



Celiac disease is a disorder in which eating gluten triggers an immune response in the body, causing inflammation and damage to the small intestine. Picture: WWW.HEALTHLINE.COM

Celiac disease

CELIAC disease is an autoimmune disorder that's triggered when you eat gluten. It's also known as celiac sprue, nontropical sprue, or gluten-sensitive enteropathy.

Gluten is a protein in wheat, barley, rye, and other grains. It's what makes dough elastic and gives bread its chewy texture.

When someone with celiac disease eats something with gluten, their body overreacts to the protein and this reaction damages their villi, small finger-like projections found along the wall of their small intestine. (the Villi structure is 0.5 to 1.6mm in length and extend to the lumen of the small intestine is responsible for absorption of nutrients)

When your villi are injured, your small intestine can't properly absorb nutrients from food. Eventually, this can lead to malnourishment and this affects the body function and structure through loss of bone density, miscarriage, infertility or even neurological diseases or certain cancers.

If your celiac disease isn't better after at least a year without gluten, it's called refractory or nonresponsive celiac disease.

Most people with celiac disease never know that they have it. Researchers think that as few as 20 per cent of people with the disease get the right diagnosis.

The damage to your intestine is very slow, and symptoms are so varied that it can take years to get a diagnosis.

Celiac disease isn't the same thing as gluten intolerance or gluten sensitivity. People with gluten intolerance may have some of the same symptoms and may want to avoid gluten. But they don't show an immune response or damage to the small intestine.

Celiac disease symptoms

Celiac disease isn't the same thing as a food allergy, so the symptoms are different. If you're allergic to wheat but eat something that contain wheat, you may develop itchy or watery eyes or difficulty breathing.

Celiac disease symptoms in adults

If you have celiac disease and accidentally eat something with gluten in it, you may have symptoms including;

- Abdominal pain;
- Anemia;
- Bloating or a feeling of fullness;
- Bone or joint pain;
- Constipation;
- Diarrhea;
- Gas;
- Heartburn;
- Itchy, blistering rash (doctors call this dermatitis herpetiformis);
- Headaches or fatigue;

- Mouth ulcers; and
- Nausea.

Nervous system injury, including numb or tingling hands or feet, balance problems, or changes in awareness. Poop that's pale, smells especially bad, or floats (steatorrhea)

Weight loss

Celiac disease can also cause a loss of bone density and reduced spleen function (hyposplenism).

Celiac disease symptoms in children

Children with celiac disease are more likely to have intestinal problems, including;

- Bloating or belly swelling;
- Constipation;
- Diarrhea;
- Pale, foul-smelling poop;
- Upset stomach or vomiting; and
- Weight loss.

If celiac disease keeps a child's body from absorbing the nutrients they need, they can have problems including;

- Anemia;
- Damaged tooth enamel;
- Delayed puberty;
- Failure to thrive, in infants; and
- Crankiness or mood changes.

Neurological problems like learning disabilities and attention deficit hyperactivity disorder (ADHD)

Slow growth and short height

Not everyone with celiac disease will have these symptoms. Some people don't notice any problems, which can make diagnosis difficult.

Celiac disease causes and risk factors

Research hasn't found a definite cause of celiac disease. It tends to run in families and might be linked to certain genes. Stressful medical events such as a viral infection or surgery can trigger it. So can emotional trauma or pregnancy.

If one of your close family members has it, like a parent or sibling, you have a 1 in 10 chance of getting celiac disease.

The disease is most common among Caucasians and people who have other diseases, including;

- Hashimoto's thyroiditis;
- Type 1 diabetes;
- Addison's disease;
- Down syndrome;
- Rheumatoid arthritis;
- Turner syndrome (a condition in which a female is missing an X chromosome);
- Multiple sclerosis (MS);
- Autoimmune hepatitis;
- Sjogren's syndrome;
- Idiopathic dilated cardiomyopathy;
- IgA nephropathy;
- Lupus;

- Irritable bowel syndrome (IBS);
- Chronic pancreatitis;
- Psoriasis;
- Scleroderma;
- Williams syndrome;
- Primary biliary cirrhosis;
- Lactose intolerance;
- Intestinal lymphoma; and
- Intestinal cancer.

Celiac disease complications

Celiac disease can be dangerous if you don't get treatment. Complications may include;

- Cancer, including intestinal lymphoma and small bowel cancer;
- Damaged tooth enamel;
- Infertility and miscarriage;
- Lactose intolerance;
- Malnutrition;
- Nervous system problems like seizures or pain and numbness in your hands and feet (peripheral neuropathy); and
- Pancreatic disease.

Celiac disease tests and diagnosis

Doctors use blood tests and other tests to help find out if you have celiac disease:

Initial test: anti gliadin antibody test
Next test: anti endomysial antibody test and anti Transglutaminase test (90 per cent sensitive)

Confirmatory test: small bowel or duodenal biopsy (look for Subtotal villous atrophy)

Celiac disease treatment and diet

No drugs treat celiac disease. The best thing you can do is change your diet. Unless they're labeled as gluten-free, don't eat foods that are typically made with grains, including;

- Beer;
- Bread, cake, and other baked goods
- Cereals;
- Pasta or noodles;
- Crackers;
- Breading;
- Pancakes
- Sauces and gravies;
- These grains always have gluten;
- Wheat;
- Wheatberries;
- Durum;
- Semolina;
- Spelt;
- Farina;
- Farro;
- Graham;
- Einkorn wheat;
- Rye;
- Barley
- Malt;
- Brewer's yeast; and
- Wheat starch.

People with celiac disease need to check labels carefully. Many processed foods

sometimes have gluten;

- Granola or energy bars;
- French fries;
- Potato chips;
- Lunch meats;
- Candy or candy bars;
- Soup;
- Salad dressings and marinades;
- Meat substitutes such as seitan or veggie burgers; and
- Soy sauce.

These foods are always gluten-free;

- Fruits;
- Vegetables;
- Meat and poultry;
- Fish and other seafood;
- Dairy; and
- Beans and nuts.

Gluten-free starches and grains include;

- Rice;
- Corn or maize
- Soy;
- Potato;
- Tapioca;
- Beans;
- Sorghum;
- Quinoa;
- Millet;
- Amaranth;
- Flax;
- Chia; and
- Nut flours.

Common products like medications and toothpastes can also contain gluten, so it's important to check the label.

If you have a serious lack of nutrients, your doctor may have you take gluten-free vitamins and mineral supplements and will give you medication if you have a skin rash.

After you've been on a gluten-free diet for a few weeks, your small intestine should begin to heal, and you'll start to feel better.

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