anti-inflammatory). You want a turmeric that is 90 – 95% concentrated curcuminoid and the dose is 1 to 1.5 grams per day.

[Inflame Repair](#) is another product that I created that has boswellia, turmeric, skull cap and bee propolis in it. All of these things are designed as a synergistic formula in patients with Crohn's and ulcerative colitis. Both of these are inflammatory bowel diseases. Inflame Repair was originally designed to go with patients to help them wean off of their anti-inflammatory medications, so it's a very effective product.

[Ultra Immune IgG](#) is a colostrum derived antibody formulation and can be extremely effective especially if you have inflammation within the gut and you also have an infection that has been identified. This actually helps fight infection and helps to soothe and support the inflammatory process.

Next you will need a good quality probiotic. [Ultra Biotic Defense's](#) daily dose is about 400 billion colony forming units. There are a number of probiotics that are out on the market, but the vast majority of them don't hit the mark in terms of that 400 billion colony forming unit dose in a serving. Most of them are somewhere in the neighborhood of 10 billion or up to 50 billion.

The one that I know of on the market now that a lot of people are using is called Viacell. Unfortunately, that particular product has corn in it. I wish they would get the corn out because it would otherwise be a very good product, one I might even use if it didn't have the corn in it. But that's just not the case, so again I was forced to design my own that was just as strong of a dose but without the corn.

# Replacing and Repairing

- It is Essential to Restore Gut Motility
  - Fiber (beware of FODMAPS)
  - Water
  - Movement
- Supplements that clinically work
  - GI Soothe - 2 caps four times daily for 30 days.
  - Consider L-Glutamine - doses can vary greatly
  - Replace missing micronutrients (Spectracell)
  - Gluten Shield or Ultra Digest - 2 caps prior each meal
  - Ultra Acid -consider when highly constipated.



It's also essential to restore gut motility. The first thing you can do is to ensure you have fiber in your diet. There can be a drawback to this if your gut is somewhat compromised and damaged. Fiber can be one of those things that is a double edged sword. If you don't have enough good bacteria then you will have difficulties with digesting fiber.

Fiber is one of those things to work into the diet slowly. You must also be aware of the foods that contain high quantities of FODMAPs. FODMAPs are difficult to digest carbohydrates often found in foods that contain high fiber. For many people FODMAPs can mimic gluten sensitivity and can contribute to irritable bowel syndrome, so it can actually cause constipation or diarrhea and create bowel dysfunction. Just be aware of that when you're introducing fiber. Go slowly.

For me, I prefer using vegetable fibers from whole foods as opposed to fiber powders or fiber supplements. However, if you need a good fiber

supplement with vegetable intact I do have something called [Ultra Food VF](#) available online. Ultimately, I prefer food as a source of fiber.

Water is critical and essential too. There really isn't a magic number of water you should drink. Some people say six, 8 ounce glasses a day, some say eight, 8 ounce glasses a day, and some say divide your body weight in half and that's how many ounces a day you should drink.

Bottom line is water is important. Most people are not aware of this but you should be drinking water at room temperature because water that is too cold actually causes a blood restriction to your gut and prevents you from being able to digest your meal. When you're drinking water with your meals make sure that you're drinking it at room temperature.

Some people will also say that drinking water with your meals makes it harder for your food to be digested because it waters down your enzymes and your acid. That's not actually true. But for some people, drinking water does create that symptomatic response. So we can't say that water is a bad thing to take with your meal because your body actually needs water to break your food down. Just remember that if you're taking in a lot of vegetables and fruits you may not need to drink as much because you're eating whole real foods that contain 60 – 70% water by concentration.

The other part to restoring gut motility is movement. Getting up, not sitting down, and not chronically laying down. In order to signal the nerves that travel to your gut to create a peristaltic reaction, in other words for that reaction in your GI tract to properly process, requires motion and movement. Those nerves in your spine that feed your GI tract need to be moved and they need to be pumped. The thing that does that the best is walking. It doesn't have to be super aggressive exercise. It can be simple walking. The recommendation for movement is anywhere between 8,000 and 10,000 steps a day.

I also have a fantastic formula called [GI Soothe](#) that is a mixture of aloe vera, glutamine, licorice, marshmallow, and a number of other things. For somebody who has such severe inflammation and ulceration in their GI tract, we use this to coat the damaged area so that even eating broth doesn't irritate it. The [GI Soothe](#) allows us to get a coating down so that your body can heal in the very beginning. I use this in the clinic a lot of times with patients because their damage is so extensive.

[L-glutamine](#) is another supplement that can work very well. Again, we can test for L-glutamine so it can work for you, but it's not always necessary. Many people take it unnecessarily. The doses for [L-glutamine](#) can vary, but the average therapeutic dose is 2 to 5 grams a day depending on your weight and depending on how you respond to it. Sometimes for some people glutamine can actually trigger diarrhea or trigger migraine headaches. You have to be aware of those things if you're going to consider using L-glutamine in your healing process.

For healing to take place we must replace the missing micro nutrients. You have to replace the vitamins and minerals that are missing. I recommend having your doctor run a lab from a company called SpectraCell and that will give you the best look at what vitamins and minerals you're deficient in. If you don't have access to this test, a strong Multi-Vitamin is a must. I recommend [Ultra Nutrients](#) (4 capsules per day)

Sometimes replacing enzymes also becomes necessary because the gut and pancreas is so damaged that your organ reserve of being able to produce enzymes is diminished which causes the act of eating to be overwhelming. This is where some people tell me, "I'm allergic to everything." It's not that they're allergic to everything, it's just that they can't digest food very well so every time they eat it's not comfortable. Every time they eat they're having symptoms, not necessarily because there's an immune reaction occurring, but because they're processing, breaking down, or digesting their food. I recommend [Gluten Shield](#) for general digestion improvement. However; if you have had your gallbladder removed, use [Ultra Digest GB](#).

The last thing on the list is [Ultra Acid](#). Digestive enzymes and Ultra Acid both can be extremely effective if your stomach acid reserve, your stomach cells are damaged and not producing enough acid or if your pancreas and intestinal cells are damaged and not producing enough digestive enzymes.

One of the hallmark symptoms of low stomach acid is actually constipation, even though you're eating plenty of vegetables and plenty of fiber. If you find you're that type of person, then replacing your stomach acid might be a really smart move to help overcome that.

I've discussed a lot about supplements here because I want to be able to give you some viable solutions that you can walk away with, but I also want you to understand something else. My intention is not for anyone to ever be

on supplements for the rest of their life. Supplements are used as a clinical supplement to help guide and accelerate the healing process. Sometimes they're necessary because the damage is so extensive that we have to put these nutrients in place just to get a person's body to respond.

At the end of the day, supplements are not something that you should be shackled to in order to maintain your health. You should be able to get to a point where you're not having to take gobs of pills, gobs of potions, or gobs of different types of supplements. Whole food, real food, and the right lifestyle choices are the things you need in place that will help you to heal.

If you would like to try any of these supplements, I do have a promo code you can use. I just want to get you the help and be able to save you money in that process. If you find that you might need any of these things mentioned in this book you can go to [Gluten Free Society Shop](http://GlutenFreeSocietyShop.com) and use the promo code "LEAKY" to save 15% off your order.

For those that want to dive more into this and get much deeper information, I wrote *No Grain, No Pain* and you can get a copy of the book at **[NoGrainNoPainBook.com](http://NoGrainNoPainBook.com)**. The book goes into much greater detail than this manual.

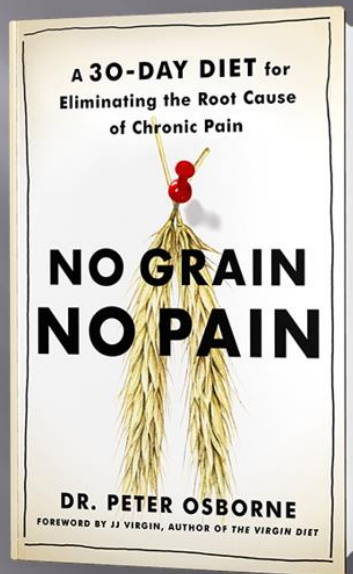
You might also find my foundation website, [www.GlutenFreeSociety.org](http://www.GlutenFreeSociety.org) very helpful.

For those of you who need to dive even deeper, you can contact my clinic, Origins Healthcare at [www.DrPeterOsborne.com](http://www.DrPeterOsborne.com) I am here to help you.

Always looking out for you,

Dr. O – The Gluten Free Warrior

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To conclude, it's best not to guess what's wrong with your gut and what "may or may not" work. It's best to go in with a plan of action. In order to do that you really need to find a good functional medicine practitioner who has the right tools and the ability to run the right types of diagnostics to get you the proper care so that he or she is not guessing and neither are you. It's so much easier once you take the guesswork out to heal a leaky gut.

The information in this book should at least put you on the right path before you find that doctor. Maybe even your body is not so far gone and your health is not so far deteriorated that it puts you on the right path and your body can actually heal itself. God willing, I hope and I wish that for you.

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