

Celiac Disease

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-ak*) 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 like wheat, rye and barley.

The lining of the small intestine normally has very tiny finger-like projections called villi. When food is 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 these 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.

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

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, Iran and India. 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
- Abdominal distension
- Constipation
- Lack of weight gain and poor growth
- Weight loss
- Short stature
- Fatigue and Weakness
- Lack of blood (anemia)
- Weak bones (osteoporosis)
- Infertility
- 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 relatives including siblings, parents and children of the patient with celiac disease are at high risk of developing this disorder. Celiac disease is also common in patients with other

autoimmune disorders including type 1 diabetes (insulin-dependent) and thyroid disease.

How is celiac disease diagnosed?

Blood tests are now available to screen for celiac disease. Currently, the IgA tissue-transglutaminase antibody (called TTG) is the recommended test for screening. However, the definitive test to confirm celiac disease is a small intestinal biopsy. Biopsy is a small 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 specialists in digestive diseases (gastroenterologist).

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. Regular follow-up with the physician is important.

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.

What is a gluten-free diet?

Individuals with celiac disease should **not** consume any of the following gluten-containing grains:

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

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

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

- ✓ Rice
- ✓ Corn (*makai*)
- ✓ Millett (*bajra*)
- ✓ 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, 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, the preparation of corn flour on 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 lead

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

When buying food products, the ingredients listed on the label should be carefully checked to ensure that they are gluten-free. If there is any doubt about contamination, it is best to avoid the food or drink in question.

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

Remember

**Celiac disease is a serious disorder.
The only treatment for celiac disease
is a strict gluten-free diet.**

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Pakistani Celiac Society

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The Pakistani Celiac Society is a national, volunteer, non-profit organization dedicated to providing support and services to individuals and families with celiac disease and dermatitis herpetiformis through programmes of awareness, advocacy and education.

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