



## Celiac Disease

Celiac Disease is an autoimmune disease triggered by gluten (or more specifically, gliadin) in some genetically predisposed people (HLA gene DQ2 or DQ8). The gliadin component of gluten is a protein found in wheat, barley, rye and some other grains and is very difficult to digest. In a person with Celiac Disease, when gluten is detected, the immune system mounts an inflammatory response to **Gliadin** and to an enzyme located in the cells that line the small intestine, called **Transglutaminase**. This creates inflammation and damage to the intestine resulting in a decrease in the absorptive surface area (malnourishment) and integrity of the intestinal wall. This can make your Tummy feel really bad. You could experience diarrhea, constipation, bloating, gas, pain, cramping etc... The repercussions of this autoimmune response are not localized to the gut, they are far reaching.

Damage to the intestines has been linked to many different types of disease states, such as Osteoporosis, Cancer, Autism, ADHD, Alzheimer's, Parkinson's, Allergies, Thyroid issues like Hashimoto's and Graves Disease, Dermatitis and other skin issues etc....

An immune response to gluten may also result in the formation of chemical complexes which can travel beyond the intestines and create inflammatory processes throughout the body. Some people with Celiac Disease or gluten sensitivities may not experience gut symptoms at all! They may have symptoms in other areas of the body.

**\*\*\* What I am learning is that gluten is particularly troublesome to the central nervous system!\*\*\***

### Celiac Disease can be managed through Diet.

It is important to follow a strict gluten free diet to avoid autoimmune attacks. Even very small amounts of gluten can still cause an immune reaction. Products made with Wheat, Barley, Rye and other grains should be avoided unless they are marked as certified "Gluten Free".

To be labeled as "Gluten Free" products can still contain up to 20 parts per million of gluten in the product. This means the facilities can still process gluten containing products on their equipment and contaminate a product labeled as "Gluten Free". For a super sensitive person, this could still cause an immune reaction.





## Hidden Food Sources of Gluten

Aside from the obvious sources of gluten like: bread, pasta, cookies, cakes, crackers, pizza, etc... gluten can also be found in things like:

- ❖ Ketchup, Mayo & Mustard and other condiments
- ❖ Salad Dressings
- ❖ Canned Soups!!!
- ❖ Cold Cuts and Hot Dogs
- ❖ Seasonings
- ❖ Gravy & Thickeners
- ❖ Bouillon Cubes
- ❖ Dry Sauce and Dip Mixes
- ❖ Candy & Chocolate
- ❖ Malted Vinegar
- ❖ Malted Milk
- ❖ Honey Ham (Glaze)
- ❖ Instant Coffee and Teas
- ❖ Matzo
- ❖ Artificial Flavorings and Dyes
- ❖ Soy Sauce
- ❖ Fried Foods In Restaurants (will commonly have wheat or breaded items fried in the oils)

You don't necessarily have to avoid all of these things but you really should be reading all of your labels and be paying close attention to sourcing your ingredients. Also, don't be afraid to ask! When you eat in a restaurant it ok to ask about gluten.

## When reading labels look for these other names for Gluten Containing Ingredients:

- ❖ Wheat Germ
- ❖ Hydrolyzed Wheat Protein
- ❖ Hydrolyzed Vegetable Protein
- ❖ Avena Sativa
- ❖ Triticum Aestivum
- ❖ Seitan
- ❖ Spelt
- ❖ Semolina
- ❖ Kamut
- ❖ Farro
- ❖ Duram
- ❖ Bulgar

If you're going to use processed or prepackaged foods, it's a good idea to look for items with a short list of recognizable ingredients.... that you can pronounce.

## Other sources of Gluten...Beyond Diet

Gluten is found in more than just food! Because wheat is such a grossly overproduced crop, manufacturers have found a zillion ways to use the excess. Wheat is everywhere!! Gluten can





be found in cosmetics, personal care items and even in the glue that is used to seal envelopes and coat the backs of stamps! It is important to learn about the hidden sources of gluten.

Our skin is extremely absorbent! What we put on our skin has a direct route into our bloodstream so it's important to be mindful of the ingredients in our cosmetics, hair, skin and oral care. I'm not just talking about gluten!

**Some common sources of hidden gluten include:**

- ❖ Toothpaste
- ❖ Lipstick / Makeup
- ❖ Stamps & Envelopes
- ❖ Hairsprays
- ❖ Detergents
- ❖ Lotions
- ❖ Shampoos & Conditioners
- ❖ Pet Food
- ❖ Pharmaceutical Drugs
- ❖ Supplements, Vitamins / Minerals
- ❖ Anything you put on your skin

**Cross Reactivity**

Once the immune system becomes confused, it can be further tricked by other proteins that resemble Gluten/Gliadin or Transglutaminase. This is called molecular mimicry.

Proteins found in the foods below have been researched and in some cases have been found to trigger a Celiac immune response. This may not be the case for everyone with Celiac, but it is something that every person with Celiac should be aware of. Of all the foods listed below, Dairy, by far...ranked the highest as a potential gluten cross reacting immune trigger! The casein protein in dairy looks very similar to gliadin.

**Potentially Cross Reactive Foods - Be Aware!**

- ❖ **Dairy!!!**
- ❖ Oats
- ❖ **Quinoa**
- ❖ Millet
- ❖ **Corn**
- ❖ Amaranth
- ❖ Yeast (Baker's, Brewer's, Nutritional)
- ❖ Milk Chocolate
- ❖ Rice (Wild Rice is ok)
- ❖ Potato





## Gluten is not the only problem with Wheat!

The commercial wheat that is grown in our country is genetically altered to yield more grain and more carbohydrates and more gluten. Additionally it is heavily sprayed with Round-Up during harvest and that chemical makes it's way into the final product... which we consume. **Glyphosate is a neurotoxin!** There is evidence that the active chemical in Round-Up, glyphosate, may be involved in the formation of Celiac Disease in some cases. Taking gluten out of wheat does not protect you from the other elements at work here.

## Whole Foods....Are Safer Foods!!

There are a lot of "Gluten Free" products on the market...BUT they are not perfect foods either. Many gluten free products contain high amounts of sugars, additives, dyes, inflammatory refined oils and even ingredients from the list above that could potentially be confused as gluten by your immune system. As mentioned above, even certified "Gluten Free" products are still allowed to contain trace amounts of gluten.

**If you do your homework and source your "gluten free" products, you can find some reputable products that are made in completely gluten free facilities.**

However, a better way to go is the Whole Foods Route! Preparing your foods yourself from healthy wholesome ingredients is the optimal way to protect yourself against immune triggers and THE BEST WAY to nourish your body and improve your overall health!

Processed and prepackaged convenience foods are a big part of what got us into the health crisis we are experiencing as a modern society. We were designed to eat the foods provided by nature. When we denature these foods through heavy processing, our bodies get confused. That is essentially what autoimmunity is...confusion in the body.

Hollie Donelson, NTP

Happy Tummies of The Lowcountry, LLC  
167A Bluffton Rd, Bluffton SC 29910  
843-227-1042





<https://link.springer.com/article/10.1007%2Fs00415-014-7245-7>

<http://www.greenmedinfo.com/toxic-ingredient/wheat-germ-agglutinin-wga>

<http://www.webmd.com/digestive-disorders/celiac-disease/celiac-disease#1>

<http://www.greenmedinfo.com/blog/dramatic-recovery-parkinson-s-patient-gluten-free-diet>

<https://www.scientificamerican.com/article/parkinsons-disease-and-pesticides-whats-the-connection/>

