

FACT SHEET

The Gluten Challenge

Coeliac tests only work while gluten is still in your diet. If you've already cut it out, a short "gluten challenge" gets your body back to a state where the tests can give a reliable answer.



Don't start a gluten-free diet before testing

Going gluten-free before a coeliac blood test or biopsy can make the results **falsely negative**. If gluten has already been removed, you'll need a gluten challenge before testing to get a conclusive result.

1 How much gluten, and for how long?

If you've been gluten-free, resume a normal diet for **six weeks before testing** (blood test or biopsy).



6 weeks

of normal diet before testing



~ 4 slices a day

of bread (2 for children)



Build up gradually

over about a week

What "4 slices of bread" looks like

Adults aim for the equivalent of **four slices of wheat-based bread a day** (children, two). One slice is about **2-2.5 g of gluten** – roughly equal to any of these:

- ½ cup wheat-based cereal
- ½ cup cooked wheat-based pasta
- ½ large bread roll
- 8-10 crackers (e.g. Water Crackers, Jatz)
- 1 Weet-Bix
- ½ English muffin
- 4-5 crispbreads (e.g. Vita-Weats, Salada)
- 2 small sweet biscuits (e.g. Scotch Finger)

Ease into it. It's best to build up to the full amount over a week or so. Early symptoms can be strong but usually settle over time – stay well hydrated, and ask your doctor or pharmacist for advice on managing any symptoms.

2 How much is enough?

There isn't full agreement on the exact dose and duration – so this should always be guided by your doctor.

Coeliac Australia notes there's **limited consensus** on how much gluten, and for how long, a challenge needs to be. Some evidence suggests **3–6 g of gluten a day for 4 weeks** may be enough to change coeliac blood tests for most people (around 70%). To be as certain as possible, Coeliac Australia currently recommends **more gluten over a longer period** to give a reliable diagnosis for the majority. Be guided by your doctor throughout.

3 What about the coeliac gene test?

Over **99%** of people with coeliac disease carry the **HLA DQ2 or DQ8** genes (or parts of them). That makes the gene test useful in a specific way:

- ✓ A **negative** gene test effectively **rules coeliac disease out**.
- ✓ A **positive** gene test **can't diagnose** coeliac on its own – only about **1 in 40** people with these genes go on to develop it.
- ✓ Because it doesn't depend on gluten intake, the gene test **can be done even if you're already gluten-free**.
- ✓ If it's positive, a **gluten challenge followed by a small-bowel biopsy** is needed to confirm coeliac disease.

A gluten-free diet should only be started **after coeliac disease is confirmed by biopsy**.

In summary

- ✓ **Don't go gluten-free before testing** – it can make coeliac tests falsely negative.
- ✓ If you're already gluten-free, do a **gluten challenge** (about 4 slices of bread a day for ~6 weeks) before a blood test or biopsy.
- ✓ The **gene test can be done any time** – even gluten-free – and a negative result rules coeliac out.
- ✓ Only start a gluten-free diet **after coeliac disease is confirmed**, and always be **guided by your doctor**.

Source & disclaimer. Adapted from Coeliac Australia's *Gluten Challenge* fact sheet (coeliac.org.au). This is general educational information, not medical advice – always seek the guidance of your doctor before starting or stopping a gluten challenge. Reference: Leffler et al, *Gut* 2013;62:996–1004.