

## Celiac Disease in Children and Adolescents

**Celiac disease (CD) involves the inability for the small intestine to digest gluten, which is found in many grains such as wheat, barley, rye, buckwheat, or millet.**

In addition to the gastrointestinal system, CD can also involve other body systems and cause conditions including short stature, osteoporosis, and iron-deficiency anemia. It develops in people who are genetically predisposed to having an immune system that reacts to gluten in the diet and are exposed to gluten.

In the United States, an estimated 3 to 13 per 1000 people have CD. Some research studies suggest that although CD is likely present in about 1% of people, only about 10% to 15% of those know they have it and are being treated.

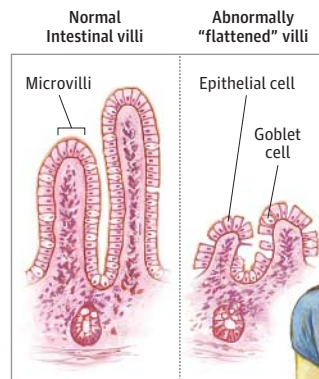
For babies, CD symptoms may initially appear after a baby is first given cereal containing gluten. Symptoms may include irritability, poor weight gain, or even loss of weight. Common symptoms for children and adolescents may include chronic diarrhea, although some patients are constipated. Some children may vomit, complain of abdominal pain or distension, or have pale or foul-smelling stools.

Symptoms of CD can arise at any age; the older the child is at symptom onset, the more likely it is for the symptoms to be unusual and include symptoms other than those related to the gastrointestinal tract. These may include fatigue, iron-deficiency anemia, or dental problems. Some children get a rash called dermatitis herpetiformis, which involves itchy blisters mostly on the outer surfaces of the elbows, knees, and buttocks.

Because CD is a serious condition and requires lifelong avoidance of gluten, confirming the diagnosis with a laboratory test is often necessary. Your doctor may recommend a blood test to look for high levels of antibodies, which are proteins in the immune system that may react to gluten. Your doctor may recommend referral to a gastrointestinal specialist for further evaluation. Another potential test is a biopsy, which involves using a thin tube called an endoscope to take a tissue sample from the small intestine.

The only treatment of CD is complete and lifelong avoidance of foods containing gluten including cereals, pastas, breads, and other baked goods. Families need to also monitor other foods, such as canned soups and stews, that may be thickened with grains. Even small amounts of gluten can cause symptoms.

Today, there are many gluten-free options available including gluten-free grains and pastas. Many products provide clear labels



indicating gluten-free status. Some families find it helpful to meet with a nutritionist as they learn about creating a balanced and nutritional gluten-free diet, and websites can also be helpful in selecting healthy gluten-free menus.

### FOR MORE INFORMATION

University of Chicago Celiac Disease Center:  
<http://www.cureceliacdisease.org/living-with-celiac>

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**Author:** Megan A. Moreno, MD, MEd, MPH  
**Resource:** University of Chicago Celiac Disease Center

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