

# What Is Celiac Disease?

Celiac disease is a digestive disorder that occurs in reaction to gluten, a protein found in rye, barley, wheat, and hundreds of foods made with these grains. The body's immune system reacts to the gluten and causes damage to the intestine. Celiac disease, also known as celiac sprue or gluten-sensitive enteropathy, is fairly common. An estimated 1.8 million Americans have the disorder and need to follow a gluten-free diet.

## Celiac Symptoms:

Symptoms of celiac disease can vary from mild to severe. Some people have no symptoms, although they still are developing intestinal damage. Celiac disease is sometimes misdiagnosed as irritable bowel syndrome, Crohn's Disease, or gastric ulcers. Digestive symptoms may include:

- Abdominal bloating and pain
- Diarrhea
- Vomiting
- Constipation
- Pale, foul-smelling stool

Many adults with celiac disease don't have digestive symptoms at all. But the failure to absorb nutrients may lead to other

problems, including weight loss and malnutrition. Signs and symptoms related to weight loss or malnutrition can include:

- Anemia
- Fatigue
- Osteoporosis
- Infertility or miscarriage
- Mouth ulcers
- Tingling, numbness in the hands and feet
- For some people, celiac disease causes an itchy, blistering rash known as dermatitis herpetiformis. It may begin with an intense burning sensation around the elbows, knees, scalp, buttocks, and back. Clusters of red, itchy bumps form and then scab over. It often first occurs in the teenage years and is more common among men than women. The rash usually clears with a gluten-free diet but can also be treated with medication
  - Some people with celiac experience depression, irritability, poor memory, and trouble concentrating. The strain of having a chronic disease can contribute to problems with mood and memory, particularly when there is chronic pain or fatigue related to anemia.

## **Warning Signs in Children**

Celiac symptoms may start in childhood, even in infants when parents introduce foods that contain gluten. Symptoms can include vomiting, bloating, pain, diarrhea, and irritability. The disease can lead to slowed growth or even failure to thrive.

Children with celiac may have teeth that are pitted, grooved, discolored, or poorly formed. Children with a parent or sibling with celiac disease should be screened

## **Celiac Disease Trigger Foods**

Wheat is a staple in Western cultures, so many common foods contain enough gluten to aggravate celiac disease -- breads, crackers, muffins, pasta, pizza, cakes, and pies. Fried chicken can be off limits, thanks to the breading. Chinese seitan and Japanese udon noodles come from wheat. Rye and barley also contain gluten, so pumpernickel bread, barley soup, and even beer can cause problems for those with celiac disease.

Celiac disease and wheat allergy both involve the immune system but the reaction within the body is different. Celiac disease is an autoimmune disease that causes damage to the lining of the intestine. It is a lifelong disorder. Symptoms of wheat allergy can include a skin rash, wheezing, abdominal pain, or diarrhea. Wheat allergy is often outgrown.

Celiac disease damages the inner lining of the small intestine, and that may lead to difficulty digesting lactose, a sugar found in milk and milk products. Following a gluten-free diet allows the intestine to recover, and people with celiac disease may discover that they are able to digest lactose once again

## **Who Gets Celiac Disease?**

While no one knows exactly why, the following factors place you at greater risk for developing the condition:

- An **immediate** family member with celiac
- Exposure to gluten before 3 months of age
- Major life event, emotional stress, pregnancy, or surgery in people who are genetically predisposed
- Type 1 diabetes, thyroid disease, or other autoimmune disease
- Another genetic disorder such as Down syndrome or Turner syndrome

## **Celiac Disease and Osteoporosis**

When the small intestine is damaged due to celiac disease, it doesn't absorb nutrients well. People with celiac disease are at risk for osteoporosis, and many of them will need aggressive treatment to address their low bone density. They may benefit from calcium and vitamin D supplements and periodic bone density screening.

A wide variety of foods contain gluten, including processed meat, potato chips, french fries, breaded foods, sauces, and soups. It may be in lipstick or in medicines. You may be able to eat oats if they are not contaminated with wheat, but talk to your health care provider first. Wine and distilled alcohol are generally safe, but most beers are not. Beer is made from grains and does not go through a distilling process.

## **Treatments: Supplements**

People with celiac may also benefit from vitamin and mineral supplements if the condition has caused a deficiency.

Important nutrients that may need supplementing include iron, calcium, vitamin D, zinc, copper, folic acid, and other B vitamins. Be sure to check with your health care provider for the right amount.

## **Other Treatments**

A small percentage of people with celiac don't respond to a gluten-free diet. These people may be prescribed steroids to be taken orally or by injection into a vein for short-term use to curb the immune system.

## **Living With Celiac Disease**

Meat, fish, rice, beans, fruits, and vegetables are all fine for people with celiac disease, when prepared without ingredients that contain gluten. Some restaurants now offer gluten-free meals. And many stores carry gluten-free versions of pasta, pizza, and cookies. Strict adherence to the diet can prevent health problems. If you don't see improvement, you may need to look for hidden sources of gluten.

Studies are underway for new drugs that would enable people with celiac disease to eat gluten safely. These include enzymes, taken as a pill, that break down the gluten. Immunotherapy injections may counteract the underlying immune reaction to gluten. Scientists have even tested hookworms (seen here), a parasite that can live in the gut, to see if they will help people with celiac disease.