



Bristol Urological Institute

Service: **Bristol Urological Institute**

Hydrogen Breath Test



Exceptional healthcare, personally delivered

Hydrogen Breath Tests

You have been asked to attend this test to diagnose either:

■ **Small bowel bacterial overgrowth:** This is a condition where there are greater than normal numbers of bacteria in the small intestine

or

■ **An intolerance to a specific sugar:** An intolerance is when the body is unable to sufficiently break down a specific food (e.g. lactose which is the sugar found in dairy products).

Please be aware that if you have been referred for more than one of these tests only one test can be performed at a time.

Your Doctor has requested this test so that he/she can establish what exactly is causing your particular problem. He/she can then offer the most appropriate treatment.

The test is non-invasive, safe and painless.

This leaflet outlines what to expect both during and after the test.

Upon arrival

When you arrive you will be greeted and taken into a private room by the gastrointestinal (GI) physiologist who will be performing the test. They will ask you some questions about the symptoms you have been having and take a brief history. They will also take this opportunity to answer any questions you have or any concerns regarding the test.

How shall I prepare for the test?

- You need to **fast** for at least **14 hours** before the test and not drink anything apart from water (particularly avoid milk and fruit juice the day before the test). If you are diabetic please see the frequently asked questions on the next page.
- **Avoid high fibre foods** the day before the test these include: fruit and vegetables, wholegrain, beans, pasta, cereals and try to base meals around white bread, plain white rice, potatoes (skin off), chicken or fish.
- Your last meal on the day before the test should not be too big and should ideally not consist of any roughage (e.g. beans, cabbage or leeks).
- You must **not smoke/vape or chew gum** 12 hours before the start of the test
- **Avoid laxatives** for 3 days before the test (especially lactulose).
- Medicines (apart from vitamins, laxatives and antibiotics) can be taken with pure water on the day of the examination.
- If you use dentures, do not use an adhesive on the day of test
- Brush your teeth on the day of the test

The following will make the test results difficult to interpret:

- Antibiotics in the last 4 weeks.
- Colonoscopy in last 4 weeks.
- Irrigoscopy in last 4 weeks.
- Other bowel cleansing procedures in last 4 weeks.
- Ileostomy (except for diagnosis of bacterial overgrowth).

Please contact the department if any of the above is unclear or you have had any in the last month (see back of leaflet).

What does the test involve?

- You will be asked to give an initial breath test to make sure your stomach is empty. This is done by holding your breath for 15 seconds and then blowing gently and completely into a hand held gadget.
- A cup of sugar dissolved in water will be then given to you to drink.
- You will be asked to blow into the hand held machine every 20 minutes.
- During the test you should not eat, chew gum, smoke, sleep or exercise.
- You can continue normal activities after the breath sampling.
- The test will last **2-3 hours**.

Repeat testing

If your initial breath test reading indicates your stomach is not sufficiently empty the test can't continue. If this happens we will ask you to come back with the following instructions:

- Fast for at least 16 hours before the test.
- The last meal prior to the test should not contain roughage such as beans, cabbage or leeks.
- If lactose intolerance is a possibility the last meal consumed prior to the test should not contain milk or dairy products. If fructose intolerance is suspected the last meal should not contain fruit.
- On the morning of the test drink a glass of hot water.

Frequently asked questions

Are there any risks associated with this test?

The hydrogen breath test is only dangerous in the following two (rare) scenarios:

- If hereditary fructose intolerance is suspected (or known) you must not undertake the fructose load test or sorbitol load test.
- If you have postprandial hypoglycaemia (low blood sugars after eating) of unknown cause, you must not have a hydrogen breath test.

What will happen after your test?

The GI physiologist will explain the findings of your test and a report will be sent to your consultant or GP. You may be asked to return for another appointment if another test using a different sugar has been asked for. You will be able to resume normal activities following the test.

Are there any alternatives to the test?

There are no alternative tests for diagnosis other than a trial of antibiotics in the case of suspected small bowel bacterial overgrowth, or dietary exclusion in the case of suspected sugar intolerances.

How long does the test take?

The appointment is for 2-3 hours with breath samples being taken every 20 minutes. During this time you will be sitting in our waiting area so please feel free to bring a book or magazine.

Diabetic patients

If you are diabetic please let our department know using the contact information on the back of this leaflet.

Please also bring your blood glucose monitor, food to eat after the test and insulin (if appropriate).

Further appointments

If you require any additional information concerning the investigations or any advice please contact us using the details on the back page:

If unavailable please leave a message and you will be contacted.

References and sources of additional information

The Bladder and Bowel Foundation

The Bladder and Bowel Foundation is a UK wide charity dedicated to helping people manage their continence needs as a result of both bladder and bowel control problems. They can be contacted at:

Bladder & Bowel Foundation, SATRA Innovation Park,
Rockingham Road, Kettering, Northants, NN16 9JH

www.bladderandbowelfoundation.org

British Nutrition Foundation

This organisation is a registered charity that provides information on food and nutrition. They can be contacted at:

Imperial House 6th Floor, 15-19 Kingsway, London, WC2B
6UN

www.nutrition.org.uk

Allergy UK

This organisation is a national charity that provides information and advice on allergies and intolerances. They can be contacted at:

Imperial House 6th Floor, 15-19 Kingsway, London, WC2B
6UN

www.allergyuk.org

**PATIENT
APPROVED** 

How to contact us:



**GI Physiology Department,
Gate 36, Level 1,
Brunel Building,
Southmead Hospital,
Bristol, BS10 5NB**



0117 414 8801



www.nbt.nhs.uk

email: GIphysiology@nbt.nhs.uk

If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

© North Bristol NHS Trust. This edition published July 2019. Review due July 2021. NBT003005

**Take Part
Be Involved**
In research

Research is everyone's business

Learn more about the wide range of research that takes place here every day.

www.nbt.nhs.uk/research



southmeadhospitalcharity.org.uk

Southmead Hospital Charity raises funds for departments and wards throughout the Trust, meaning you can support an area close to your heart