Celiac Disease Diagnosis Guide







What is celiac disease?

Celiac disease is an inherited autoimmune disorder. Inherited means the gene or genes causing it came from your parents. Autoimmune disorders are illnesses that happen when the body's immune system attacks the body itself.

Celiac disease is caused by exposure to gluten. Gluten is a protein found in certain grains, such as wheat, rye and barley. If you have celiac disease and eat gluten, it causes damage to your small intestine. This damage normally occurs in the beginning of the small intestine in the area called the duodenum. Celiac disease mainly damages structures, called villi, that line the small intestine. Villi are tiny, finger-like protrusions that help digest food and absorb nutrients. When the villi are damaged, your body may not be able to absorb important nutrients. This can cause you to become malnourished or develop nutrient deficiencies. It limits your health and well-being.

Celiac disease can also impact other parts of the body and is associated with as many as 200 to 300 symptoms.



Normal Villi

Villous Atrophy (Celiac Disease)

What are the symptoms of celiac disease?

Memory loss

Mood swings

Night terrors

Panic attacks

Short tempter

Suicidal

Infertility

The most common symptoms involve the gastrointestinal system, which digests food. These symptoms include diarrhea, weight loss and pain in the belly.

Other common symptoms that people with untreated celiac disease may have include osteoporosis (weakened bones), anemia (having too few red blood cells) and elevated liver enzymes (high amounts of certain proteins in the blood that could mean the liver is not working properly). The following page provides a list of less common symptoms people with celiac disease can experience.

Behavioral

- ADD
- Anxiety
- Brain fog
- Depression
- Irritability
- Irrational anger
- Loneliness/isolation
- Loss of interest in activities

Female-Specific

- Breast tenderness
- Early menopause
- Frequent miscarriages
- Hormonal level swings

Intestinal

- Acid reflux
- Bloating
- Constipation
- Diarrhea
- · Gas that would clear a room

Joint/Muscle

- Ataxia
- Back pain
- Burning sensation in the joints
- Joint pain/stiffness/ swelling
- Leg cramps
- Muscle spasms
- Swelling in hands and feet

Miscellaneous

- Asthma
- Bladder infections
- Blurred vision
- Chills and fevers
- Chronic fatigue
- Dandruff
- Coughing
- Dizziness/vertigo
- Fainting
- Fluctuating weight
- GERD
- Hair loss
- Headaches

Oral

- Bad breath
- Gum disease
- Mouth sores
- Mouth ulcers

Skin

- Acne
- Brittle nails
- Bruising
- Burning scalp
- Dandruff
- Dark circles under the eyes

Vitamin Deficiencies

- Anemia
- (low iron)

- Heartburn
- Hemorrhoids
- High blood pressure
- Hyperthyroidism
- Irregular heartbeat
- · Low Blood sugar
- Migraines
- Night sweats
- Racing heart
- Seizures
- Sinus pressure
- Sleeping issues
- Swollen gums
- Tonaue sores
- Tooth enamel erosion
- Eczema
- Flaky skin around the eyes
- Hives
- Pale skin
- Skin cancer
- Skin rashes
- Low vitamin B12
- Low vitamin D
- Low calcium

· Heavy, painful periods

Swollen bladder/cervix

Loss of appetite

Stomach pain

Nausea

Long-term complications of celiac disease

Untreated celiac disease can cause serious long-term health problems. If your intestine is not absorbing nutrients properly, that can lead to vitamin and mineral deficiencies, osteoporosis and anemia. People with untreated celiac disease have a greater chance than people without this illness to have heart disease, some cancers and infertility. People with untreated celiac disease are also more likely to develop other autoimmune disorders and have neurological or mental health conditions.

Testing and diagnosis

For celiac disease testing to be accurate, it is important that the patient continues to eat foods containing gluten before they are tested.

The testing to diagnose celiac disease should include blood work and an upper endoscopy, with biopsies of the small intestine (taking a small piece of tissue to examine under a microscope).

About the blood work

When you have celiac disease, your body thinks gluten is a harmful intruder and activates your immune system to make certain antibodies. To diagnose or monitor celiac disease, your provider will order blood work to see if you have these antibodies in your blood.

The three main antibodies related to celiac disease are tissue transglutaminase (TTG), anti-endomysial antibody (EMA) and deamidated gliadin peptides (DGP).

About upper endoscopy

In an upper endoscopy, the doctor threads a narrow, flexible tube that has a camera and light at the end through your mouth, esophagus, stomach and small intestine. The doctor will take six to eight tissue samples (biopsies) from the small intestine. These are sent to another provider, a pathologist, who will look at them under a microscope to find signs of celiac disease.





Treatment

The only treatment for celiac disease is permanently avoiding eating foods containing gluten. A gluten-free diet heals the damage to the small intestine and helps ease symptoms. It also helps prevent future problems related to celiac disease. Getting used to a completely gluten-free diet can be a difficult change for most people. It is important that celiac disease patients are treated by specialized celiac disease doctors, nurses and dietitians who will help guide them through these changes and perform regular testing to check on the status of their illness.

Should you get tested?

If you can answer "yes" to any of the following questions, you should be seen by our clinic for a celiac disease evaluation.

- 1. Have you ever been told that you have anemia due to low iron?
- 2. Have you ever been told that you have low B vitamins?
- 3. Have you ever been told that you have osteopenia or osteoporosis? Have you broken more than one bone in your life?
- 4. Do you have recent unexplained weight loss?
- 5. Do you have a family member with celiac disease?

If you cannot answer yes to any of the above questions, you could still have celiac disease and might want to get tested.

How to get tested

If you answered yes to any of the above questions, schedule an appointment directly with our clinic by visiting VanderbiltHealth.com/Celiac or calling 615-640-1051. If you cannot answer yes to any of the above questions but still believe you may have celiac disease, the first step in getting tested is to have your primary care physician (PCP) order celiac disease blood tests.

Click here to download a printable copy of the instructions that your PCP will need to test you for celiac disease. If the initial blood work comes back positive, your PCP will refer you directly to our clinic.

Why choose Vanderbilt for celiac disease care

Teamwork

Our celiac disease specialists include doctors, nurses, registered dietitians and pharmacists, all with special training in celiac disease. They work together as a team to care for you.

Thorough, personalized care

Vanderbilt University Medical Center's Celiac Disease Clinic is the leading health care provider for celiac disease in the Southeast. Our care team addresses all aspects of managing celiac disease, including nutrition, bone health, risk for other autoimmune diseases, mental health and more. We are a recognized clinic in the Celiac Disease Unit Recognition Program (CDURP), developed by the Society for the Study of Celiac Disease. Clinics in this program offer a high level of care for people with celiac disease.

Research

About 30% of patients on a gluten-free diet will still experience some celiac disease symptoms. This is called refractory celiac disease. One option for treatment of refractory celiac disease is taking part in a clinical trial. Clinical trials are ongoing studies of new drugs, in addition to a gluten-free diet, to help improve symptoms of celiac disease. Vanderbilt University Medical Center makes several clinical trials available to people with celiac disease.

Convenient Location

The Celiac Disease Clinic is conveniently located in Nashville at the Vanderbilt University Medical Center campus inside the Vanderbilt Center for Human Nutrition.



The Celiac Disease Clinic Team



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Click on a team member's name or visit **VanderbiltHealth.com/Celiac** to learn more or to make an appointment.



Celiac Disease Clinic

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