

## Gluten Sensitivity Quick Facts

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Gluten Sensitivity is the broad category and includes both celiac and non-celiac forms. Celiac Disease (CD) is therefore a small subset of Gluten Sensitivity (GS).

Gluten Sensitivity refers to all those who have negative health consequences from dietary gluten. See the list that starts on page 2 for conditions frequently related to GS. Gluten Sensitivity is a genetic disorder and is a lifelong condition.

The celiac disease form of gluten sensitivity consists of physical changes and damage to the small intestine and is likely to include one or more of the multitude of chronic related conditions that occur outside the intestines from systemic inflammation and autoimmune disorders. Celiac Disease can present with or without obvious intestinal symptoms even though an intestinal biopsy would show malformations either way. Only about 1 in 8 people with CD have significant intestinal symptoms related to dietary gluten. The treatment is a gluten-free diet (GFD) along with supplements such as anti-oxidants and probiotics.

Non-celiac GS includes the same likelihood as a celiac patient of developing one or more of the multitude of chronic and inflammatory conditions outside the intestines and autoimmune and/or neurological disorders without abdominal symptoms and without celiac-type small intestine pathology. Most often the only sign of gluten sensitivity is the onset of an autoimmune or neurological disorder. Treatment is the same as the celiac gluten sensitive form and that is a GFD and supplements.

Research is ongoing but some authorities estimate that as many as 50% of the North American population is affected by gluten sensitivity in one form or another and most of these are non-celiac GS.

In spite of the life threatening nature of GS, it remains grossly under diagnosed in all forms even in the classic celiac form that affects about 1 in 100 in the US. Doctors of all kinds routinely miss even celiac patients with obvious intestinal signs. Genetic testing has improved greatly in the past several years. A person can be reliably tested for celiac and non-celiac GS predispositions. All forms of GS are inflammatory responses to dietary gluten. Gluten is a grain protein and is found in highest quantities in the family of grains that includes wheat, rye and barley (WRB). Gluten is a combination of two proteins, gliadin and glutenin. Gliadin and glutenin are extensively cross-linked in nature so most references are to this gluten complex instead of the biologically-active component gliadin. Gliadin is difficult if not impossible for the GS person to digest. Our body makes anti-bodies to gliadin primarily in the small intestine (95%). 5% of the anti-gliadin antibodies are made in the blood where they may be detected by blood testing. Most often a gluten sensitive person will have a negative blood test but more often a positive stool test for the antibody. A negative blood test or even a negative stool test does not automatically rule out gluten sensitivity. The most reliable indicators that a person will benefit from a gluten free diet (GFD) is one of the clinical conditions listed below plus a positive genetic test. Ultimately a person will have to go GF for many weeks to months and observe health patterns (symptoms and appropriate testing) to know if he or she is gluten sensitive.

Gluten Sensitivity in both forms is a life-long condition. The only treatment is elimination of gluten from the diet. Most gluten-related conditions respond favorably to a truly GFD. A low gluten diet is not an effective treatment for gluten-related conditions. Even minute amounts of

gluten once a month can perpetuate the condition(s). Gluten is not an essential nutrient so the only negative aspect of a GFD is convenience. It only feels like an essential nutrient because of the addictive nature of gluten. Portions of the gluten protein (exorphins) bind to opiate receptors in the brain like opium, heroin or cocaine so some withdrawal is expected once a person truly goes gluten free. The addiction should not be underestimated. If any other agent in our diet caused so much misery and death, it would cause a social uproar and legislation would be enacted to limit its use.

To be gluten free, a person will have to learn to read labels and reread labels and watch for hidden sources of gluten and gluten contamination. Rice is a low gliadin food is considered safe for most people as long as they are not contaminated with wheat, barley or rye in transport, processing or packaging. Oats does contain significantly high gliadin percentages so can be a problem food for some GS people. Oats is usually contaminated with wheat gluten unless grown and processed apart from wheat, rye & barley completely.

You can download the Enterolab form for antibody and/or genetic testing from [soarchiro.com](http://soarchiro.com) (look for gluten resources) or [OVitaminPro.com](http://OVitaminPro.com) (look for Resources then Gluten Resources). This Quick Facts publication is also available for a free download from these sources.

*Dangerous Grains* by Braly is an excellent resource as well. It was published in 2002 so some things have become dated especially in the genetics descriptions. I still recommend reading this book. I want to stress that a quick genetic test is extremely valuable in sorting out this gluten issue for you and your loved ones.

Below is a partial list of conditions or diseases that have been scientifically or clinically linked to gluten sensitivity. Any of these listed conditions or any chronic inflammatory or auto-immune reaction is a good enough reason to suspect gluten sensitivity and warrants the simple, one-time genetic test (\$149). Which condition or conditions that show up will vary greatly from person to person even with a similar genetic profile. Some conditions will also vary during your lifetime. A past history of any of these will warrant testing.

#### **Gluten Sensitivity Watch List**

Abdominal bloating and/or distension	Autism
Abdominal pain and/or cramping	Auto-immune conditions
Acquired hypertrichosis lanuginosa	Auto-immune thyroiditis (Hashimoto's)
ADD and ADHD	Back pain
Addison's Disease	Behavioral difficulties
Allergic rhinitis	Behavioral problems in children
Alopecia areata	Behget's Disease
ALS	Bell's Palsy
Anemia or Low iron	Biliary Cirrhosis
Anxiety	Bipolar disorder (Manic depression)
Aphthous stomatitis (canker sores)	Bone or joint pains
Aplastic Anemia	Bowel cancer
Appetite Disorder (increase or decrease)	Brachial neuritis
Arthritis	Bursitis
Asthma	Cancer
Ataxia	Carpal Tunnel Syndrome
Atypical mole syndrome	Chronic muscle or joint pain or stiffness

Congenital giant nevus  
Cravings for sweets, bread, carbohydrates  
Crohn's Disease  
Cutaneous Vasculitis  
Depression  
Dermatitis herpetiformis  
Dermatomyocitis  
Diabetes - Juvenile Onset  
Diabetes - Adult Onset  
Difficulty digesting dairy products  
Difficulty in relaxing or chronic tension  
Drowsiness after eating  
Dysautonomia  
Eczema  
Edema (puffy swollen legs)  
Epilepsy  
Erythema elevatum dilantum  
Erythema nodosum  
Esophageal metaplasia (Barrett's esophagus)  
Esophageal reflux (GERD)  
Failure to thrive  
Fatigue (chronic)  
Fibromyalgia  
Flatulence  
Gastric reflux and digestive complaints  
Generalized acquired cutis laxa  
Headache  
Heart Disease  
Heartburn after pasta, pizza or pastry  
Hepatitis (AutoImmune)  
Hereditary angioneurotic edema  
Herpetiformis dermatitis  
Huntington's  
Ichthiosiform dermatosis  
Infertility  
Insomnia  
Iron-deficient anemia  
Iron-overload  
Irritable bowel syndrome (IBS)  
Lactose intolerance  
Learning difficulties  
Linear IgA Bulbous Dermatitis  
Liver abnormalities – elevated enzymes  
Lupus

Malabsorption problems - Malnutrition  
Metabolic syndrome - Syndrome X  
Mineral deficiency  
Mood swings  
Multiple sclerosis  
Muscle cramps and spasms  
Myopathy  
Nausea and vomiting  
Necrolytic migratory erythema  
Neutropenia  
Obesity  
Oral Lichen planus  
Osteopenia  
Osteoporosis  
Pale, bulky, greasy and/or smelly stools  
Parkinson's and Parkinsonian Syndromes  
Pellagra  
Peripheral neuropathy  
PMS symptoms/hormonal imbalances  
Porphyria  
Premature gray hair  
Psoriasis  
Psychological disorders  
Pyoderma gangrenosum  
Rashes of unexplained origin  
Recurrent Febrile Infections  
Regional enteritis  
Resistant hypothyroidism  
Restless Leg Syndrome  
Rheumatoid arthritis  
Schizophrenia  
Sciatica  
Sclerosing cholangitis  
Seizures/epilepsy  
Short stature  
Sjögren's syndrome  
Skin problems of unexplained origin  
Tendency to over-consume alcohol  
Tinnitus  
Ulcerative colitis  
Urticaria (Hives)  
Vitiligo  
Weight gain