



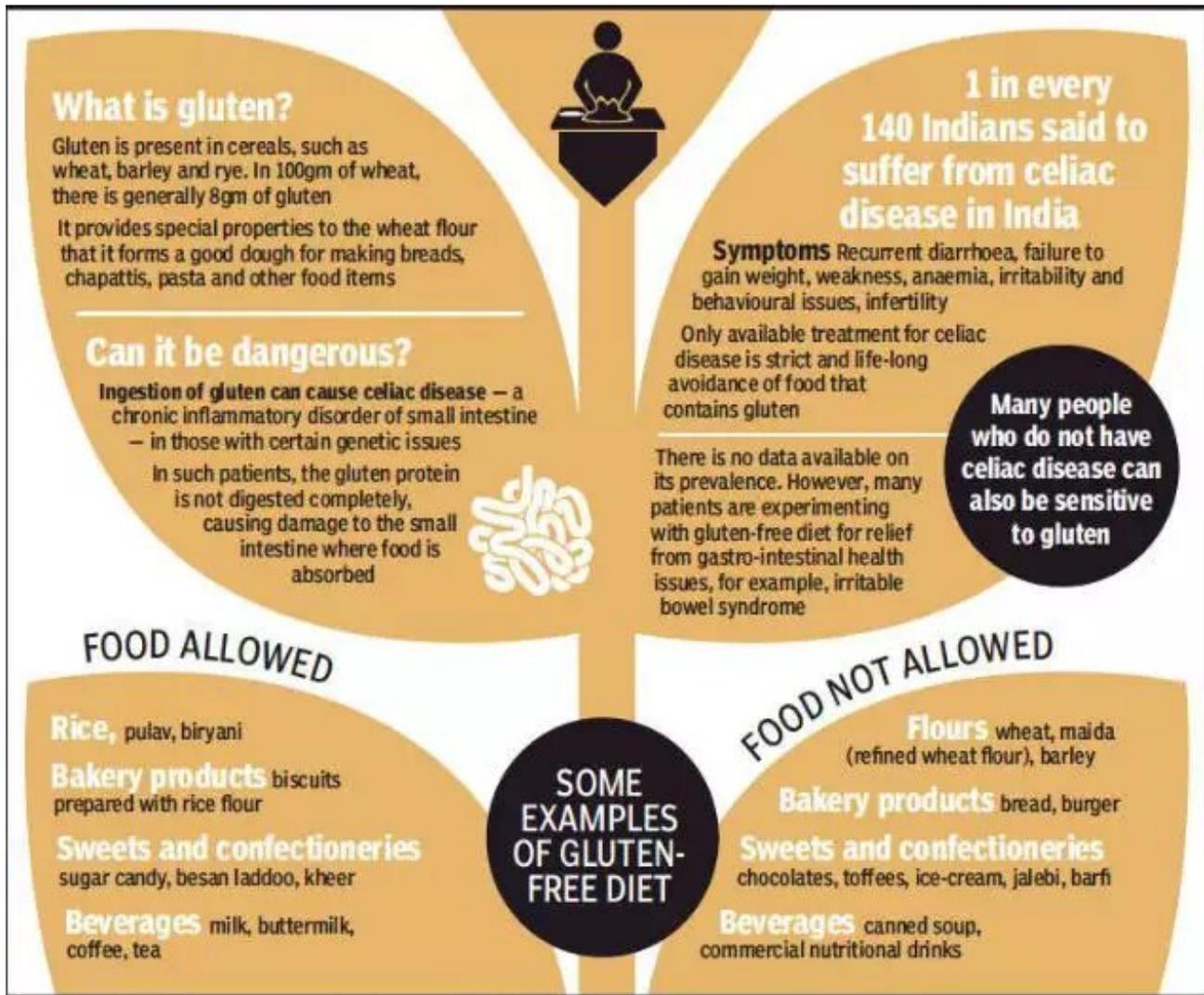
## Celiac Disease

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 [drishtiias.com/printpdf/ceciac-disease](https://drishtiias.com/printpdf/ceciac-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**.



## 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.**