

# Coeliac Disease – A Quick Guide

*Guidelines from the Coeliac Society of New Zealand*

Coeliac disease is an autoimmune disease caused by an intolerance to gluten. Gluten is a rubbery elastic protein found in wheat, barley rye and oats (though mainly in wheat). When coeliacs eat gluten an immune response is triggered in the body, inflaming and damaging the cells of the small bowel (intestine). Tiny finger-like projections called 'villi' line the inside of the normal bowel and break down and absorb nutrients in food. In coeliac disease these cells become flat and inflamed, and their ability to absorb nutrients is damaged. This causes nutrient deficiencies for the sufferer, particularly in vitamins, iron, folic acid and calcium.

## How is it diagnosed?

Diagnosis can only be confirmed by examining the small bowel lining for the changes that occur with coeliac disease. Blood tests can reveal antibodies to gluten and these are the first step to screen for the disease. If the gluten antibody test is positive then a biopsy test is performed by endoscopy (a tube is passed through the mouth into the upper small bowel and a tiny piece of tissue removed for examination.) Trialling a gluten-free diet is not recommended because that may delay the eventual diagnosis.

Symptoms vary widely between coeliacs as well. Damage in coeliac disease starts in the intestine just after the stomach and works its way down but the small intestine is nearly seven metres long and has a huge ability to compensate. Also, though you are born with genetic predisposition to gluten intolerance, it can take a trigger to start the autoimmune response. Triggers can be an infection, pregnancy, even surgery.

## How common is it?

Paediatric gastroenterologist Dr Simon Chin says there's a wide variation of figures on this question but a Christchurch study put the figure as high as one in 80 while other studies suggest about one person in 300 will develop the disease. Dr Chin says that the way coeliac disease presents has changed over time, "Commonly in paediatrics, it was an infant with weight loss, failure to thrive, diarrhoea, bulky stool and abdominal distension. This still occurs but is much less common than presenting later at say age five to seven with a variety of symptoms such as recurrent abdominal pain, tiredness, poor weight gain, intermittent vomiting, loose stool, and iron deficiency. Non-specific symptoms such as these may be put down to other causes initially." Coeliac disease is an inherited autoimmune disease, so if someone in the family is diagnosed other family members should be checked. About half of coeliacs also have lactose intolerance, though this can often recover once on a gluten-free diet.

## Treatment

The only treatment is to remove gluten from the diet, and when that is done the lining of the bowel can recover. Coeliacs can then return to normal health – as long as they remain gluten-free. Generally, the older you are when diagnosed the longer it takes to recover. If coeliac disease continues untreated it can lead to malnutrition, anaemia, growth problems and osteoporosis. There is also an increased risk of bowel and stomach cancer.

## Symptoms: most common in adults

- Diarrhoea – This may begin at any age and is often present for years prior to diagnosis. It may first appear after other illnesses (e.g. gastroenteritis) or abdominal operations.
- Fatigue, weakness and lethargy.
- Anaemia – iron or folic acid deficiency are the most common.
- Weight loss.
- Constipation – some are more likely to experience constipation rather than diarrhoea.

- Flatulence and abdominal distention.
- Cramping and boating.
- Nausea and vomiting.

**Most common in children**

Symptoms do not occur until gluten is introduced into an infant's diet – later onset is also possible.

- Large, bulky, foul stools.
- Diarrhoea or constipation.
- Poor weight gain.
- Weight loss in older children.
- Chronic anaemia.
- Retarded growth.
- Abdominal distention, pain and flatulence.
- Nausea and vomiting.
- Irritability.