

Celiac Disease

Information

For Patients and Health Professionals



Pakistani Celiac Society

All About Gluten-Free Lifestyle

www.celiac.com.pk

What is celiac disease?

Celiac disease (pronounced *se-le-ek*) is a condition in which the mucosa (lining) of the small intestine is damaged by ingestion of gluten in genetically susceptible individuals. Gluten is a protein found in certain grains including wheat, rye and barley.

The lining of the small intestine normally has very tiny finger-like projections called villi. When food is eaten and digested, these villi help to absorb nutrients from the intestine into the blood. In celiac disease, when gluten is ingested, the immune system of the patient gets activated causing inflammation and damage to the villi. This can lead to various symptoms and an inability of the body to absorb nutrients like carbohydrates, proteins, fat, minerals and vitamins. This can cause a variety of health problems and complications.

Celiac disease is an intolerance or sensitivity to gluten. Removal of gluten from the diet leads to healing of the intestine with resolution of symptoms and nutritional problems.

How common is celiac disease?

Celiac disease is one of the most common chronic gastrointestinal disorders in the world affecting about 1% of the population. However, most cases remain undiagnosed. Celiac disease has been reported from North and South America, Europe, Australia, Africa, Middle East, and other Asian countries. Although the exact prevalence of celiac disease in Pakistan is not known, it is felt to be a common disorder present in all four provinces.

What are the symptoms of celiac disease?

Common symptoms of celiac disease include the following:

- Abdominal pain
- Diarrhea
- Indigestion and gas
- Nausea and vomiting
- Bloating
- Constipation
- Lack of weight gain and poor growth
- Weight loss
- Short stature
- Fatigue and Weakness
- Lack of blood (anemia)
- Weak bones (osteoporosis)
- Infertility
- Itchy skin rash (dermatitis herpetiformis)

An individual may have one or more symptoms. The symptoms can be mild or severe. When symptoms are mild, individuals may not seek medical help and the diagnosis is delayed or missed altogether. Celiac disease can occur at any age once solid foods are introduced in the diet of a baby. The disease can occur in infancy, childhood, adolescence, adulthood or old age.

Celiac disease is a hereditary disorder. Family members especially first-degree relatives including siblings, parents and children of the patient with celiac disease are at high risk of developing this disorder. Celiac disease is an autoimmune condition and also common in patients with other autoimmune disorders including type 1 diabetes and thyroid disease.

How is celiac disease diagnosed?

Blood tests are available to screen for celiac disease. Currently, the tissue transglutaminase-IgA antibody (called TTG) is the recommended test for screening. It will be most in most patients who have untreated celiac disease. However, the definitive test to confirm celiac disease is a small intestinal biopsy. Biopsy is a tiny sample taken from the lining of the small intestine and examined for damage to the villi. The patient is sedated and a flexible tube is introduced through the mouth and advanced into the small intestine from where the biopsy is taken. This procedure is called endoscopy and is performed by digestive disease specialists (gastroenterologist).

The intolerance to gluten in celiac disease is permanent and the person does not outgrow it. Since the dietary restriction is for life, it is important that a gluten-free diet not be started until the diagnosis is confirmed with a biopsy.

How is celiac disease treated?

At present, there is no cure for celiac disease. The only treatment for celiac disease is a strict gluten-free diet for life. The person must abstain from consuming wheat, rye and barley and all foods and beverages made from these grains. Once the gluten is removed from the diet, the symptoms resolve and the patient can lead a full and healthy life.

A multivitamin daily is recommended.

Regular follow-up with the physician is important.

What is a gluten-free diet?

Patients with celiac disease should **not** consume the following gluten-containing grains;

- × Wheat (including *atta*, *maida*, *sooji*)
- × Barley
- × Rye
- × Triticale (a cross between wheat and rye)

All foods and beverages than contain any of the above grains should also be strictly avoided.

The following foods are **safe** for patients with celiac disease if they are free from gluten contamination;

- ✓ Rice
- ✓ Corn (*makai*)
- ✓ Millett (*baajra*)
- ✓ Lentils and Pulses (*daal*)
- ✓ Oats (only if pure and uncontaminated).
- ✓ Nuts and seeds
- ✓ All fruits and vegetables
- ✓ Milk and dairy products
- ✓ All types of meats
- ✓ Eggs
- ✓ Salt, pepper, turmeric and other spices
- ✓ Water, tea, coffee, fruit juices and most other beverages

Wheat is a very common ingredient of our diet. Contamination of other food products with wheat is common. For example, preparation of corn flour in the same machine that makes wheat flour (*atta*) may lead to cross contamination with gluten. Therefore, corn flour made on such a machine will not be safe. Even a small amount of gluten can

cause problems. Although in some cases the person may not have any symptoms after eating a contaminated food item, it still causes damage to the small intestine. If ingestion of contaminated products continues, serious complications including bowel cancer can occur.

When buying food products, the ingredients listed on the label should be carefully checked to ensure that there is no gluten present. If there is any doubt about the product being contaminated, it is best to avoid the food or drink in question.

Consultation with a dietitian is important to go over the details of a gluten-free diet.

Remember

Celiac disease is a serious disorder. The only treatment for this disease is a strict life-long gluten-free diet.

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Pakistani Celiac Society

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Pakistani Celiac Society is a volunteer organization dedicated to providing support and services to individuals and their families with gluten-related disorders such as celiac disease through programmes of awareness, advocacy, and education.

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