



Manchester University
NHS Foundation Trust

Manchester Royal Infirmary

Department of Specialist Medicine

Glucose Hydrogen Breath Test for Small Bowel Bacterial Overgrowth

Information For Patients



Introduction

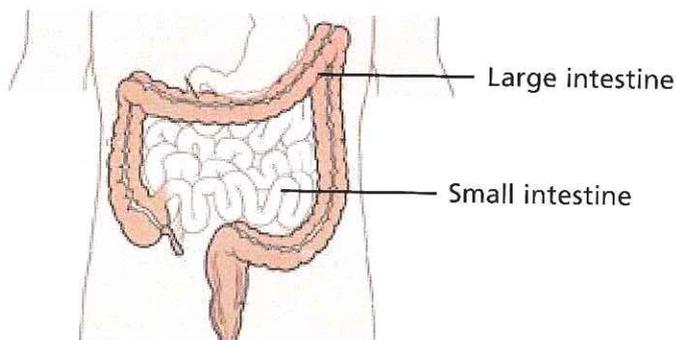
You have been referred by your General Practitioner (GP) or your hospital consultant to our department for a Hydrogen Breath test.

A hydrogen breath test is a safe, painless and non-invasive procedure to investigate bacterial overgrowth within your small bowel.

What is bacterial overgrowth?

In most people large numbers of bacteria live in our large bowel. These bacteria are sometimes referred to as 'friendly bacteria' that you may have heard mentioned in TV adverts. The small bowel, which connects the stomach to the large bowel, is relatively free from bacteria.

Sometimes when food is not digested properly, the bacteria in the large bowel can move to the small bowel as there is more food. This movement of bacteria is known as bacterial overgrowth as they are 'overgrowing' from their natural home in the large bowel. This can cause symptoms such as flatulence, un-intentional weight loss, chronic diarrhoea, bloating and fatigue.



How do we test for Small Bowel Bacterial Overgrowth?

Healthy people who have fasted and followed a 2 day low fibre diet normally do not produce hydrogen gas (H₂) mixed in with their breath. Glucose (a sugar) is used to test for bacterial overgrowth. Normally glucose is absorbed by the small bowel and does not reach the large bowel where bacteria normally live.

If bacteria are present in the small bowel, they will digest this sugar and produce hydrogen gas (H₂) as a by-product. The resulting hydrogen gas (H₂) is then absorbed into the blood stream and expelled by the lungs. Breath samples are taken at regular intervals using a breath analyser to measure the hydrogen gas (H₂) content.

What to do before your test

1. Please contact us immediately if you:
 - a. Have Diabetes.
 - b. Have taken any antibiotics in the last 4 weeks (for any reason).
 - c. Had an endoscopy looking into your large bowel (Colonoscopy), within the last 4 weeks.
 - d. Had a Barium Follow Through investigation within the last 4 weeks.
 - e. Had a Nuclear Medicine appointment within the last 4 weeks.
 - f. Had any investigation where you needed to have bowel preparation e.g. Moviprep, Picolax beforehand in the last 4 weeks.
 - g. Are taking laxatives.

2. Two days (48 hours) before your appointment please:
 - a. Stop any of the following medication: Zomorph, Sodium Docusate, Motilium, Domperidone, Metoclopramide, Loperamide, Imodium, Fybogel and Senna. You can take paracetamol, ibuprofen or co-codamol (if prescribed) to manage pain.
 - b. Please do not eat or drink any High Fibre foods, but choose Low Fibre foods from the allowable foods list.
 - c. Please complete fully the enclosed diary. Recording any foods eaten, drinks drunk, cigarettes smoked or medication taken, and any bowel movements.
3. If your appointment is in the morning please fast (No food or drink) from 6.00pm the day before.

OR

4. If you have an afternoon appointment please fast (No food or drink) from midnight the day before.
5. **The morning of the test:**
 - a. Please brush your teeth and rinse mouth out but do not swallow any toothpaste etc.
 - b. Please do not smoke or passively smoke.
 - c. Please do not chew gum including nicotine gum.
 - d. Please do not eat/suck sweets.
6. Please arrive 10 minutes before your appointment time and please do not forget to bring your completed diary.

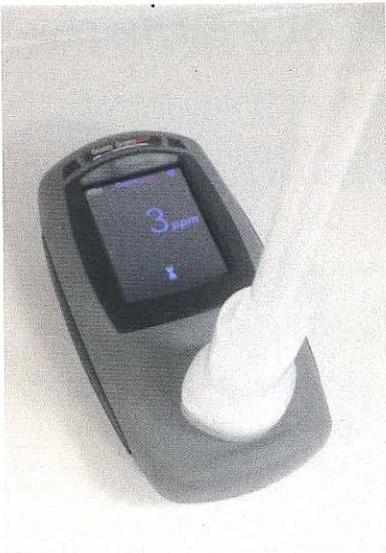
What does the test involve?

On arrival into our department you will be:

1. Greeted by a member of staff
2. Directed to a clinic room where you will be asked some basic health questions
3. Instructed on how to use the breath analyser (Gastrolyser) to take breath samples

During the test you will be:

4. Asked to give 2 baseline breath samples
5. Given a glucose drink (glucose sugar mixed in water)
6. Asked to take breath samples at regular intervals for 90 minutes



Gastrolyser used to measure hydrogen (H₂) levels in breath

What happens next?

When you have completed the breath test, the result will be sent to the referring doctor.

- If the test is positive and you have bacterial overgrowth, your doctor will prescribe antibiotics.
- If the test is negative and everything is normal, you may be asked to return for a lactose intolerance test.

Any questions?

If you have any questions please contact us using the details below.

Department of Gastroenterology, Hepatology and
GI Investigations
2nd Floor Nowgen Building
Manchester Royal Infirmary
Oxford Road
Manchester
M13 9WL
(0161) 276 4612

You can read more about this test at the following website:
www.medicinenet.com/hydrogen_breath_test/article.htm

No Smoking Policy

Please protect our patients, visitors and staff by adhering to our no smoking policy. Smoking is not permitted in any of our hospital buildings or grounds, except in the dedicated smoking shelters in the grounds of our Hospital site.

For advice and support on how to give up smoking, go to www.nhs.uk/smokefree.

Translation and Interpretation Service

It is our policy that family, relatives or friends cannot interpret for patients. Should you require an interpreter ask a member of staff to arrange it for you.

تتص سیاستنا علی عدم السماح لافراد عائلة المرضى او اقاربهم او اصدقائهم بالترجمة لهم. اذا احتجت الی مترجم فیرجی ان تطلب ذلك من احد العاملين لیرتب لك ذلك.

بماری یہ پالیسی ہے کہ خاندان ، رشتہ دار اور دوست مریضوں کے لئے ترجمہ نہیں کر سکتے۔ اگر آپ کو مترجم کی ضرورت ہے تو عملے کے کسی رکن سے کہیں کہ وہ آپ کے لئے اس کا بندوبست کر دے۔

ইহা আমাদের নীতি যে, একজন রোগীর জন্য তার পরিবারের সদস্য, আত্মীয় বা কোন বন্ধু অনুবাদক হতে পারবেন না। আপনার একজন অনুবাদকের প্রয়োজন হলে তা একজন কর্মচারীকে জানান অনুবাদকের ব্যবস্থা করার জন্য।

Nasze zasady nie pozwalają na korzystanie z pomocy członków rodzin pacjentów, ich przyjaciół lub ich krewnych jako tłumaczy. Jeśli potrzebują Państwo tłumacza, prosimy o kontakt z członkiem personelu, który zorganizuje go dla Państwa.

Waa nidaamkeena in qoys, qaraaboamasaaxiiboaysanu tarjumikarinbukaanka. Haddiiaad u baahatotarjumaankacodsoxubinka mid ah shaqaalahainaykuusameeyaan.

我们的方针是，家属，亲戚和朋友不能为病人做口译。如果您需要口译员，请叫员工给您安排。



@MFTNHS



Follow us on
Facebook

www.mft.nhs.uk

© Copyright to Manchester University NHS Foundation Trust