

Gluten 101

By Faye Elahi, M.S., M.A.

“The gluten-free guru!”

What in the world is gluten?

Gluten is a subfraction of the wheat or barley or rye protein that causes an immune reaction when the person eats foods that contain any of these grains. Among the physical symptoms are constipation, bloatedness, diarrhea, gas, idiopathic anemia (iron deficiency anemia of unknown cause), severe headaches (gluten ataxia), hair loss (alopecia), neuropathy neuropathy (nervous system degeneration), and many more. In addition, there are shocking psychological symptoms such as inattention, lack of concentration, mental lethargy, distractibility, dementia, ADD, ADHD, autistic-like symptoms, and schizophrenia. Individuals with a genetic predisposition to gluten protein can either develop gluten sensitivity or Celiac disease.

What is the difference between gluten sensitivity and celiac?

Celiac is a subtype of gluten sensitivity, caused by a genetic marker, HLA-DQ8, where the individual's small intestine is attacked by *gluten*, causing the cells to atrophy. Since the small intestine is where 70-80% of our nutrient absorption takes place, a damaged small intestine can lead to mal-absorption and, subsequently conditions such as anemia (lack of iron absorption) or osteoporosis (lack of calcium absorption). In contrast, *gluten sensitivity* can affect many organs other than the small intestine, such as the skin, leading to eczema and/ or Dermatitis Herpeti-formis (a life long skin rash or pimplelike lesions that are extremely itchy), or the Central Nervous System, causing Lupus and/or Sjogren- Larsson Syndrome(neurological disorder), just to name a few conditions.

What is the treatment for celiac and gluten-sensitivity?

A strict, life-long, gluten-free diet is known as the most effective treatment for both of these conditions. Avoidance of gluten quickly leads to healing of the small intestine, and the person starts feeling better in some cases within days, if not weeks. In addition to watching dietary sources of gluten, it is also crucial to know about and eliminate hidden sources, such as skin care products, shampoos, prescription drugs, toothpaste, soaps, lotions, cosmetics, nutrition supplements, and even glue used to seal envelopes. This

inconspicuous use of gluten in common household products makes following a 100% gluten-free diet challenging.

As you have noted, the gluten-free diet is especially challenging in the first six months to a year while you adapt your thinking and develop new ways to shop, eat out, stock medicine cabinets, and cook gluten-free.

What amount of gluten would cause a reaction in someone with a sensitivity?

According to Dr. James Braly, a researcher who has studied the effects of gluten on the intestinal lining, less than one gram of gluten (1/5 of a teaspoon) is enough to cause damage to the intestine. Considering that some common medications use gluten as a starch binder, it is not hard to imagine how much daily exposure an average person with gluten sensitivity could receive.

What is the prevalence of celiac or gluten sensitivity in the U.S.?

According to the documented national estimates, 1% of the general population is affected by celiac disease. Since most internal medicine doctors do not commonly screen for gluten sensitivity or celiac, these conditions seem to be grossly under-diagnosed. In my medium-sized nutrition practice in Dallas, these estimates are more like one out of 25-30 individuals! One main reason behind the higher prevalence of celiac or gluten sensitivity in some practices is perhaps the fact that more people were tested and properly diagnosed. According to Dr. James Braly, 15-20% of the population demonstrates some type of immune reaction to gluten protein.

What are the early warning signs of gluten sensitivity?

The most glaring warning sign among children is a distended belly and a short stature (usually below 10th percentile). This is especially true if no obvious medical explanation for these two factors is evident. In adults, iron deficiency anemia of unknown cause, folate deficiency, elevated free homocysteine level, low bone density (osteopenia), chronically elevated liver enzymes of unknown cause, low blood pressure, elevated serum alkaline phosphatase, chronic headaches, family history of Type I diabetes, or overweight and obesity could all be important warnings.

How long does it take to be diagnosed for celiac or gluten sensitivity, and what is the cost involved?

The average time it commonly takes for an individual to be officially diagnosed through the traditional medical channels is between two months

to a couple of years, depending on the doctor's knowledge about early warning signs.

The average co-pay cost of the celiac blood test along with a biopsy varies from \$300-\$1,000 depending on insurance coverage.

In my private practice, since we have had a high client base of over 500 cases of celiac and gluten sensitivity, coupled with the fact that I am personally affected by gluten sensitivity (and am sympathetic!), we can detect this disease within two to three weeks. The average out of pocket cost of this quick diagnosis at the Nutrition Balance For Life! office is under \$125.

Is this like a food allergy when once treated, the person can start eating the allergy provoking foods again?

No, unlike a food allergy, which is mostly reversible after a period of elimination and rotation, gluten sensitivity is life-long. However, one needs to note that most celiacs and gluten sensitive individuals may also have multiple delayed-onset food allergies. The good news is that with proper gluten elimination, one can at best have a symptom-free life with almost the same health risks as the general population for cancer, cardiovascular, and neurological diseases.

Faye Elahi is a gluten-sensitive nutritionist who has been practicing in the area of Special Needs Nutrition in Dallas for 18 years. She is nationally known and the founder of Nutrition Balance For Life! Her work has been published in the Journal of the American Dietetic Association. Contact her at: (972) 743-1425 or faye@specialneedsnutrition.com. Visit her website at: www.specialneedsnutrition.com

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