

## CELIAC DISEASE

Celiac disease (a.k.a. celiac sprue, nontropical sprue, gluten-sensitive enteropathy) is an autoimmune disorder primarily affecting the gastrointestinal (GI) tract. Patients with celiac disease have a genetically inherited intolerance to gluten, a protein found in wheat, rye, and barley. Ingestion of gluten results in damage to the intestinal villi impairing the absorption of nutrients from food leading to problems including: osteoporosis, iron deficiency anemia, and vitamin deficiencies. Untreated celiac disease can increase the risk of developing other autoimmune diseases and malignancies of the intestine.

### ***Could I have Celiac Disease?***

Celiac disease affects about one in 200 persons in North America. Because the symptoms of celiac disease are so varied, identifying patients with this disease can be difficult. The following is a list of associated conditions that could indicate the need to consider celiac disease: failure to thrive, unexplained short stature, Down syndrome, chronic fatigue, type 1 diabetes, GI complaints (diarrhea, constipation, abdominal pain, dyspepsia, esophageal reflux), osteopenia/osteoporosis, hypocalcemia, secondary hyperparathyroidism, neurological problems (ataxia, peripheral neuropathy, epilepsy), anemia (iron, folate, or vitamin B12 deficiency), dermatitis herpetiformis, aphthous stomatitis, dental enamel defects, gynecologic problems (delayed menarche, premature menopause, infertility, spontaneous abortion), liver disease (primary biliary cirrhosis, autoimmune hepatitis, elevated transaminases), thyroiditis, Sjogren's syndrome, and first- and second-degree relatives of patients with celiac disease.

In patients with suspected celiac disease, a blood test (for specific antibodies) is performed. If testing and clinical presentation suggest celiac disease, a small intestinal biopsy is necessary to make a diagnosis.

### ***Gluten in Diet and Drugs***

Once a diagnosis of celiac disease is made, patients must follow a gluten-free diet for life. A gluten-free diet excludes all forms of wheat, rye, barley, and possibly oats (because of potential contamination with gluten during harvesting and processing). While food is the primary source of gluten, other sources of gluten, such as pharmaceuticals, must be considered. Gluten present in medications is found in the inactive ingredients. With celiac disease, even the smallest amounts of gluten are of concern and can damage the intestines.

### ***Treatment***

Once a patient is diagnosed with celiac disease they should be assessed for nutritional deficiencies. Depending on the patient's food choices, a multivitamin/mineral supplement and a commercial fiber product might be beneficial.

Patients with newly diagnosed celiac disease should have their bone mineral density checked. If osteopenia (decrease in bone density) is present, supplemental calcium and vitamin D is indicated. Since many patients with celiac disease are also lactose intolerant, a check for that condition should also be made. Pneumococcal vaccine is recommended for celiac patients over the age of 50 years.

Treatment of celiac disease by adherence to a gluten-free diet is a lifelong commitment. Patients should be well informed about their disease and the consequences of deviating from a gluten-free diet. Support from the pharmacist, prescriber, and dietician helps the patient with celiac disease manage their condition.

For additional information on this and other health issues, visit: [EMCemergency.com](http://EMCemergency.com) and [MedlinePlus.gov](http://MedlinePlus.gov)  
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