# Celiac Disease

# Should You be Gluten Free?

by Margy Squires

read and water, the necessities of life. Or are they? For those with the disorder known as Celiac Disease (CD), an intolerance to gluten may have them reaching for water alone. Gluten is a protein found in most grains like barley, wheat and rye. Known also as celiac sprue and gluten sensitive enteropathy (GSE), CD deserves serious attention, early diagnosis and treatment. What may start out as mild GI symptoms hides a potentially damaging inflammatory problem that causes malnutrition, weight changes, and, if not treated, even GI carcinoma or lymphoma. CD may affect 1 out of 100 Americans, many undiagnosed. Are you one of them?

# **Just the Facts**

Studies indicate that 95% of CD may be genetically disposed, especially for those of European descent, although Blacks, Asians and Hispanics suffer CD as well. CD affects all age levels. With infants and children, CD can appear as early as their first introduction to grains in cereals. Recent epidemiology figures indicate that 3 million Americans may have CD, but diagnostic numbers are not that high, suggesting that the medical profession may not be recognizing the disorder. In fact, it may take as many as 8 to 11 years for diagnosis from the first onset of symptoms. In Italy where CD is common, doctors have a diagnostic turn around time of 2-3 weeks! With better diagnostic tools and more awareness, celiac is coming of age in the U.S. as well. An early diagnosis is the only way to avoid unnecessary complications in the face of a known and effective treatment: elimination of gluten in the diet.

# An Autoimmune Problem

Basically, CD is a disorder of the immune system. Upon consumption of gluten, antibodies raise a red flag in the GI tract, signaling a hostile invasion. Tiny, hairlike "fingers" in the intestines called villi are damaged and/or destroyed. The intestines themselves become inflamed and irritated, and try to "flush" the intruders out. Inflammation also slows down the digestive process, promoting food allergies, nausea, gas and stomach bloating. Since these villi help with nutrient absorption and transport, malnutrition can be a problem no matter how much food is consumed.

Untreated, symptoms progress and weakness, weight loss or gain, irritability and bone, muscle or joint pain follow. Anemia is common. In infants and children, CD may stunt normal growth and development. Dermatitis herpetiformis is a related condition that causes intensely itchy, patchy, blistery skin on the elbows, knees and buttocks. Since many of these symptoms mimic irritable bowel, fibromyalgia, chronic fatigue, allergies

and/or digestive woes, the diagnosis of CD is elusive indeed.

As an auto-immune disorder, CD is often associated with other auto-immune diseases such as insulin dependent diabetes and thyroid disease, and less frequently with rheumatoid arthritis, lupus, Sjogren's and scleroderma. Accordingly, women are more likely to have CD than men.

# How to Test

Testing for CD is typically a Celiac Panel blood screening for Anti-Endomysial (EMA) IgA, Anti-tissue transglutaminase (tTg) and total serum IgA. Testing must be done while still consuming a gluten containing diet. Additionally, an endoscopic biopsy of the small intestines should be done to both confirm a CD diagnosis and check for intestinal damage. The biopsy is done in an out-patient setting. Genetic markers may be checked as 97% of those with positive HLA markers (HLA-DQ2 and HLA-DQ8) will be predisposed to CD.

Of note, blood tests may be negative in mild CD cases. EnteroLab (see references) has perfected and patented tests for 100% sensitivity for identifying gluten antibodies present in stool samples "whether a person has symptoms or not".



#### Celiac Disease continued

Their stool test is also non-invasive as opposed to biopsy methods. As celiac is genetic, EnteroLab also offers the HLA-DQ gene test. By offering tests which provide a definitive celiac diagnosis, earlier treatment and potentially less damage to the GI tract means a lower risk for developing disorders associated with CD.

### Diet is Key to Recovery

Inflammation is the villain to villi. Avoid gluten to stop the damage and begin healing. Obvious foods are wheat, barley and rye but oats sometimes are restricted in the beginning. The gluten free diet (GFD) requires a bit of investigative work for hidden sources of gluten (see box on page 4).

The GFD diet is for life. The simplest strategy is to keep foods as close to nature as possible. Most packaged foods contain gluten in some form. Read food and supplement labels carefully. Choose fresh veggies and fruits, unbreaded fish and meats. Substitute rice, soy, potato and cornmeal in place of offending grains. Prepare, cook and store foods separately

from gluten containing foods. Chew food thoroughly to make digestion easier. In the beginning, you may want to keep a food diary, watch your weight and if you feel overwhelmed, consult a registered dietician.

# Gluten here, gluten there

Gluten itself is comprised of a mixture of gliadin and glutenin. Since symptoms of CD can only be eliminated with a 100% GFD, knowing what you're eating is critical for recovery and healing. One of the problems in finding gluten free foods is labeling standards and what constitute as gluten free. Even trace amounts can inflame villi (whether you have symptoms or not); damage that can be irreversible. Resources for the GFD diet are at the end of this article.

# **COMMON SYMPTOMS**

Abdominal Pain, Bloating Anemia Bone & Joint Pain Depression Diarrhea, Chronic Failure to thrive (Babies) **Fatique** Gas, Flatulence Growth Stunting (Children) Infertility **Irritability** Menstrual Problems Mouth Sores Muscle Pain, Weakness Seizures Smelly, Pale Yellow Stools **Tooth Discoloration** Weight Loss or Gain

# Summary

Celiac is a disease that can lead to serious complications if left untreated. Education and diet compliance is critical. But the good news is, 70% of symptomatic relief can be obtained through diet alone, without drugs. Villi can be restored to normal. Supplements help speed up the healing process and fill the gaps in nutritional deficiencies during the 4 to 6 months recovery time. Celiac is very treatable and a fork and knife may be your best tools for success!

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For more on celiac, check these organizations. Most information is free for the asking.

- 1. American Celiac Disease Alliance (703-622-3331). http://americanceliac.org
- 2. Celiac Sprue Association (1-877-272-4272). www.csaceliacs.org
- 3. Celiac Disease Foundation (1-818-990-2354). www.celiac.org
- 4. American Celiac Society (504-737-3293)
- 5. Gluten Intolerance Group (253-833-6655). www.gluten.net
- 6. University of Chicago Celiac Disease Center. www.celiacdisease.net
- 7. National Digestive Disease Information Clearinghouse (1-800-891-5389). http://digestive.niddk.nih.gov/index.htm
- 8. National Institutes of Health Consensus Development Conference on Celiac, Final Statement at http://consensus.nih.gov/
- 9. EnteroLab www.enterolab.com (972-686-6869 for lab tests)

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