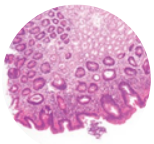
# COELIAC DISEASE

allergy foundation south africa
www.allergyfoundation.co.za

## COELIAC DISEASE



- Gluten is a protein found in wheat, rye and barley.
- Coeliac disease occurs when gluten causes an immune reaction in the gut, leading to inflammation in the lining of the small intestine.
- Over a long time, the inflammation causes damage to the lining of the gut, which can affect the absorption of food, vitamins and nutrients.
- If you avoid gluten-containing food the lining of the intestine will heal and symptoms will improve.

## HOW COMMON IS COELIAC DISEASE?

- Coeliac disease is common in Western countries, but less common in South Africa.

## WHAT CAUSES COELIAC DISEASE?

- Some people have a specific gene that makes it more likely for them to develop coeliac disease.
- When they eat gluten, they develop abnormal antibodies to proteins in their own bodies, called auto-antibodies.
- Antibodies are proteins in the immune system that usually attack viruses and bacteria to protect the body.
- In coeliac disease these antibodies attack the body itself and cause damage to the lining of the gut and other organs.
- Coeliac disease is different from a wheat allergy where IgE mediated antibodies cause symptoms.

## WHAT ARE THE SYMPTOMS OF COELIAC DISEASE?

The symptoms of coeliac disease can vary from mild to severe. **Common symptoms include:** Diarrhoea | Pale, smelly stools | Constipation | Poor appetite | Bloating, gas and abdominal pain | Weight loss | Nausea and vomiting | Delayed onset of puberty | Not menstruating | Tiredness or weakness | Mouth ulcers | Itchy blistering skin rash

**Less commonly:** Infertility | Thinning of the bones | Poor growth | Low blood count due to a lack of iron | Tooth abnormalities

These symptoms may develop at about 6-24 months with the introduction of gluten-containing solids in the diet but may also develop later in childhood or adulthood.

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## HOW IS COELIAC DISEASE DIAGNOSED?

When coeliac disease is suspected, the first step is to do a blood test. Before doing the test the person should be eating normal amounts of gluten for at least 6 weeks, because avoiding gluten can cause false negative tests.

They are:
- Tissue transglutaminase 2 IgA and IgG (anti-TG2)
- Endomysial IgA (EMA)

If the levels of antibodies are high, celiac disease is very likely.

The diagnosis may be confirmed by looking at a sample of a small piece of the lining of small bowel under a microscope. This involves swallowing an instrument with a camera on the tip (a "scope"). In Coeliac disease we see flattening of the finger-like structures of the intestinal lining that absorb nutrients, and a build-up of inflammatory cells in the lining.

## WHO SHOULD BE TESTED FOR COELIAC DISEASE?

- People with symptoms that might be due to celiac disease, like unexplained diarrhoea, bloating, abdominal pain and poor weight gain, or iron deficiency anaemia, slow growth or easy bone fractures.

- Some people (family members of a patient with coeliac disease or people with auto-immune thyroid disease, insulin-dependent diabetes or Downs syndrome) have higher chance of having coeliac disease and may need to be tested even if they don't have any symptoms.

## HOW IS COELIAC DISEASE TREATED?

- The most important treatment for coeliac disease is total avoidance of all foods containing gluten.
- Although coeliac disease cannot be cured, the symptoms mostly resolve on a gluten free diet.
- A qualified dietician can help you to avoid gluten containing foods while still eating enough protein, energy, minerals and vitamins.

## CAN COELIAC DISEASE BE PREVENTED?

Studies have shown that introducing gluten at the age of 4-6 months while continuing breastfeeding may reduce the risk of developing coeliac disease.

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**Label ingredients that indicate the presence of wheat proteins:**

- Bread crumbs
- Rusk
- Bran or wheat bran
- Cereal extract
- Couscous
- Bulgar wheat
- Cracker meal
- Enriched flour , flour or unbleached flour
- Gluten
- High-gluten flour, high- protein flour
- Semolina wheat
- Spelt
- Kamut
- Triticale
- Vital gluten
- Wheat bran, wheat germ, wheat gluten, wheat malt, wheat starch
- Durum wheat
- Whole wheat flour

**Label ingredients that may indicate the presence of wheat protein:**

- Gelatinized starch
- Hydrolyzed vegetable protein
- Modified food starch, modified starch
- Natural flavouring
- Soy sauce
- Starch
- Vegetable gum, vegetable starch

**Some alternatives which may be used instead of wheat include:**

Rice grains/flakes/flour
Potato flour
Sago
Buckwheat flakes or flour
Corn, corn flour, Maize, Polenta
Millet grains/flakes/flour
Quinoa
Soy flakes or flour

A medical specialist with a special interest and skill in allergy might be able to help. See the list of health professionals with skills in allergy on the AFSA website.