

# Celiac Disease: Explained

## What is celiac disease?

Celiac disease is an autoimmune disease that is based on an intolerance to gluten which causes an autoimmune reaction, resulting in the immune system attacking the villi, the absorptive finger-like structures that line the small intestine, resulting in malabsorption. Untreated, the malabsorption and damage to the small intestine can lead to severe complications such as liver disease and certain cancers.

## What is gluten?

Gluten is a protein found in wheat, barley, and rye. It is found in a variety of foods as well as other products such as cosmetics, supplements, and medicines.

## What are the symptoms?

Celiac disease has a wide array of physical and mental symptoms, and sometimes people don't experience any symptoms. Some people experience a delayed onset of the symptoms, as the disease gets triggered or developed later in life.

Gastrointestinal symptoms of celiac disease include abdominal bloating, discomfort, or pain, diarrhea, constipation, ulcers in the mouth, and pale, loose, bulky, or foul-smelling stools. Symptoms of malnutrition can also manifest, such as anemia, chronic fatigue, weight loss, stunted growth in children, short stature, delayed puberty, and dental enamel loss or discoloration of the teeth. Mental and behavior symptoms can also occur, such as irritability or behavior changes in children, anxiety, and depression.

Other signs of celiac disease include arthritis, osteoporosis, a tingling sensation or numbness in the extremities, an itchy rash known as dermatitis herpetiformis, epilepsy, irregular menstrual cycles, infertility, frequent miscarriages, other autoimmune disorders such as diabetes, and osteoporosis. Left untreated, celiac disease can lead to long-term serious conditions such as infertility, liver disease, cancers of the intestine.

## What is the prevalence of celiac disease?

According to the University of Chicago Celiac Disease Center, at least 3 million Americans have celiac disease, approximately 1% of the population. Of these, 97% have not yet been correctly diagnosed.

## How do I get tested and diagnosed?

Blood tests can test how your immune system responds to gluten in your diet by testing for specific antibodies. According to the University of Chicago Celiac Disease Center, the Anti-Tissue Transglutaminase (tTG-IgA) is the most sensitive screening test for celiac disease available. "Ig" stands for "immunoglobulin" (antibody). Anti-endomysial IgA and anti-tissue transglutaminase IgA (tTG) are anti-self antibodies, as opposed to anti-gluten, or anti-gliadin, antibodies.

If your antibody blood test results are positive, the next step is usually an intestinal biopsy. The procedure is to insert an endoscope, a long and thin tube, into the small intestine to take samples of the tissue lining in order to determine if the villi, or absorptive finger-like structures that line the organ, have been damaged.

### **What is the treatment for celiac disease?**

The treatment for celiac disease is a gluten-free diet. It's important to completely eliminate gluten from the diet, as even small amounts of the protein can make celiac patients ill.

Foods made from wheat, rye, and barley, such as breads, pasta, and cakes, must be avoided. Some celiac patients find it necessary to avoid oats as well, as these can be contaminated with wheat, although pure oats are available from certain dedicated gluten-free companies. Gluten can be found in common foods such as salad dressings, seasonings, ice creams, lunch meats, condiments, yogurt, and canned soups, to name a few. Gluten can also be found in medicines, vitamin supplements, and even cosmetics.

It's important to learn how to read ingredient labels for gluten and to contact food companies before consuming a product if you have any question about it being gluten-free. Sometimes products can be free of gluten in the ingredients, but due to cross-contamination, for example during processing, they can have enough gluten to make you ill.

### **Celiac Disease Resources**

#### **Websites:**

Celiac.com

[www.celiac.com](http://www.celiac.com)

Gluten-Free Restaurant Awareness Program

<http://www.GlutenFreeRestaurants.org>

Celiac Disease Center at Columbia University

<http://CeliacDiseaseCenter.columbia.edu>

The Food Allergy Network

<http://www.foodallergy.com>

GlutenSyndrome.net

<http://www.glutensyndrome.net>

Gluten Free Society

<http://www.glutenfreesociety.org>

Celiac Handbook

<http://www.celiachandbook.com>

## Groups:

American Celiac Society  
(504) 737-3293

<http://www.americanceliciansociety.org>

Celiac Sprue Association/USA, Inc.

<http://www.csaceliacs.org>

Celiac Disease Foundation

<http://Celiac.org>

Gluten Intolerance Group of North America

(253) 833-6655

[www.gluten.net](http://www.gluten.net)

R.O.C.K (Raising Our Celiac Kids)

<http://www.celiackids.com>

Kids with Food Allergies, Inc.

<http://www.KidsWithFoodAllergies.org>

American Celiac Disease Alliance

<http://www.americanceeliac.org>

National Foundation for Celiac Awareness (NFCA)

<http://www.celiaccentral.org>

## Resources:

American Celiac: Diagnosis <http://americanceeliac.org/celiac-disease/diagnosis/>

University of Chicago: Celiac Disease Center <http://www.celiacdisease.net/testing>

National Digestive Diseases Information Clearinghouse: What are the symptoms of celiac disease?

<http://digestive.niddk.nih.gov/ddiseases/pubs/celiac/#symptoms>

About.com: Typical and Atypical Symptoms of Celiac Disease in Adults and Children

<http://celiacdisease.about.com/od/symptomsofceliacdisease/a/celiacsymptoms.htm>

National Digestive Diseases Information Clearinghouse: Celiac Disease

<http://digestive.niddk.nih.gov/ddiseases/pubs/celiac/>

University of Chicago Hospitals: Celiac Disease Facts and Figures [http://www.uchospitals.edu/pdf/uch\\_007937.pdf](http://www.uchospitals.edu/pdf/uch_007937.pdf)

WebMD: Celiac Disease Treatment <http://www.webmd.com/digestive-disorders/celiac-disease/celiac-disease-treatment>

**Tina Turbin, Founder of <http://GlutenFreeHelp.info>  
Your Dependable Celiac and Gluten-Free Resource Guide**

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