

Coeliac disease

Coeliac disease is a significant medical condition that can result in a number of serious consequences if not diagnosed and treated properly. It affects the small intestine – the part of the digestive system responsible for absorbing nutrients. In a person with coeliac disease, the lining of the small intestine is damaged by gluten. Gluten is a protein component of wheat, rye, barley and oats.

Malnutrition, osteoporosis, depression, infertility and a small (but real) increased risk of certain forms of cancer, such as lymphoma of the small bowel, are just some of the problems that can develop if coeliac disease is left untreated. Blood screening tests have shown that coeliac disease affects approximately one in 100 Australians.

Damage to the small intestine

The normal lining of the small intestine (also called the small bowel) is made up of millions of finger-like projections called villi. The function of the cells on villi is to break down and absorb nutrients in food. In a person with coeliac disease, the mucosa (lining) of the small intestine is damaged. This results in a flattening of the villi, referred to as villous atrophy. The surface area, which enables the absorption of nutrients and minerals, is seriously reduced and this can lead to nutritional deficiencies.

Symptoms

The symptoms of coeliac disease can range from severe to minor or atypical and may even go undetected. Some symptoms can incorrectly be confused with irritable bowel syndrome or wheat or other food intolerance, while others may be put down to stress or getting older.

The most common symptoms in adults can include:

- Anaemia
- Bloating and flatulence
- Diarrhoea or constipation
- Fatigue, weakness and lethargy
- Nausea and vomiting
- Stomach cramps
- Weight loss – although weight gain is possible.

The most common symptoms in children include:

- Abdominal pain, bloating and flatulence
- Bulky, foul-smelling bowel motions
- Chronic anaemia
- Diarrhoea or constipation
- Nausea and vomiting
- Poor weight gain or weight loss in older children
- Delayed growth or delayed puberty
- Tiredness
- Irritability.

Risk factors

People are born with a genetic predisposition to develop coeliac disease. They inherit a particular genetic make-up (HLA type), with the genes DQ2 and DQ8 being identified as the 'coeliac genes'. Coeliac disease affects Caucasians and west Asians. It is uncommon in the Oriental Asian and full-blood Australian Aboriginal population. Environmental factors also play a role.

In many cases, the condition will not have been diagnosed in other generations; however, a first-degree relative of a person with coeliac disease has about a 10 per cent chance of also having the condition.

Diagnosis

Coeliac blood tests can be used for initial screening ('coeliac serology and IgA'). If the results are positive, a referral to a gastroenterologist will be necessary. The diagnosis must be confirmed by performing a gastroscopy, a procedure that allows tiny samples (biopsies) to be taken from the small intestine. This procedure occurs while the person is under sedation and involves an endoscope being passed through the mouth into the small intestine.

Problems with diagnosis

Since the symptoms of other conditions can closely mimic coeliac disease, correct diagnosis can only be made by showing that the bowel lining is damaged. Trialling a gluten free diet does not provide a diagnosis of coeliac disease. Subsequent investigations while on a gluten free diet will produce negative results and may delay the diagnosis of another condition with similar symptoms. This includes both the blood tests (serological testing) and biopsy (histological testing).

A gluten free diet

The only treatment is the avoidance of all gluten-containing foods. This allows the bowel lining to recover. This strict attention to diet must be lifelong.

Obvious foods that contain gluten include bread, cakes and pasta. However, there is also a whole range of ingredients within prepared and commercial foods that can come from a gluten source. It is essential that a person with coeliac disease become 'ingredient aware'. The guidance of an accredited practising dietitian, who can give assistance with advice to suit individual needs, is recommended.

Where to get help

- Your doctor
- Gastroenterologist
- An accredited practising dietitian, contact the Dietitians Association of Australia
- The Coeliac Society

Things to remember

- Coeliac disease is an intolerance to gluten in food.
- Even small amounts of gluten can damage the lining of the small intestine (bowel), which prevents the proper absorption of food nutrients.
- There is no cure and a lifelong gluten free diet is the only way to manage the condition.
- Damage can occur to the small intestine even when there are no symptoms.

This page has been produced in consultation with, and approved by:

Coeliac Society of Victoria

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