

Gluten Intolerance, Wheat Allergies, and Celiac Disease – It's More Complicated Than You Think

Is “gluten free” a fad? No, it's going to be a thing for as long as we are producing wheat and bread the way we're doing it. A lot has changed in the bread industry – it's not just one thing.

People often comment about how bread didn't cause problems with our health before GMOs and Roundup were prevalent in our food supply. Our farming practices have changed, and fairly recently, wheat has started being sprayed with Roundup. The newest speculation is that wheat is not the problem – that the problem is glyphosate, the active ingredient in Roundup. People also often suspect that wheat has been genetically modified. And, of course, there are those who believe the whole gluten-elimination thing is ridiculous and that most people are jumping on the gluten-free bandwagon because it's trendy.

In my experience, if one suffers from a chronic illness of any kind, they must remove gluten from their diet in order to get well. I have yet to see an exception. So what's the problem? Is it the glyphosate or the wheat or something else? The truth is it's not just one thing. Everyone would already know this if most humans weren't so bad at thinking in terms of systems. We tend to think linearly and look for singular cause and effects, but rarely if ever are complex problems solved by such simplistic thinking. There are multiple reasons one gets sick, with a cold or a chronic disease, just like there are multiple reasons why our planet's ecosystem is changing. This is why you can't blame the rise of autism on just glyphosate,

or GMOs, or increased vaccinations, or diminishing food quality, or environmental degradation – they all correlate, it's all of the above.

Related: [*Best Supplements To Kill Candida and Everything Else You Ever Wanted To Know About Fungal Infections*](#)

There is a very complex system that is causing the decline of American health, and it's not just the bread. And yes, our health is in decline. If you doubt that...[here, google it](#) and take your pick. Our lifespan is [actually decreasing](#).

What's the difference between Gluten Intolerance, Wheat Allergies, and Celiac Disease

Conventional medicine states that celiac disease and non-celiac gluten sensitivity have a lot of symptoms in common but identifies a key difference. Non-celiac gluten sensitivity is not a genetic disease and does not cause an autoimmune reaction, and celiac disease is a genetic autoimmune disease. A wheat allergy is an allergic reaction to any of the hundreds of proteins in wheat. Gluten intolerance used to be a catch-all phrase for any problem with eating gluten, but now it's being relegated to mean Non-celiac gluten sensitivity.

Non-celiac Gluten Sensitivity

Non-celiac gluten sensitivity is believed to be the most prevalent of the gluten-related disorders, but it's not as well defined as the other two. It's not an autoimmune reaction nor is it an allergic reaction. There are no tests or biomarkers to identify this disorder. Other components of gluten-grains may be causing symptoms. In order for non-celiac gluten sensitivity to be diagnosed, a doctor will rule out celiac disease and wheat allergies or other possible causes of the symptoms first.

Common Symptoms for Non-celiac Gluten Sensitivity

- Fatigue
- Mental fatigue, aka “brain fog”
- Headaches
- Migraines
- Bone or joint pain
- Gastrointestinal distress
 - Gas
 - Bloating
 - Cramping
 - Indigestion
 - Abdominal pain
 - Diarrhea
 - Constipation

It's said that individuals with gluten sensitivity do not experience damage to the small intestine or develop tissue transglutaminase antibodies like they do with celiac disease. Non-celiac gluten sensitivity has been linked to a variety of health problems including, diabetes, allergies, autism spectrum disorders, and much more.

Related: [*How to Avoid GMOs in 2018 – And Everything Else You Should Know About Genetic Engineering*](#)

Gastroenterologists looking for celiac disease typically test for a few specific antibodies, and if found, they do an intestinal biopsy to determine if tissue damage is present. Chris Kresser addresses the issue with this kind of testing in [*3 Reasons Gluten Intolerance May Be More Serious Than Celiac Disease*](#), which I highly recommend reading. He states:

According to some estimates, for every diagnosed case of celiac disease (CD), there are 6.4 undiagnosed cases that remain undiagnosed—the majority of which are atypical or “silent” forms with no damage to the gut. (1) This silent form of CD is far from harmless; it is associated with a

nearly fourfold increase in the risk of death. ([2](#))

I believe that patients with NCGS are even more likely than patients with CD to go undiagnosed. Most gastroenterologists today know how to screen for celiac disease. They will typically test for antibodies to antibodies to alpha gliadin, transglutaminase-2, deamidated gliadin, and endomysium, and if positive do a biopsy to determine if tissue damage is present.

However, we now know that people can (and do) react to several other components of wheat above and beyond alpha gliadin, the component that is implicated in CD. These include other epitopes of gliadin (beta, gamma, omega), glutenin, wheat germ agglutinin (WGA), gluteomorphin, and deamidated gliadin. What's more, people can react to other types of tissue transglutaminase, including type 3—primarily found in the skin—and type 6—primarily found in the brain. ([3](#), [4](#), [5](#), [6](#), [7](#), [8](#))

Celiac Disease

Celiac disease is considered a genetic, autoimmune disorder. Ninety-eight percent of people with celiac disease carry one or both of two very specific genes, HLA DQ2 and DQ8. On the other hand, so does up to 25-30% of the general population. Carrying one or both of these genes does not mean you have celiac disease nor does it mean you will develop it. Doctors often use gene testing to rule out celiac disease, but there are some cases where people who do not have either of the genes still tested out to have celiac disease.

Though celiac disease is said to be genetic, genes cause predispositions and our diet and environment adjust our genes. Environment can alter gene activity without changing the DNA sequence. This is called gene expression. I also believe that the environment and diet can actually alter the DNA sequence,

but from what I'm seeing, current science doesn't agree with me on this. Regardless, how your genes affect you is altered by our diet and our environment, and those traits can be passed down to our offspring as well. In other words, a predisposition to celiac disease may be hereditary, but whether or not we have celiac disease could depend on our genetic health, which depends on our overall health, which depends on our lifestyle. And this can all be traced to gut health – you cannot have a healthy gut without a healthy lifestyle, and our gut health is something most of us have complete control over.

Related: [Gluten, Candida, Leaky Gut Syndrome, and Autoimmune Diseases](#)

Common Symptoms of Celiac Disease

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 - Bloating
 - Cramping
 - Indigestion
 - Abdominal pain
 - Diarrhea
 - Constipation
- Arthritis
- Dermatitis
- Eczema
- Osteoporosis
- Liver disorders
- Depression or anxiety
- Peripheral neuropathy
- Seizures

- Migraines
- Irregular menstruation
- Miscarriages
- Canker sores

Doctors believe that in order to develop the disease, a person needs to have the genetic predisposition while they are consuming gluten and to subsequently have the disease activated. Activation triggers are said to potentially be stress, trauma, and viral infections. I contend that vaccines and antibiotics are the two most common triggers for the disease. Damaging the gut is what leads to problems with wheat, but we'll get more into that below.

Wheat Allergies

Celiac disease and non-celiac gluten sensitivity have many symptoms in common, but wheat allergies are often much more distinctive. Symptoms include itching, hives, or anaphylaxis which is a life-threatening reaction. A wheat allergy is an immune reaction to any of the hundreds of proteins in wheat. It is possible for a person to be allergic to wheat and to have non-celiac gluten sensitivity or celiac disease at the same time.

What About Roundup?

Monsanto introduced glyphosate under the trade name Roundup in 1974 shortly after DDT was banned. It wasn't used very much until the late 1990s when Monsanto genetically engineered seeds to withstand high doses of Roundup, and the product took off. Eager to sell more of its flagship herbicide, Monsanto has encouraged farmers to use their glyphosate as a desiccant. Wheat can be harvested quicker and easier if you dry it all out ahead of time with Roundup. It's also used in this way on wheat, barley, oats, canola, flax, peas, lentils, soybeans, dry beans, and sugar cane.

Studies have concluded that chronically ill people have higher levels of glyphosate in their bodies. Glyphosate has been attributed to an increased prevalence of most of our common chronic conditions including, but not limited to ADHD, Alzheimer's, birth defects, autism, cancer, kidney disorder, irritable bowel syndrome, Parkinson's disease, depression, diabetes, heart disease, thyroid disorders, liver disorders, multiple sclerosis, reproductive issues, adrenal failure, obesity, asthma, and of course, celiac disease.

It's not hard to understand why. Glyphosate is poison and so are the other ingredients in Roundup. People have to wear protective gear to apply the product. It is designed to kill. It kills plants by preventing them from making certain proteins. Just imagine what that does to one's gut ecology.

How Wheat Has Changed

The wheat we have now is very different from what our ancestors consumed. Modern dwarf wheat is hybridized. That isn't a GMO, but the genes of our wheat plant have certainly been modified to grow faster, and to be more resilient. We used to eat wheat called einkorn, which was actually one of the very first grains we humans cultivated more than 10,000 years ago. When you read in the Bible about how we should eat bread, this is the wheat it refers to.

There is a lot more gluten in modern wheat than there is in einkorn, and the gluten that einkorn wheat does contain is different. Einkorn also has 15 percent less starch and 30 percent more protein. Modern wheat has a lower nutrient content and a different protein structure. In fact, many with celiac and gluten intolerance report being able to eat einkorn without issue.

Also, that blood sugar spike experienced after eating bread does not happen with einkorn.

So I conducted a simple experiment on myself. On an empty stomach, I ate 4 oz of einkorn bread. On another occasion I ate 4 oz of bread that dietitian, Margaret Pfeiffer, made with whole wheat flour bought at the grocery store. Both flours were finely ground and nothing was added beyond water, yeast, olive oil, and a touch of salt.” – [Einkorn and blood sugar](#)

“Ancient wheat diets caused a downregulation of key regulatory genes involved in glucose and fat metabolism, equivalent to a prevention or delay of diabetes development. Spelt and rye induced a low acute glycemic response compared to wheat.” – [NCBI](#)

How Bread Making Has Changed

Most commercial bread contains bromides, added starches, refined sugars, added gluten (vital wheat gluten), preservatives, artificial flavorings, leveling agents, and stabilizers. Potassium bromate is an additive used in commercial bread and baked goods that make the products lighter and fluffier. Bromines are part of the halide family, a group of elements that includes fluorine, chlorine, and iodine, which are all endocrine disruptors that cause digestive issues and a host of other health problems.

Related: [Sugar Leads to Depression – World’s First Trial Proves Gut and Brain are Linked \(Protocol Included\)](#)

Baking Soda, baking powder, and cream of tartar are often used in place of yeast or in addition to rapid rise yeast to make the bread rise quickly and more uniformly. Modern bread rises for a couple of hours or less, whereas homemade bread traditionally takes at least 12 hours to rise. I got curious about the difference between baking soda and baking powder, and I thought you might be as well, hence the video below.

Traditional bread recipes typically utilized a few common ingredients including flour, yeast, salt, water, a sweetener, and some spices or herbs.

Related: [Holistic Guide to Healing the Endocrine System and Balancing Our Hormones](#)

Refined flours started to be widely used around 1880 which caused worldwide epidemics of pellagra and beriberi. Refining the flours removes bran and germ which increases shelf life. It also removed the B vitamins. Previous iterations of bread did use bolted or sifted flour which did refine the wheat somewhat, but it didn't remove all of the bran, germ, and endosperm, and that flour was never bleached.

Bread with Whole Grains that are gently stone ground just before mixing the dough and then allowed to ferment slowly and naturally, in other words – authentic sourdough. That's how the Egyptians made it 6,000 years ago."

Bread was fundamentally redesigned. Refined flours, large quantities of commercial yeast, and a combination of additives and intense energy created the modern industrial bread. Fast mixing, fast rise, fast baking. Industrial bread is made far too fast." – [Mario Repetto](#)

How Our Gut Biology Has Changed

We keep eating more and more sugar. In the early 1700s, the average sugar consumption was about 4 pounds a year. By 1800 we were at 18 pounds a year. By 1900 we were up to 60 pounds of sugar a year. Today the average American consumes between 130 and 150 pounds of sugar every year.

Sugar feeds pathogens. Our healthiest gut bacteria like the healthiest foods: vegetables and herbs. Nature wouldn't work any other way; how could it? You're probably thinking, "What about fruit?" We don't eat the fruit we used to eat. Like

wheat, our fruit has been radically altered through hybridization. But that's another article (I'm working on it). For now, just Google "[wild banana](#)" or "[what watermelon used to look like](#)".

We get way more sugar than our ancestors got even if we cut out refined foods. This causes an abundance of Candida. I believe Candida is prevalent in every single person with chronic illness. Everyone has yeast but when yeast is left unchecked they turn into pathogenic fungi. Tests for Candida aren't accurate. Candida, when in its virulent fungal form, will make the gut more permeable. When this happens food proteins are absorbed into the body before they are digested. This causes allergies. This is one of the main causes of allergies, but there are others at play as well. In my experience, every single person who has cut refined sugar out of their lives and decreased their body's Candida was able to rid themselves of seasonal, environmental, and food allergies. Every single time!

In addition to that, a study published in *The Lancet* showed that the candida protein HWP-1 is similar in structure to gluten.

A candida infection in the gut can cause an immune system reaction to HWP-1, which then stimulates an allergic reaction to the gluten in wheat and other grains and may trigger celiac disease in genetically susceptible people." – [Leyla Muedin, RD](#)

Wheat proteins can also cause an immune response against the thyroid.

An obvious explanation is that the initial attack on the thyroid by anti-tTG autoantibodies of celiac leads to thyroid inflammation and presentation of TPO, with a second round of autoantibodies produced to TPO resulting in Hashimoto's Thyroiditis." – [Dr. Art Ayers](#)

Celiac disease and hypothyroidism beget more chronic autoimmune issues. Allergies lead to autoimmune disease. Allergies lead to chronic health issues. Medical science has established this. Medical science is just starting to understand the fact that a permeable gut causes allergies. Science also has established that an abundance of Candida causes a permeable gut. What they haven't figured out yet is just how prevalent the permeable gut issue really is. But the bottom line is that our poor diet leads to allergies and almost all that commonly ails us.

Suggestions

If you have a healthy gut, make your own sourdough bread using heirloom wheat and the old-school practices. If you have any chronic illness, then you do not have a healthy gut. [Here's how you fix it](#). If you're not well, wait until you get well before consuming any kind of bread. And don't think of old-fashioned bread as healthy. Vegetables are healthy. Bread is at its best a neutral food with some health benefits and easy calories that can help sustain life like brown rice and millet. Vegetables and herbs heal the body.

Obviously, stay the heck away from poisons! Glyphosate is a cocktail of poisons. Science has firmly established this. And avoid GMOs as well. They weren't designed with our health in mind, they were designed for profit, and in most cases, to sell more Roundup.

The hard truth is that letting companies cook your food for you leads to poor health. People often ask me, "If you can cure cancer why aren't you rich?" If I could cure cancer and figure out how to do it while still eating refined, prepackaged, and processed foods that we humans have grown accustomed to, I would be rich. But people would rather die for convenience food than give it up. Obviously. We see this everywhere.

Being well long-term means preparing all your own food yourself the right way, or being rich and hiring someone else to do it. There is no shortcut. Certainly not with bread.

Sources:

- [*Your Ancestors Didn't Eat The Same Type Of Wheat That You Do \(And They Were Healthier\) – Off The Grid News*](#)
 - [*4 Ways Modern Bread is Different From Traditional Bread – Our Heritage of Health*](#)
 - [*The Real Problem With Bread \(It's Probably Not Gluten\) – Mother Jones*](#)
 - [*Problems Linked to Monsanto's RoundUp – EcoWatch*](#)
 - [*15 Health Problems Linked to Monsanto's Roundup – EcoWatch*](#)
 - [*Consumption of Sugar – Sugar and Sweetener Guide*](#)
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Stop Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet

I have worked with many doctors, health coaches, nutrition consultants, and other various health professionals who are baffled with a client's inability, or their own inability to get over certain health issues. Ninety-nine percent of the time, the problem is sugar. We eat so much sugar! But it's not just sugar. If you're struggling with your health, and you feel like you've learned so much about health but still are unable to reach homeostasis, take a look at these common mistakes people make with their diet.

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Juice

The sugar within a whole apple will not feed pathogenic gut flora or spike most people's blood sugar when eaten as an apple. Apple juice, on the other hand, is a refined sugar. Juicing removes fruit sugar from its natural state, which is inside the fruit, surrounded and bound with fiber. If the

juice gets hot enough the enzymes are getting destroyed too.

How to Juice For Health

Use a slow juicer to preserve enzymes and other delicate nutrients. Drink immediately; don't store it. Use vegetables and herbs. This will not be that refreshing burst of sweetness fruit juicers are accustomed to. Spinach, lettuces and other lighter leafy greens make for a pretty easy transition. Kale, cabbage, and collards can be difficult to work with (or drink) depending on the juicer and their palate. Try adding them in slowly. Personally, I cannot make collard work to save my life, but I've grown accustomed to kale and spinach.

Related: [How to Optimize Curcumin Absorption – With Golden Milk Tea Recipe](#)

[Cayenne](#), [turmeric](#), [garlic](#), [ginger](#), and [cinnamon](#) are a healthy juicer's best friend. The herbal antimicrobial properties and some other factors help balance out the effects of the sugars from juicing.

Related: [The Best Juicer](#)

Wheat

The food pyramid is not our friend. Meat and grain industries have influenced dietary regulations for decades. How a food pyramid is done right depends on whether one is vegan, a raw foodist, or an omnivore, but the commonality is raw vegetables as the base for a balanced diet.

Related: [How to Optimize Curcumin Absorption – With Golden Milk Tea Recipe](#)

Grain has been consumed for thousands of years, but modern wheat is making people sick. There are a few likely reasons for this, including genetic engineering through hybridization (not to be confused with GMOs), glyphosates, unnatural harvesting practices, and the way we handle the modern

processing that make the food products. Many who cannot consume wheat are able to eat spelt, Kamut, Einkorn, and some other ancient grains that contain gluten, but anyone with severe gluten issues would be wise to stay away from all wheat and gluten until the gut is balanced and healed.

A proper food pyramid would have raw herbs and vegetables as the most important items, with cooked vegetables and herbs being shown as the second most beneficial, with fruit following close behind. Meat and grains are not necessarily bad for you, but they don't do nearly as much to heal the body (unless you're severely deficient in nutrition). Cooked vegetables, meats, and grains have many benefits and can help sustain and build our body, but raw fresh produce and herbs produce the best ecosystem in our gut which equates to a healthy body.

Gluten-Free Grains and Grain Substitutions

- **Amaranth** is an ancient grain that is very easy to absorb and assimilate and is rich in protein, as well as calcium, iron, magnesium, phosphorus, and potassium. It's also the only grain that has been documented to contain vitamin C.
- **Buckwheat** is technically not a grain; this fruit seed is related to rhubarb and sorrel. It's a good source of antioxidants, fiber, manganese, magnesium, and tryptophan.
- **Corn** can be problematic for those dealing with inflammation, but it's a much better choice than wheat for anyone who's not feeling their best. Corn is a good source of vitamins B1, B5 (pantothenic acid), and C; folate; and phosphorus.
- **Millet**, "with its many nutrients, has been shown to support the cardiovascular, gastrointestinal, and respiratory systems. It has the potential to protect

against diabetes and cancer.” – [Click to read more about millet here](#)

- **Montina** is flour milled from Indian ricegrass (which is not to traditional rice). It's rich in protein, carbohydrates, and fiber and is typically used as an additive to primary gluten-free flours.
- **Quinoa** is an ancient grain that's very popular right now. It's often is used in place of traditional starches, such as pasta, rice, couscous, and cereals. Quinoa is rich in amino acids, manganese, magnesium, iron, copper, and phosphorous.
- **Rice.** But not white rice. Brown rice contains the bran and germ portion of the kernel and is higher in fiber and other nutrients. Rice is rich in B vitamins, calcium, iron, magnesium, manganese, phosphorous, potassium, and zinc. Rice flour is commonly used for baking with gluten-free products.
- **Sorghum** is an ancient millet like cereal grain that's used in baking.
- **Teff** is an ancient grain that is similar in size to poppy seeds. Teff has a nutty, molasses like flavor is somewhat mucilaginous. It's can be eaten uncooked, as a cooked grain, or ground and added as part of the flour used in recipes. Teff is rich contains all eight indispensable amino acids, and it's chock-full of thiamin and contains significant amounts of the minerals phosphorus, magnesium, aluminum, iron, copper, zinc, boron, and barium.
- **Wild rice** is an aquatic cereal grain that grows wild in isolated lakes and riverbeds in the cold regions of North America. It contains protein, phosphorous, potassium, and magnesium and the B vitamins thiamine, riboflavin, niacin, and folic acid.

And of course, there are also beans and lentils for gluten free meals. Did I miss any? Comment!

Should I Be Soaking My Grains?

Phytic acid is an enzyme inhibitor of concern for many. Studies on phytic acid reveal that the phytic acid in whole grain can block calcium, zinc, magnesium, iron and copper absorption. It doesn't happen with everyone; some seem immune to these adverse consequences because of a favorable ecosystem of gut flora. In addition, when animal fats that provide vitamins A and D accompany whole grains the effects of phytic acid are lessened.

Despite its potential drawbacks, phytic acid is similar in some ways to a vitamin, and metabolites of phytic acid may have secondary messenger roles in cells.” – [All About Phytates Phytic Acid](#)

For those with healthy gut flora, it's probably not necessary to soak grains before cooking. For anyone suffering health issues, soaking grains and grain flours in an acid medium at very warm temperatures reduces or even eliminates phytic acid. I don't generally soak grains or grain like products. I also tend to eat grains with raw herbs and vegetables, and I eat more vegetables in a day than I do grains. If you consume lots of grains you may do better with soaking them first.

I do soak legumes and I typically soak most nuts and seeds. I sprout them if I can.

matter what else we do. We know that the quality of food can impact our DNA degradation, and enzymes are the other big piece of the longevity puzzle.

Related: [*Enzyme Supplementation For Disease*](#)

The more enzymes we get from our food, the longer our body will be able to produce our own enzymes, the longer we live.

Heat destroys enzymes. Pasteurized nuts are unlikely to sprout. The few that do still have some enzymes, but most do not.

Nuts, seeds, and legumes have natural enzyme inhibitors. Some are worse for us to consume than others, but all enzyme inhibitors inhibit certain enzymes from working. This is great for nuts and seeds so that they can be stored for years without breaking down, but these enzyme inhibitors disrupt our body's functions.

How To Do Seeds Right

Pumpkin seeds, almonds, hazelnuts, hemp seeds, pecans, walnuts and a few of other nuts and seeds are chock full of enzymes while in their raw, natural forms. Provided they are raw, chewing them well enough can mix the enzymes with the inhibitors, effectively canceling each other out, but soaking and sprouting these nuts and seeds will remove the inhibitors, turning the nuts into enzyme rich, life-giving superfoods. Other nuts, and many legumes, really should be soaked and sprouted due to the nature of their enzyme inhibitors. There's no need to sprout flax or chia seeds.

Enzyme supplements can also help to properly digest nuts and seeds, and eating them with raw vegetables can provide extra enzymes for digestion too.

Cooking can destroy many enzyme inhibitors but does not destroy all of them. Ideally, cooked nuts and seeds should be

sprouted first.

Related: [Homemade, Vegan Nut Milk Recipes and More](#)

Soaking and Sprouting Nuts and Seeds

I use warm filtered water and a pinch of sea salt. The warm water will neutralize many of the enzyme inhibitors, but not all of them. I dump the water half way into it, refill, and then dump and rinse well before use. The salt also helps to activate some of the enzymes that deactivate the enzyme inhibitors.



I soak for 12-24 hours, depending on the nut or seed.

What You Need

- 2-3 cups of raw, organic nuts or seeds (I don't mix them, one kind per container)
- 3-4 cups of warm water (cover nuts +15% for expansion)
- 1 tablespoon of salt

Instructions

1. Place the warm water in a medium bowl or jar that accommodates 2 liters or more
2. Add salt
3. Add the nuts or seeds
4. Leave uncovered overnight.
5. If you're not sprouting, it's time to dehydrate them. If I'm sprouting, at this point I soak them for one more round, another 8 hours or so, and then I lay them out on a towel and leave them overnight, damp. Wait until you see sprouting, and then you dehydrate the nuts or seeds.

Here is an article that goes into more depth on [how to sprout using a mason jar](#).

There are preferred individual soaking times, but I just tend to go by size. Bigger nuts get a little more water time.

Sprouting goes a step further reducing the levels of enzyme inhibitors and unlocking other nutritional benefits, even more. But not all seeds sprout. Pine nuts, macadamias, pecans, and walnuts will not sprout, at least in my experience. Don't even bother with soaking flax or sesame seeds. I like to sprout pumpkin, sunflower, almonds, broccoli, alfalfa, and clover. I can't get brazil nuts to sprout, but I always treat them as if I could. Judging by the chia pet, it would seem you could soak and sprout chia seeds.

If you give a squirrel a raw nut, it will always bury it. The squirrel will only dig it up when the nut has sprouted. They have found sensors in squirrels' noses that can identify a sprouted nut. Raw, unsprouted nuts have digestive enzyme inhibitors that prevent animals from digesting it easily. Only when it sprouts are these inhibitors deactivated. Smart squirrels!" – [Diana Herrington](#)

Beans, Legumes

Apparently, our ancestors understood this very well, because grains, beans, nuts, and seeds in their natural form were never consumed without being soaked or fermented first. It was a time-honored tradition of food preparation that kept agrarian cultures thriving. It wasn't until food mechanization took the reigns and the processing of food became an industry, that soaking and fermenting became a dying tradition." – [Kim, Yogitrition](#)

Do not buy canned beans. Do not trust companies to cook your

legumes. Legumes can have intolerable quantities of enzyme inhibitors and dangerous types of lectins that need to be resolved with soaking (and cooking). Check out [All About Lectins](#) for more on lectins. Always soak your beans, legumes, and lentils before consuming.

Soak lentils and peas for about 5 hours, and I soak other legumes overnight.

Soy

Soy contains a few enzyme inhibitors including a trypsin inhibitor, that won't allow nutrients to be properly digested. More than 90% of our soybean crop is genetically engineered. The GMO variety contains 27% more trypsin inhibitor. Soy should be consumed in a fermented form such as miso, tempeh, natto, and tamari sauce. Fermentation reduces soybean's enzyme inhibitors. Sprouted soy and edamame (green soybeans) are easier to digest.

Asian women have very low rates of menopausal complaints, heart disease, breast cancer and osteoporosis. The soy industry, with sketchy evidence to support their claims, attributes this to soy being a regular part of the Asian diet. These claims, which have become widely accepted due to massive media campaigns, disregard extensive research that shows otherwise. They also disregard other dietary and lifestyle factors at play in Asian cultures. For example, there are many Asian populations that don't eat soy as a regular part of their diet, yet still enjoy low rates of the chronic diseases mentioned. Among those who do eat soy regularly, fermented soy products are what is consumed the most. Asians aren't downing quarts of overly-sweetened, highly-processed soy milk or popping supplements containing concentrated soy isoflavones, which has become popular in the U.S. Soy. In addition, the traditional Asian diet consists of primarily whole, fresh, natural foods including sea

vegetables, which are packed with vital nutrients and one of the richest sources of absorbable calcium. They also eat a lot of fish, small amounts of meat, and little to no dairy products or processed foods—in stark contrast to the Standard American Diet, which consists of mostly processed foods high in sugar, fat, sodium, and excessive amounts of meat and zero sea vegetables.” – [Family Wellness First: Nutrition](#)

Related: [Sprouting to Remove Enzyme Inhibitors](#)

Agave Nectar

The Glycemic Index measures how quickly sugar from food enters the bloodstream. Fructose does not raise blood sugar or insulin levels in the short-term. This is why high fructose sweeteners are often labeled as “healthy.” Agave nectar’s low GI is because the sugar in it is fructose. The harmful effects of agave have little to do with the glycemic index. Glucose is an incredibly important molecule, found in many healthy foods and our bodies produce it. We need it. Every living cell does. The liver metabolizes fructose. When the liver cannot process all of the fructose it turns the fructose into fat, which gets shipped out of the liver as VLDL particles, fatty triglycerides, which raise our triglyceride levels. Eventually, much of the fat lodges inside the liver, which can cause fatty liver disease.

Related: [How To Reverse Fatty Liver Disease \(Diet Plan Included\)](#)

The sugar in agave also feeds pathogens. It doesn’t take much agave to overwhelm the liver. Agave is probably no healthier than white table sugar and could be worse.

Honey

A little bit of raw honey is good for you. While there’s no

scientific determination as to how much is too much, I reckon a tablespoon a day is just the right amount for those who are healthy, and far too much for those without a healthy gut.

Related: [*Candida, Gut Flora, Allergies, and Disease*](#)

The biggest two problems with consuming honey are:

- It's not always real honey, and it's almost always pasteurized
- People tend to cook it even when they buy raw (like when you put it in that coffee or tea)

Cooked honey loses too many of its beneficial properties to still be healthy. Honey should only be consumed raw with the natural enzymes intact.

Other Sugars

Coconut sugar, evaporated cane juice, apple juice, and brown rice syrup are all refined and processed foods. The sugar in fruit juice will have different results than the sugar in whole fruit. You can't sweeten foods by adding sugar without the consequences of added sugar.

There are also sugar alcohols like maltitol, sorbitol, erythritol, and the most well known, xylitol. Manufacturers of xylitol market the sweetener as derived from xylan, which is found in the fibers of many plants including berries, oats, beets, sugar cane and birch. Sugar alcohols are naturally occurring substances but manufactured xylitol is another matter entirely. Xylitol can be derived from the xylan of birch trees, but xylan is also found in corn. Thanks to our tax dollar subsidies, corn is cheap. Xylitol typically comes from GMO corn to make matters worse.

Sugar alcohols do not break down like food does through digestion. The fermentation of undigested xylitol in the gut disrupts our flora. Studies have shown health issues with

mice.

It appears that xylitola may be ok as a sweetener in small amounts, especially for those addicted to sugar. But it's not healthy. It's not at all beneficial to our bodies. And in large amounts, sugar alcohols are clearly toxic. For those sweet-tooth'ed ones looking to replace their sugar, there is not substitute without consequences. Sugar, in nature, is hard to come by. We just weren't meant to eat foods that are so sweet.

But there is one. The holy grail for health nuts: Stevia. But even this sweetener is not without its problems. True health does not come with a sweet tooth.

Dried Fruit

Speaking of sugar, dried cranberries almost always have plenty of it. Lots of dried fruit has this problem. Why do dried bananas need sugar? Double check those ingredients. Ideally, there should only be one. We suggest making your own.

Yogurt

First of all, the whole probiotic craze negates the fact that our stomach acid is designed to kill bacteria. Most yogurt is made with weak bacteria that would be killed within the stomach before reaching the gut. "Would be..." Most conventional yogurt does not have enough of this beneficial bacteria and what little bit it did have was killed off in the processing.

Food Bars

Sugar, cooked, processed, soy and other sticky ingredients make bars a no-no for anyone trying to heal. I've found a few bars that I like, but they aren't healthy. They are a treat. A much better choice than conventional food, but when you're not

well, you shouldn't trust a company to make your food. Another common problem with healthy food bars, besides soy and sugar, is they tend to add healthy fats that are highly susceptible to degradation, like chia and flax seeds.

Smoothies

Smoothies are typically too sweet, thanks to fruit juice and lots of fruit. But smoothies can be done right if they are made at home. Check out [How to Make the Healthiest Smoothies](#).

Packaged Health Food

The health food section of any grocery store is where the fresh produce is. That conventional, pesticide laden, perfect looking, 4 month-old apples is going to do most people a lot more good than a box of organic, all natural, free range, grass-fed, non-GMO, small farm, locally grown box of cereal. Healthy people eat lots of fresh, raw produce, and cook food from scratch. Pretenders buy their junk food in the organic section. It's better than the conventional aisles, but it's not healthy. Get to know your farmer's markets and the farmers there. Grow your own. Take things one step at a time. And listen to your body. Forget the health food section, and stick to the produce and bulk sections.

Conclusion

When I do eat foods that aren't the healthiest choices, I take Abzorb with it. It's an enzyme and a probiotic. It works well. I use it to help digest the food and keep the gut eco system in check. It's also useful for beans that maybe didn't soak long enough. Also, it's very important to get a wide variety of foods. Try a new food every day. Check out [my salad recipe here](#). I'll bet you'll find a few new ones in there. Those salads are better than any supplement on the market. Good,

large, diverse salads are the foundation of a healthy and powerful immune system.

Recommended Reading:

- [How to Detoxify and Heal the Lymphatic System](#)
- [Holistic Guide to Healing the Endocrine System and Balancing Our Hormones](#)
- [Candida, Gut Flora, Allergies, and Disease](#)
- [Hypothyroidism – Natural Remedies, Causes, and How To Heal the Thyroid](#)
- [Total Nutrition – Make your own Homemade Multivitamin and Mineral Formula](#)
- [How to Cure Lyme Disease and Virtually Any Other Bacterial Infection, Naturally](#)

Sources:

- [Raw Nuts & Seeds High in Enzymes – SF Gate](#)
 - [Nuts and Seeds: More Than They're Cracked Up to Be – Huffington Post](#)
 - [Living With Phytic Acid – Weston A. Price](#)
 - [Soy–Oh, Boy! Things to Consider About This Not-Always-Healthy “Health” Food – Kelly Hayford, C.N.C.](#)
 - [Inhibitors – FreeGrab](#)
 - [Natural plant enzyme inhibitors. Isolation and characterisation of two \$\alpha\$ -amylase inhibitors from *Colocasia antiquorum* tubers – Wiley Online Library](#)
 - [Eliminating Anti-Nutritional Plant Food Proteins: The Case of Seed Protease Inhibitors in Pea – Plos One](#)
 - [Nuts and Phytic Acid – Mark's Daily Apple](#)
 - [Another reason you shouldn't go nuts on nuts – Chris Kresser](#)
 - [Soaking Nuts and Seeds – Wellness Mama](#)
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Why Gluten Triggers Multiple Sclerosis Flare-Ups

There are many people who believe the whole “gluten intolerance” “gluten free diet” craze is nothing more than a sham, another diet scam created to market specialized foods to the masses. They are wrong. Unfortunately, many of them will continue to suffer from autoimmune diseases or other chronic conditions and will never admit to themselves that their diet is to blame.

If you suffer from MS or know someone who does, learning how a [leaky gut](#) is linked to MS is a vital step toward health.

What Is the Difference Between a Healthy Gut and a Leaky Gut?

When people hear the term “leaky gut” they often imagine the intestines leaking its contents into the body cavity. This is not the case. Healthy gut walls are coated with a biofilm, tightly interwoven cells that provide a barricade between the tissues and the intestinal contents. When the biofilm breaks down and the intestinal walls become inflamed, proteins and other particles that would normally stay inside the intestines pass into the bloodstream. Suddenly the body is flooded with what the immune system sees as “foreign invaders”. The immune system goes into overdrive and often steers off course.

Anyone who has faced the grim reality of an autoimmune disease has been told that their immune system isn't working right, that it is attacking their body. Unfortunately, it is a rare to find a health care practitioner who can tell them why and how to stop the process. Bottom line, the only way to heal the body is through proper nutrition, detoxing, and exercise. You start with healing the gut. If the gut isn't working right,

you can't assimilate nutrients. One of the first steps to healing the gut is eliminating gluten.

What Has Caused a Leaky Gut?

The standard American diet, sugar, antibiotics, chemicals, and heavy metals have all combined to destroy the natural bacterial balance in the gut.

Our gut is home to trillions of microbes, many of them beneficial bacteria that live with us in a symbiotic relationship that is vital to our health. These good bacteria help us digest our food, help keep bad bacteria, fungi, and parasites in check, and are even responsible for the production of neurotransmitters.

Antibiotics kill bacteria that are harmful to our health. In the process, they also kill the good bacteria in our gut. When the balance in the gut is destroyed, fungi take over along with the bad bacteria.

Sugar also feeds fungi (along with bad bacteria and viruses). An overgrowth of Candida typically occurs with high sugar diets and antibiotic use. Since sugar weakens the immune system, these two go hand in hand. Sugar also feeds fungi (along with bad bacteria and viruses). An overgrowth of Candida typically occurs with high sugar diets and antibiotic use. Since sugar weakens the immune system, these two go hand in hand. Drink sodas, eat sugary snacks and chemically laden processed foods and then wonder why you get sinus infections and bronchitis. Take antibiotics, break down the immune system more, and you repeat the cycle.

If this wasn't enough, processed foods are filled with sugar, high fructose corn syrup, artificial flavors, colorings, preservatives, MSG, and GMOs. And even our produce isn't safe unless it's organic. Some fruits have as many as 15 chemicals on and in them. All of these chemicals further destroy gut

health and lead to a chronic imbalance of good bacteria, bad bacteria, and Candida.

How Do You Heal the Gut?

There are supplements that can help you get your gut back in balance, but the main way to heal the gut is to eat a truly healthy diet. This means eliminating processed foods and eating 80% fresh, raw, organic produce – more vegetables than fruits and including healthy fats and plenty of pure water in your diet.

The MS leaky gut connection is clear. If you completely eliminate gluten (and that means every condiment and morsel of food that goes in your mouth) and adhere to a healthy diet, you will be amazed at how much better you feel. Many people with MS have found that symptoms return whenever they indulge in foods that contain gluten. To learn more about gluten, gut health, and multiple sclerosis, read [Gluten, Candida, Leaky Gut Syndrome, and Autoimmune Diseases](#) and [Foods To Avoid With Gluten Intolerance or Celiac Disease](#).

Recommended Reading:

- [Naturally Treat Multiple Sclerosis – Therapies, Diet, Pain Management, Alternative Medicine](#)
 - [How to Kill Fungal Infections](#)
 - [How to Cure Lyme Disease, and Virtually Any Other Bacterial Infection, Naturally](#)
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5 Things Everyone Should Know

About Wheat & Gluten

Although wheat is a staple food in the human diet, gluten proteins are associated with three well-known pathologies that affect a significant portion of the human population: gluten allergy, non-celiac gluten sensitivity, and celiac disease. More and more people are having trouble digesting wheat. Today, approximately [one in every 133](#) Americans have celiac disease, the least common of the three gluten-related pathologies. Let's look at a few likely reasons as to why.

Wheat Has Changed

The wheat we have now is very different from what our ancestors consumed. Modern dwarf wheat is hybridized. That isn't a GMO, but the genes of our wheat plant have been modified to grow faster and to be more resilient. Nearly all of the wheat consumed today is dwarf wheat, which has shorter stems and offers greater yield.

We used to eat a wheat variety called einkorn, which was actually one of the first grains that humans cultivated more than 10,000 years ago. When the Bible tells us to eat bread, einkorn is the wheat it refers to. Einkorn is lower in starch and higher in protein, essential fatty acids, phosphorus, potassium, pyridoxine, and beta-carotene.

More & Different Gluten

Modern wheat has much more gluten than einkorn. Modern wheat has a different gluten-protein structure. Einkorn has 14 chromosomes, and modern wheat has 42 chromosomes.

Gluten is actually not a single protein, it is a family of different proteins. One of the gluten proteins that scientists believe is causing much of the problems is called Gliadin- α 9. A

study found that Gliadin is significantly higher in modern wheat.

Wheat Processing Has Changed

Modern techniques in grain processing make it possible to create massive amounts of refined wheat for much lower cost than before. These modern processing techniques separate the nutritious bran and germ from the starchy endosperm. This process increases the shelf life of wheat but removes B vitamins and other nutrients.

These more refined flours started to be widely used around 1880. Soon after the world experienced epidemics of pellagra and beriberi.

Bread Making Has Changed

Most commercial bread contains bromides, added starches, refined sugars, added gluten (vital wheat gluten), preservatives, artificial flavorings, leveling agents, and stabilizers. Baking Soda, baking powder, and cream of tartar are often used in place of yeast or in addition to rapid rise yeast to make the bread rise quickly and more uniformly. Modern bread rises for a couple of hours or less, whereas homemade bread traditionally takes at least 12 hours to rise.

RoundUp

Eager to sell more of its flagship herbicide, Monsanto has encouraged farmers to use their glyphosate as a desiccant. Wheat can be harvested quicker and easier if you dry it all out ahead of time with Roundup. It's also used in this way on barley, oats, canola, flax, peas, lentils, soybeans, dry beans, and sugar cane.

My Two Cents

I believe that much of our problems with wheat digestion stem from the changes in our gut bacteria due to the increase in antibiotic usages, antimicrobial toxins chemicals (from pesticides to hand sanitizers), increased vaccines, and most importantly, our ever-increasing consumption of refined sugars. The result is a gut full of candida with little beneficial bacteria to help properly digest food, and this leads to a body full of fungus, parasites, and other pathogens.

An abundance of candida in the gut will cause the gut lining to be more permeable which allows for gluten proteins to pass into the bloodstream undigested. I believe this is a major cause of the increase in food allergies and digestive issues and gluten problems we are experiencing today. For more on that, I urge you to check out [*Best Supplements To Kill Candida and Everything Else You Ever Wanted To Know About Fungal Infections*](#). It's a must-read for anyone with chronic illness.

Related:

- [*Monsanto Lost! Ordered to Pay \\$289 million in California Roundup Cancer Trial*](#)
 - [*Gluten Intolerance, Wheat Allergies, and Celiac Disease – It's More Complicated Than You Think*](#)
 - [*Stop Eating Like That and Start Eating Like This – Your Guide to Homeostasis Through Diet*](#)
 - [*Sugar Leads to Depression – World's First Trial Proves Gut and Brain are Linked \(Protocol Included\)*](#)
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Candida or Celiac Disease – Which Came First?

The more we learn about leaky gut syndrome and gluten sensitivity, the more we question which came first, the gluten sensitivity or an overgrowth of Candida?

Gluten free diets may be all the craze right now, but there is a good reason for this. Many people are finding they feel better and their health improves when they remove gluten from their diets.

What Is Gluten?

Gluten is a protein that is made up of gliadin and glutenin. It acts as an emulsifier and it helps to bind food together. Wheat is the most commonly eaten grain that contains gluten, but the list of gluten grains is actually pretty long. It includes:

- Wheat
- Barley
- Bulgur
- Einkorn
- Emmer
- Farina
- Farro
- Kamut
- Mir
- Rye
- Seitan
- Semolina
- Spelt
- Triticale

Many people who react to gluten are also sensitive to oats.

Although oats do not contain gluten, the protein in oats is similar. Also, to avoid gluten with oats it is necessary to purchase gluten free oats and most oats are processed in the same plants as wheat and other gluten containing grains. Cross contamination is pretty much guaranteed if the oats are not gluten free.

In addition to oats, many gluten sensitive individuals react to cow dairy. Some are sensitive to other gluten free grains.

Note that couscous is made of wheat and malts are made of gluten grains. Learn the various names of wheat to avoid it. (See link below.)

What Is Candida?

Candida albicans is a yeast that is found in most humans. A healthy gut contains an abundance of good (beneficial) bacteria that keeps Candida in check, not allowing it to overgrow. If this balance is disturbed (generally through antibiotic use or ingesting too much sugar) Candida overgrows.

Through its metabolic process, Candida releases harmful toxins. As it grows it changes forms from a one-celled yeast to a form with filaments or threads that can cut right through tissues and single cells. It destroys the biofilm lining the intestines and can drill right through the gut wall. Proteins and food particles that never would pass through the villi now enter the bloodstream.

The body reacts to these invading, unnatural substances as if they were pathogens. This release of gluten proteins into the blood may well explain the rise in numbers of gluten sensitive people. Candida is ravaging the health of Americans and is rampant due to our overuse of antibiotics and the outrageously high sugar content in the typical American diet.

To learn more about Candida and how to heal the gut read [How](#)

[to Kill Candida and Balance Your Inner Ecosystem.](#)

For a full list of grains and whether or not they contain gluten, check out [this list](#) from the Celiac Support Organization.

Recommended Supplements:

- [Floramend-Prime by Thorne](#)
- [Shillington's Intestinal Cleanse](#)
- [Formula SF722](#)
- [MicroDefense – Pure Encapsulations](#)

Further Reading:

- [*Is Wheat Poison? What's Behind the Rise of Celiac Disease and Gluten Intolerance*](#)
- [*How to Kill Candida and Balance Your Inner Ecosystem*](#)
- [*The Fascinating Bacteria in our Gut, and How it Affects Our Whole Lives*](#)
- [*The Reasons Gluten Intolerance and Celiac Disease Are On the Rise*](#)
- [*How to Cure Candida*](#)
- [*Fermented Foods Optimize Your Health*](#)
- [*No More Gluten – How I Found Health After MS*](#)
- [*How Gluten can Affect Your Brain, Gut, and Skin*](#)

Sources:

- [*Gluten Intolerance – GBhealthWatch*](#)
- [*Professor Anne Ferguson \(Anne Collee\) 1941-1998 – Journal of Pediatric Gastroenterology & Nutrition*](#)
- [*Gene-Environment Interaction – National Institute of Environmental Health Sciences*](#)
- [*Glyphosate, pathways to modern diseases II: Celiac sprue and gluten intolerance – National Center for Biotechnology Information*](#)
- [*Celiac Disease Genes Identified In Immune System – Medical News Today*](#)

- [The Biology of . . . Sourdough – Discover Magazine](#)
 - [Sources Of Gluten – Celiac Disease Foundation](#)
 - [Celiac Disease – Food Allergy Research and Resource Program](#)
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Is Wheat Poison? What's Behind the Rise of Celiac Disease and Gluten Intolerance

We humans have been hunter-gatherers for more than 99.9% of our history. For millions of years, we subsisted on a diet of fruits, nuts, wild vegetables, bone marrow, seafood, meat, and herbs. Grains such as wheat, corn, barley, oats, and rye were not introduced into the diet until about 10,000 years ago. These grains became staples of our diet due to the introduction of agriculture.

Not everyone fared so well in this new agricultural system. As a matter of fact, the majority of people didn't. Relying on agriculture for the most of the diet, restricted variety. Archaeologists have discovered that the switch to agriculture resulted in a dramatic decline in health in every culture.

Our bodies are not well adapted to grains, though some tolerate them better than others. Many cannot tolerate grains that contain gluten at all, in any amount. For other sensitive individuals, long-term consumption of gluten destroys their health and may lead to their death.

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- [Glyphosate and the Rise in Celiac Disease](#)
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- [Increased Risk for other Debilitating Diseases](#)
- [Symptoms of Celiac Disease](#)
- [Diet Is the Only Known Treatment](#)
- [Other non-food items that may not be gluten free include](#)

History of Celiac Disease

Celiac disease, also known as celiac sprue, non tropical sprue, and gluten sensitive enteropathy, has probably always been with us. The earliest case, known as the “case of Cosa,” is more than 2,000 years old. A young woman’s remains were found southwest of modern day Tuscany, Italy. It is believed that she was between the ages of 18 and 20. We know that she had celiac disease because genetic testing revealed the presence of the HLA-DQ2.5. gene, a definitive genetic marker for the disease. Her skeleton also revealed the typical damage caused by malnutrition that is characteristic of a person with celiac disease who continues to eat gluten throughout their lifetime.

Aretaeus, an ancient Greek physician who was believed to practice in the 1st century AD, was the first to describe one of the most noticeable symptoms of celiac disease. Steatorrhea was the most common symptom, a tendency for fatty stools with poorly digested food. He wrote about a mysterious disease afflicting a number of his patients who he called “koilakos,” which means “suffering in the bowels.” Aretaeus believed the affliction was caused by a lack of heat in the digestive

tract. This was a reasonable idea because he found that his patients only partially digested their food. Unfortunately, he did not find the cause or cure. Celiac disease and its debilitating symptoms continued to plague a percentage of the population for centuries, without anyone identifying the source of the problem.

Francis Adams translated Aretaeus' work from Greek to English at the Sydenham Society of England in 1856. He coined the term coeliacs.

In 1888, Samuel Gee, a British pediatrician, was the first to make the connection between diet and the disease. He said, "If the patient can be cured at all, it must be by means of diet." Gee experimented with various diets. He showed moderate success by introducing mussels (a gluten free food) into the diet. Eventually though, he put his celiac patients back on a high gluten diet, (no fruit, no sago, no rice, no vegetables) and they got worse, slowly dying a painful death.

Gee primarily fed his patients a diet of thin slices of bread and raw meat. He failed to discover the bread was killing them. Part of the reason was the fact that he was actually treating patients with two different afflictions: celiac disease and tropical sprue, two unique diseases with similar symptoms.

(Tropical sprue is a disease that to this day has an unknown cause, but is believed to be an infection caused by an unknown pathogen. It solely afflicts people in the tropics, and people who have traveled to tropical regions. Damage to the intestines and malnutrition are the typical symptoms.)

Many years later, a Dutch pediatrician, Willem Karel Dicke, discovered a link between celiac disease and wheat. During World War II, food shortages made it impossible for him to feed his patients the standard staples of wheat. Out of necessity, the doctor switched to gluten free alternatives,

and his celiac patients thrived under the new diet. When wheat became available again, his patients with celiac disease quickly deteriorated. This led Dr. Dicke to make the connection between proteins found in wheat and damage to the small intestine. He wrote his thesis on celiac disease and its connection to wheat in 1950.

In the early fifties, Dr. William Holmes Crosby Jr. developed a less invasive technique to biopsy the small intestine. Then in the late fifties, Dr. Cyrus Rubin further refined the intestinal biopsy technique. This refinement led to a more accurate diagnosis of celiac disease. Dr. Rubin also defined the diagnostic criteria for celiac disease, proving that it afflicts both children and adults.

Then in the 1970s, the right kind of specialist shed more light on the problem. Anne Ferguson, a gastroenterologist, discovered that celiac disease is due to the body's immune response to gluten in the digestive tract. In 1975, she published a paper in the Lancet, which showed how biopsied tissues from celiac patients react to the proteins found in wheat, while the control biopsies from other individuals did not show this immune response.

Glyphosate and the Rise in Celiac Disease

In 2013, Anthony Samsel and Dr. Stephanie Seneff revealed a correlation between the increasing use of glyphosate in agriculture and the growth of celiac disease in the Western population. (Glyphosate is the active ingredient in Monsanto's Round Up, and it is used extensively in modern-day agriculture and landscaping.)

Celiac disease can originate from genetics, but you don't have to be born with it. Like many diseases, environmental toxicity is increasing its numbers. To further explain this interplay

between genetics and environment, the following passage is a quote from the National Institute of Environmental Health Sciences:

Nearly all diseases result from a complex interaction between an individual's genetic make-up and the environmental agents that he or she is exposed to.

Examples of environmental agents:

- *Mold*
- *Ozone*
- *Pesticides*
- *Air pollution*
- *Cleaning solutions*
- *Dust mites*
- *Some foods and medications*

“Subtle differences in genetic factors cause people to respond differently when exposed to the same environmental agent. As a result, some possess a low risk for developing a disease through an environmental insult, while others are much more vulnerable.

“As scientists learn more about the connection between genetics and environmental factors, and how that connection may influence human disease, they’ll begin to develop new strategies for the treatment and prevention of many illnesses.” – [Gene-Environment Interaction](#)

Anthony Samsel and Dr. Stephanie Seneff have suggested such a strategy. They have urged governments to ban the use of glyphosate in agriculture.

Wheat isn't grown the way it used to be. Conventional methods of wheat farming have become more toxic. For decades now, farmers have been fertilizing their fields with petroleum based chemical fertilizers and using poisonous insecticides.

Recently, wheat farming has grown even *more* toxic. A common modern farming practice is for many farmers to douse their fields with Round Up right before the harvest. This practice kills weeds that compete with the wheat. It also increases the yield from the wheat crop, which goes to seed more readily as it is dying. Note that no one claims Round Up is good for us; the biotech folks only profess that it isn't bad for us. Wheat farming has become so toxic, is it any wonder that allergies to wheat and gluten are on the rise?

How We Make Bread

Consider how we make bread in modern times. White bread is manufactured from only one part of the wheat grain – the starch-filled endosperm. This process removes 4/5 of the nutrition. The starch is then ground into a fine powder. This processing is done at high temperatures and more of the nutrients are destroyed. The flour is then gray, so it is bleached with chemicals such as benzoyl peroxide or chlorine gas.

White bread appears to be healthy when one reads the label that lists its fortified vitamins and minerals, but these poor quality, often petroleum based vitamins and minerals are rarely of any nutritional value. All of the good vitamins and minerals were removed during processing.

Unfortunately, there are other added substances that are harmful to sufferers of celiac disease. Yeast, a common leavening agent used in breads, can make the environment in the digestive tract more suitable to an overgrowth of Candida. Those with celiac disease are particularly prone to Candida overgrowth in their digestive tract.

Some amount of Candida in the body is normal, but too much can be very harmful. When Candida multiplies out of control, it kills off good bacteria, releases toxins, and can actually penetrate the intestines by growing through them. This can

cause partially digested food particles to enter the bloodstream through the perforated intestines. This is what is referred to as leaky gut syndrome. This often causes an immune system response, which can lead to more food allergies and a variety of autoimmune diseases. Overconsumption of grains, bread, and especially bread that has been highly processed and sweetened with refined sugars, has been linked with Candida overgrowth.

Traditionally, Bread Was Healthier

Breads have been made for more than 8,000 years, but yeast wasn't introduced in baking until 1668. So what did bakers use before yeast? The traditional cultures used to make dough rise were bacteria, microscopic hard working fermenters that were pulled from the air.

Lactobacilli gives sourdough bread its unique flavor. The same bacteria that bakers have used for centuries to bake bread is closely related to the bacteria used to make yogurt and many cheeses.

This bacteria breaks down gluten and other proteins, making grains with gluten more easily digested. In the past, grains were routinely sprouted before grinding them into flour, another step rarely done today.

Some individuals with celiac disease can tolerate sourdough bread if it is prepared in a precise manner: made with sprouted grains and fermented for an extended period of time.

What is Gluten?

Gluten is a protein that is made up of gliadin and glutenin. It acts as an emulsifier and it helps to bind food together. This is why gluten free foods do not usually have the doughy, elastic consistency of foods containing gluten. Xanthan gum is

often used in place of gluten as a binder for baked gluten free foods.

Candida, Gluten, and Other Food Allergies

Individuals with celiac disease are commonly allergic to other foods as well. Cow dairy is a very common food allergy for sufferers of celiac disease. Many are sensitive to oats, even when they are gluten free, due to a similar protein. Some are sensitive to other gluten free grains. The reason for this is due to an overabundance of Candida in the intestinal tract. And this is due to sugar.

In modern diets, sugar intake has increased substantially for many years. In other words, along with all of the other changes with how we produce and consume wheat products, we are also seeing a rapid increase in people with an over abundance of Candida due to refined sugars.

Proteins from foods (such as gluten, and many others) enter the blood stream through holes in the intestinal wall due to Candida. Candida, when left unchecked, will actually destroy the protective biofilm and drill holes into the intestinal wall, causing leaky gut syndrome. When foods passes through into the bloodstream undigested, the body sees the proteins as foreign compounds that do not belong, and the body can develop an allergic reaction to the proteins.

Many have reported being able to consume gluten products occasionally after balancing their intestinal flora and healing their gut. It is wise, whenever consuming gluten, to also take a probiotic. Also, we highly recommend not eating any commercial bread. For someone who feels that bread and pasta are too important for them to give up, it's crucial for them to abstain from wheat products until the intestines are healthy, and then make their own bread and pasta the right

way, including soaking, sprouting, and using a strong bacterial culture.

Increased Risk for other Debilitating Diseases

Individuals with celiac disease are more likely to develop several cancers. They are also more likely to have Addison's disease, anemia, dermatitis, diabetes, thyroid disease, autoimmune thrombocytopenia, sarcoidosis, IgA nephropathy, and Down's syndrome.

Symptoms

There are over 300 known symptoms of celiac disease. The more common symptoms are listed below.

- Abdominal bloating and pain
- ADHD
- Anemia
- Arthritis
- Anxiety
- Bone pain
- Bedwetting
- Chronic fatigue
- Constipation
- Delayed growth and puberty
- Depression
- Diarrhea
- Eczema
- Failure to thrive
- Infertility
- Irritability
- Irregular menstrual periods
- Joint pain
- Malnutrition

- Migraines
- Miscarriages
- Osteoporosis
- Persistent canker sores
- Rashes
- Seizures
- Tingling sensation or numbness in hands or feet
- Unusually foul-smelling stool, blood or undigested foods in stool
- Unexplained weight loss
- Vomiting

Diet Is the Only Known Treatment

The treatment for sufferers of celiac disease is to avoid gluten entirely, to eat a completely gluten free diet. The FDA does not require food manufacturers to list gluten on their labels. Wheat is required to be clearly labeled, but gluten is not. The following foods contain gluten:

- Wheat
- Barley
- Bulgur
- Couscous
- Durum
- Einkorn
- Emmer
- Farina
- Farro
- Kamut
- Malt
- Mir
- Oats (unless labeled gluten free oats- oats are often contaminated)
- Rye
- Seitan
- Semolina

- Spelt
- Triticale

Gluten is commonly found in breads, bread crumbs, baked goods, beer, biscuits, brewer's yeast, brown rice syrup (often made with barley enzymes), cereals, communion wafers, crepes, croutons, dextrin, flour tortillas, food coloring, food starch, French toast, granola, gravies, herbal teas, malt vinegar, marinades, sauces, pancakes, pastas, roux, salad dressing, soup, soy sauce, starch, stuffing, waffles, and wine. Any processed food made in a facility that also processes foods with gluten may be contaminated.

Other non-food items that may not be gluten free include:

- Lipbalm, lipgloss, lipstick
- Supplements
- Pharmaceuticals
- Vitamin and mineral pills
- Over the counter medications
- Playdough (some kids will eat copious amounts of the stuff when playing with it)

This list is not meant to be comprehensive. Many processed foods contain gluten, and unless the package says certified gluten free it probably isn't. Many items that one might think are gluten free like corn flakes and rice cereal use malt or barley extract as a sweetener. Restaurants that do not offer gluten free menus cannot guarantee that their food is gluten free. And sadly, many that do offer gluten free choices contaminate the food while preparing it.

Conclusion

Celiac disease is an autoimmune disease, and like all autoimmune diseases, the body's immune system attacks the

body's tissues. In the case of celiac disease, T cells attack the lining of the small intestine in response to gluten being passed through the digestive tract. This damage to the small intestine makes individuals with celiac disease more prone to cancers of the intestine. When an individual with celiac disease eats gluten, their symptoms can vary drastically in severity. Ingesting gluten can cause severe symptoms on one occurrence and only mild symptoms the next, which can confuse and delay an accurate diagnosis.

Many individuals with celiac disease suffer in silence, living their lives in constant pain and discomfort, because they have yet to be diagnosed.

Like most autoimmune diseases celiac disease affects more women than men. Women are more likely than men to be misdiagnosed as well and more likely to be told that their symptoms are "in their head". This is one of the reasons why many sufferers of celiac disease are likely to ignore their symptoms until they become unbearable.

Thankfully, celiac disease is not the mysterious death sentence that it used to be in ages past. Now there are gluten free menus, gluten free options at the grocery store, and naturopathic ways to detox from gluten. Even the Catholic Church and the Methodist Church provide gluten free communion wafers upon request.

We know more about this disease and its symptoms than we ever have before. We also understand that gluten destroys the cilia in the intestines, the part of our anatomy that pulls nutrients into the bloodstream. If a person with this disease continues to eat gluten, malnutrition can result because the body is so damaged it is unable to properly metabolize nutrients from food. Individuals with celiac disease are more likely to be diagnosed with other autoimmune diseases such as lupus and Hashimoto's thyroiditis.

We highly recommend that anyone with any autoimmune disease completely remove gluten from their diet and concentrate on healing the gut. Anyone with a history of gluten intolerance needs to heal their gut and balance their flora. Check out [How to Kill Candida and Balance Your Inner Ecosystem](#).

Recommended Supplements:

- [Floramend-Prime by Thorne](#)
- [Shillington's Intestinal Cleanse](#)
- [Formula SF722](#)
- [MicroDefense – Pure Encapsulations](#)

Further Reading:

- [How to Kill Candida and Balance Your Inner Ecosystem](#)
- [The Fascinating Bacteria in our Gut, and How it Affects Our Whole Lives](#)
- [The Reasons Gluten Intolerance and Celiac Disease Are On the Rise](#)
- [How to Cure Candida](#)
- [Fermented Foods Optimize Your Health](#)
- [No More Gluten – How I Found Health After MS](#)
- [How Gluten can Affect Your Brain, Gut, and Skin](#)

Sources:

- [History of Coeliac Disease – Gluten Free Travel](#)
- [Genes and Me Gluten Intolerance – GB Healthwatch](#)
- [History of Celiac Disease – Celiac Support Association](#)
- [Professor Anne Ferguson \(Anne Collee\) 1941-1998 – JPGN](#)
- [Gene-Environment Interaction – NIH](#)
- [Glyphosate, Pathways to Modern Diseases II: Celiac Sprue and Gluten Intolerance – NCBI](#)
- [Celiac Disease Genes Identified in Immune System – Medical News Today](#)
- [The Biology of Sourdough – Discover Magazine](#)
- [Food Allergy Research and Resource Program-University of Nebraska Lincoln](#)

The Reasons Gluten Intolerance and Celiac Disease Are On the Rise

It seems that every few years we hear of another diet fad or food fad. In the last few years gluten is getting all of the attention. How can wheat or other common grains—fixtures of the American diet—be causing such problems?

What is gluten? Gluten is the protein found in wheat (including spelt, kamut, triticale , which are varieties of wheat), rye, and barley.

Why has gluten become a problem for so many?

There are several reasons gluten has become a problem for so many Americans.

First of all, bread or wheat forms the basis of the American diet. Toast for breakfast, sandwiches for lunch, rolls or pasta for dinner—the majority of Americans eat wheat all day, every day.

The wheat we eat barely resembles the wheat our ancestors ate. Although it is not genetically modified (yet), it has been significantly altered by selection, through generations of hybrid alterations to increase yields and make it more disease resistant.

Our ancestors used to sprout grains before using them. We rarely take this step to make grains more digestible.

And last, but certainly not least, Candida overgrowth in the gut is epidemic due to the American diet and use of antibiotics.

What is the link between Candida and gluten intolerance?

Our gut is filled with bacteria. If properly balanced, the beneficial bacteria far exceeds the bad bacteria and yeast. The beneficial bacteria are crucial to our health. They help us digest our food. They create neurotransmitters and vitamins. It is said that 80% of our immune system is in the gut.

When we take antibiotics, we kill off beneficial bacteria along with bad bacteria. When the level of bacteria drops in our gut, Candida, the opportunist, overgrows. When we eat sugar and simple carbs that change into sugar (including alcohol), we feed the Candida its favorite food.

Candida begins as a single cell yeast but soon changes form, becoming a hyphae, stretching out long filaments that bore through tissues in the gut (and throughout all organs of the body). A healthy intestine is lined with cells that form a tightly knit defense to keep its contents contained. Nutrients are pulled from the food we eat through tiny vessels from the circulatory system and lymphatic system within the villi, little hair like projections. When Candida erodes the lining of the gut, undigested food particles and large proteins, like gluten, are leaked into the bloodstream and the lymphatic fluid. The immune system attacks these particles, perceiving them as foreign invaders. This is the root cause of many autoimmune diseases and allergies.

What are the symptoms of gluten intolerance?

Digestive disturbances such as gas, bloating, and diarrhea are the most basic symptoms of gluten intolerance experienced when gluten is consumed. Those with a severe sensitivity also experience rashes (which can be severe, itchy, weeping sores) along with mild to severe muscle and joint pain.

Gluten sensitivity includes a reaction to foods with minute amounts of gluten including foods processed in a shared facility. In other words, wheat , rye, or barley may not be an included ingredient, but if the equipment used to process a particular sauce or packaged food was used to process food with wheat, it can be contaminated and produce symptoms.

What is Celiac Disease?

Celiac disease is an autoimmune disease with a genetic predisposition. There are up to 300 symptoms of this disease, but there are also individuals who are asymptomatic. The one thing they all have in common is the result of eating gluten—it attacks and destroys the villi in the intestine. When villi is destroyed, our capacity for absorbing nutrients from our food is diminished. Each time gluten is eaten even in small amounts, more damage ensues.

Can gluten intolerance be reversed?

If Candida is eradicated, if the gut is completely healed and is no longer permeable, and the immune system has healed, it is possible that many will again tolerate gluten. It is advisable, however, to get tested to be sure Celiac disease is not silently damaging the intestine.

In conclusion

Gluten intolerance is not a fad. It is a fact—an every growing reality caused by the American diet and lifestyle. If you have been diagnosed with any autoimmune disease or with gluten intolerance, leaky gut caused by Candida may well be the root cause. See [How to Kill Candida and Balance Your Inner Ecosystem](#).

Recommended Supplements:

- [FloraMend – Thorne Research](#)
- [Formula SF722 – Thorne Research](#)
- [Shillington's Intestinal Cleanse](#)
- [Shillington's Intestinal Detox](#)

Further Reading:

- [Foods To Avoid With Gluten Intolerance or Celiac disease](#)
- [5 Things You Didn't Know About Gluten](#)
- [How Gluten Can Affect Your Brain, Gut, and Skin](#)
- [How to Kill Candida and Balance Your Inner Ecosystem](#)

Sources:

- [What is Celiac Disease? – celiac.org](#)