

Celiac Disease

It has been revealed that one of every 140 persons in India is estimated to have celiac disease.

- Also called Wheat Allergy, celiac disease is a chronic inflammation of the small intestine caused by an intolerance to gluten and usually present in genetically predisposed individuals.
 - Gluten is a general name for the proteins found in wheat, rye, barley and triticale a
 cross between wheat and rye.
 - Gluten helps food maintain its shape, acting as the glue that holds food together.
- Effect of the disease on the body: When people with celiac disease eat gluten, their body mounts an immune response that attacks the small intestine, indicating the disease being an autoimmune disease.
 - These attacks lead to damage on the villi, small fingerlike projections that line the small intestine, that promote nutrient absorption.
 - When the villi get damaged, nutrients cannot be absorbed properly into the body.
 - Also, the modern wheat which is hexaploid rather than diploid, is more antigenic, meaning it stimulates the production of antibodies when introduced into the body.
- People with celiac disease have a two times greater risk of developing coronary artery disease, and a four times greater risk of developing small bowel cancers.
- Currently, the only treatment for celiac disease is lifelong adherence to a strict gluten-free diet. People living gluten-free must avoid foods with wheat, rye and barley, such as bread and beer.
- Many people who do not have celiac disease can also be sensitive to gluten, known as non celiac gluten sensitivity.

What is gluten?

Gluten is present in cereals, such as wheat, barley and rye. In 100gm of wheat, there is generally 8gm of gluten

It provides special properties to the wheat flour that it forms a good dough for making breads. chapattis, pasta and other food items

Can it be dangerous?

Ingestion of gluten can cause celiac disease - a chronic inflammatory disorder of small intestine in those with certain genetic issues

> In such patients, the gluten protein is not digested completely, causing damage to the small intestine where food is absorbed



1 in every 140 Indians said to suffer from celiac disease in India

Symptoms Recurrent diarrhoea, failure to gain weight, weakness, anaemia, irritability and behavioural issues, infertility

Only available treatment for celiac disease is strict and life-long avoidance of food that contains gluten

There is no data available on its prevalence. However, many patients are experimenting with gluten-free diet for relief from gastro-intestinal health issues, for example, irritable bowel syndrome

Many people who do not have celiac disease can also be sensitive to gluten

FOOD ALLOWED

pulay, biryani

Bakery products biscuits prepared with rice flour

Sweets and confectioneries sugar candy, besan laddoo, kheer

Device milk, buttermilk, coffee, tea



FOOD NOT ALLOWED wheat, maida (refined wheat flour), barley

Bakery profiled's bread, burger

Sweets and confectioneries chocolates, toffees, ice-cream, jalebi, barfi

(4) and (4) canned soup. commercial nutritional drinks

Issues with Gluten Free Diet

- People not diagnosed with celiac disease are giving up cereal grains for perceived benefits such as weight loss and better digestion.
- Cereal grains such as wheat are a **source of dietary fibre** and is needed for the bowels to work properly.
- Food containing gluten also are an important source of protein that most Indians lack.
- Going gluten-free might also increase the risk of heart disease.

Autoimmune Disease

- A body has an immune system, which is a complex network of special cells and organs that defends the body from germs and other foreign invaders.
- In a body suffering from Autoimmune disease, the immune system attacks the body's own tissues and organs.
- The body parts that are affected depend on the type of autoimmune disease. There are more than 80 known types. Some of them are Multiple Sclerosis, Leucoderma etc.

