

THROUGH GLUTEN FLOW TEST



- ⇒ A fast, sensitive test for cereal **GLUTEN**
- ⇒ Suitable for use in the home
- ⇒ Use for GF mixes & ingredients or prepared foods

The Imutest **GLUTEN Flow-Through (GFT) Test**, is a fast and sensitive test for the presence of cereal glutes (from e.g. wheat, rye, spelt, kamut and durum wheat) in Gluten Free mixes and ingredients, prepared GF foods etc. The test is designed for use in the food industry but has also proved popular for home use. A food sample can be tested in about 10-15 minutes; the test detects gluten levels of about 20 parts per million (ppm) or above.



STEP 1: Gluten from the food sample is dissolved using the yellow extraction solution. The mixture is shaken twice to extract any gluten and then allowed to settle until the extract clears.

STEP 2: A few drops of the food extract from Step 1. are added to a tube of diluent and mixed.



STEP 3: The food extract in diluent from Step 2. is carefully poured onto the Gluten FlowThrough test card. The liquid slowly (3-5 minutes) drains into the card through the read-out area and any gluten present binds to the Test spot.



The well and read-out area are then carefully wiped with an absorbent pad.

Finally, a pink visualisation solution is carefully poured onto the read-out area; as it drains into the card (3-5 minutes) the pink solution links to any gluten present on the Test spot, causing a pink/red spot to appear. The darker the Test spot the more gluten is present in the food being tested.

The GLUTEN Flow-Through test result is then read visually – see overleaf.



COELIAC DISEASE: True gluten intolerance or Coeliac Disease (CD) affects up to 1% of the EU, US and Australian populations but is largely undiagnosed. CD is caused when toxic proteins in cereal glutes (e.g. wheat, rye, kamut, spelt, durum) damage the absorptive areas of the small intestine. CD manifests itself as e.g. intestinal pain, bloating and cramps and in children, as a failure to thrive. The condition can only be reversed by strict adherence to a diet low in gluten. Increasingly many people also perceive themselves to be food intolerant and avoid wheat/gluten as a result. These phenomena have led to a rise in the availability of "gluten-free" food products, defined in Codex guidelines/EU Legislation as containing less than 20PPM gluten. Cereal derived foods with levels of gluten between 20 and 100PPM are defined as "very low gluten."

LA040 GFT HomeTest v02

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READING THE TEST: The appearance of a pink/red spot on the left of the test area indicates the presence of gluten at a level of about 20ppm or more; the darker the Test spot the more gluten in the food. A pink/red “Control” spot of medium intensity should appear on the right hand side of the read-out area as an indication that the food is suitable for testing, the test has been performed correctly and all reagents are functioning correctly. If the Control spot does not appear or it is indistinct and the test area is unevenly coloured pink the test is INVALID and you should contact Imutest for advice.



Above (left to right): Negative (bread) <5ppm; Low Positive (biscuit) 20ppm; Low Positive (bread) 40ppm; Medium Positive (“very low gluten” wheat starch extract); High Positive (wheat starch).
Left Spot: TEST (GLUTEN) Right Spot: PROCEDURAL CONTROL

Each **Imutest GLUTEN FlowThrough Test** (right) comprises:

- ⇒ Tube containing yellow Extraction Solution.
- ⇒ Two small spoons for adding sample to Extraction Solution.
- ⇒ One centrifugation tube (not required for home testing).
- ⇒ One pipette to help remove any fat layer from the extract.
- ⇒ One tube containing colourless Diluent Liquid.
- ⇒ One pipette to add extract to the Diluent tube.
- ⇒ One Gluten FlowThrough test card (in see-through protective pouch).
- ⇒ One absorbent pad for wiping/drying test area.
- ⇒ One tube containing (pink) Visualisation Solution.



What else do you need to perform the **Imutest GLUTEN FlowThrough Test**?

- ⇒ Food blender/processor to ensure that the food is thoroughly mixed (not required for flours/powders/liquids/sauces).

Imutest GLUTEN FlowThrough Test Kits (Prices Include VAT but exclude P&P)

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|----------------|------------|---------------|
| Cat. No. A6012 | (2 Tests) | £20.40 |
| Cat. No. A6011 | (5 Tests) | £48.00 |
| Cat. No. A6013 | (10 Tests) | £90.00 |

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