

Coeliac Disease

Information for patients

What treatment is available for coeliac disease?

The only treatment is life-long avoidance of foods containing gluten (barley, rye, oats, wheat and spelt). These products are present in many and varied foodstuffs, making it important to speak to your GP, a dietician or your local coeliac society.

For more information about the Coeliac Society please visit www.coeliac.org.au

What are non-coeliac disease causes of wheat intolerance?

Some persons may have wheat allergy, intolerance to preservatives used with wheat product, deficiency of fructose or have bowel flora that excessively ferment wheat and other foods. Your doctor may request wheat allergy tests, and may recommend that you go on a low-fructose or the FODMAP diet if the wheat allergy test is negative.

Information contained in this brochure is not intended to replace medical advice and any questions regarding a medical diagnosis or treatment should be directed to a medical practitioner.

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What is coeliac disease?

Coeliac disease is an autoimmune disease caused by gluten, a component of wheat, rye, barley, oats or spelt, which affects the small bowel. When people with coeliac disease eat gluten, an inappropriate immune response to gluten causes cross-reactive inflammation and damage to the small bowel. This damage is called 'villous atrophy', which means the surface area of the bowel that is able to absorb nutrients is markedly reduced, which can lead to nutrient deficiencies.

Fortunately, once coeliac disease is diagnosed and treated by the strict avoidance of gluten, the bowel will heal, leading to improved health. It will remain healthy as long as a diet free of gluten is adhered to.

People with coeliac disease may have increased rates of other autoimmune diseases.

Why do some people get coeliac disease?

In persons born with an inherited immune genetic susceptibility (HLA type genes DQ2 and/or DQ8), exposure to gluten may cause them to develop coeliac disease. Almost all persons with coeliac disease have at least one copy of the immune system gene, HLA-DQ2 or HLA-DQ8. However, just because you have the gene, it does not mean you will get coeliac disease and, in actual fact, only 5-10% of people with the gene will have, or develop the disease. The 'switch factors' that result in someone developing coeliac disease are, as yet, not understood, although it is suspected that environmental factors also play a role.

Genetic testing can be useful in persons with inadequate wheat intake or with inconsistent serology, or to exclude the predisposition to develop coeliac disease, if they have a family member with the disease.

What are coeliac disease symptoms and clinical features?

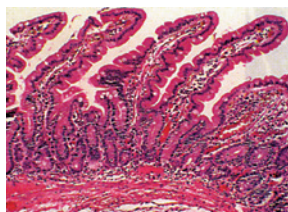
Many people with coeliac disease have no obvious symptoms. The typical coeliac symptoms include vulnerability to diarrhoea (if not looser, more frequent stools), mouth ulcers, sometimes itchy skin or an unusual rash on the elbows, knees and elsewhere. Many sufferers have mild, vague gastrointestinal or non-specific neurological symptoms. Some have mildly abnormal liver enzyme tests, low iron, B12, folate or vitamin D levels, low haemoglobin or neutrophil numbers and evidence of nutritional deficiency, including osteoporosis.

How common is coeliac disease?

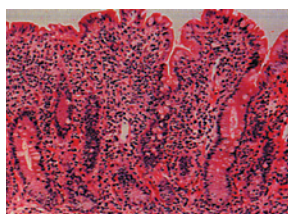
Coeliac disease affects approximately 1:100 Australians. However, around 80% of this number remain undiagnosed.

What tests 'diagnose' coeliac disease?

Blood tests are usually used for initial screening (coeliac serology with exclusion of IgA deficiency). If the results are positive, you may be referred to a gastroenterologist for an endoscopy to confirm the diagnosis. At the endoscopy, the specialist can view the small bowel and collect small tissue biopsies that are sent to pathology so that a specialist pathologist can confirm the diagnosis microscopically.



Normal duodenal mucosa
Note the long "finger-like" villi on the surface.



Duodenal mucosa in coeliac disease
The surface is almost flat, showing sub-total villous atrophy. These mucosal changes can revert to normal or near normal on a gluten-free diet.

What is coeliac serology?

Coeliac serology refers to blood tests that measure IgA and IgG antibodies to deamidated gliadin (a wheat protein) and tissue transglutaminase (tTG, an enzyme that is normally present in the small bowel).

If you have been eating enough wheat (one serve most days a week for six weeks), then most of the time these antibodies will always be strongly positive if you have coeliac disease.

About 1:300 of the population are deficient in IgA, so the test system needs to exclude IgA deficiency or measure IgA levels.

In summary, your doctor may order 'coeliac serology'. At our practice your blood will automatically be screened for IgA deficiency.

What do my antibody tests mean?

Q1 I have been eating wheat and all the antibodies assays are negative.

You do not have coeliac disease.

Q2 I have been eating wheat and I have one or two low positive antibody tests.

You could have coeliac disease. You need not restrict wheat but should be monitored.

Q3 I have been eating wheat. Most of, or all of my four antibody markers are strongly positive.

You most likely have coeliac disease. This should be confirmed by endoscopy.