

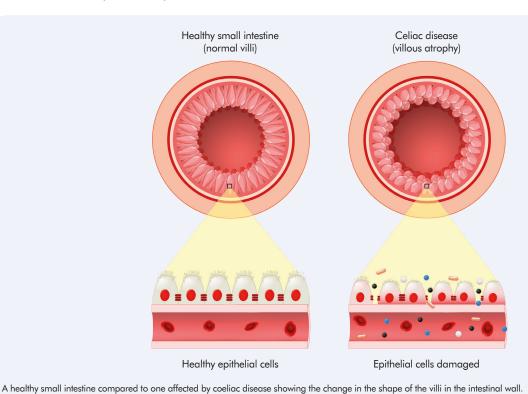
# **PATHOLOGY TESTS**

## EXPLAINED

Information about pathology tests to help everyone take control of their health and make the right decisions about their care.

#### WHAT YOU SHOULD KNOW ABOUT TESTING FOR COELIAC DISEASE

Coeliac disease is an autoimmune disorder in which your immune system mistakenly responds to gluten in wheat and other cereals and attacks the lining of your small intestine. The tiny finger-like projections, called villi, that line the walls of your intestine become inflamed and flattened making it more difficult for your body to absorb nutrients.





## **Testing for coeliac disease**

For most people, two blood tests are used to check for the antibodies that are produced by the immune system in coeliac disease.

| Antibodies                               |   |  |
|--|---|--|
| Transglutaminase IgA antibody (tTG-IgA), | Tissue transglutaminase is an enzyme that is a normal part of digestion. People with coeliac disease often make antibodies that attack this enzyme. |  |
| Anti-gliadin antibodies                  | These antibodies are made against gliadin, protein present in wheat and other cereals   |  |

In both tests, the laboratory measures two types of the immunoglobulins that make up each of the antibodies. These are IgA – immunoglobulin A– and IgG – immunoglobulin G.

IgA is the most useful form of the test because IgA antibodies are made in the intestine. However, some people can be naturally deficient in IgA. This why the IgG test is often requested with an IgA test. This is because if you are deficient in IgA and have coeliac disease you will receive a falsely negative result if only IgA is measured. When you are being tested for these antibodies, it is important that you continue to eat gluten in your diet.



#### Reading your test report

Your results will be presented along with those of your other tests on the same form. You will see separate columns or lines for each of these tests.

| Anti-tTG<br>Antibodies, IgA | Total<br>IgA | Anti-tTG<br>Antibodies,<br>IgG | Anti-Gliadin<br>Antibodies (AGA),<br>IgG | Diagnosis  |
|-----------------------------|--------------|--------------------------------|--|--|
| Positive                    | Positive     |                                |  | Probable coeliac disease   |
| Negative                    | Positive     | Negative                       | Negative                                 | Symptoms not likely due to coeliac disease   |
| Negative                    | Negative     | Positive                       | Positive                                 | Probable coeliac disease (false negative anti-tTG, IgA low due to total IgA deficiency |



### **Biopsy testing**

Sometimes a biopsy of your small intestine is needed to confirm a diagnosis although newer more precise autoantibody tests are reducing the frequency of biopsies.



#### **Genetic testing**

About 99 per cent of people with coeliac disease have alterations on one or both of two quite common genes, HLA-DQ2 and HLA-DQ8. Genetic testing is now available, but a positive result cannot diagnose coeliac disease since about 20 to 30 per cent of people carry the genetic variants but do not have the disease. Genetic testing is most often used to confirm that you do not have the disease.



## Having a medical test

The choice of tests your doctor makes will be based on your medical history and symptoms. Make sure you tell them everything you think might help.

You play a central role in making sure your test results are accurate. Do everything you can to make sure the information you provide is correct and follow instructions closely.

Talk to your doctor about any medication you are taking. Find out if you need to fast or stop any particular foods or supplements. These may affect your results.



#### Questions to ask your doctor

Why does this test need to be done?

Do I need to prepare (such as fast or avoid medications) for the sample collection?

Will an abnormal result mean I need further tests?

How could it change the course of my care?

What will happen next, after the test?

For more detailed information on these and many other tests go to pathologytestsexplained.org.au



#### www.pathologytestsexplained.org.au

Pathology Tests Explained is the primary national source of consumer information on pathology testing. Information is written and edited by practising pathologists and scientists, including leading experts. This ensures integrity and accuracy.

Pathology Tests Explained is managed by a consortium of medical and scientific organisations representing pathology practice in Australia. More details at:

www.pathologytestsexplained.org.au/about



Please use this QR code to access more information

#### My Health Record

You'll find a direct link to the Pathology Tests Explained website embedded in the pathology results pages of your My Health Record.

Click on the link to find information about what your tests are investigating or measuring and what your results can tell your doctor.