

# Hydrogen and Methane Breath Tests FAQs





### **Medications**

#### Continue as normal

- Medications for acid reflux such as Proton Pump Inhibitors (PPIs like omeprazole, esomeprazole, lansoprazole etc) and H2A receptor antagonists (famotidine, cimetidine etc).
- Topical antibiotics (creams). Only oral antibiotics must be stopped.
- Antifungals.
- Vitamins and herbal supplements except magnesium which should be stopped 1 week before due to laxative effect on the bowel.
- Medications for conditions unrelated to gut health (e.g. Statins, beta-blockers, anti-depressants, anti-histamines, inhalers, pain killers).

You can take essential medications with water before you start your test.

Gaviscon contains sugars that interfere with the preparation diet, so avoid this on the day of the diet and the day of the test until you have completed all breath samples.



#### **STOP**

Oral Antibiotics should not have been taken for at least 4 weeks before testing. Laxatives and promotility drugs, such as domperidone should be stopped from 1 week before. Probiotics (bacterial supplements) should be stopped for 1 week before. Antidiarrhoeal medications, such as Imodium, should be stopped from 2 days before.

If you feel like you can't stop these medications for the required time before the test, please speak with your referring doctor as our clinical team are not qualified doctors.



#### Food

You do not need to eat all of the foods on this list, but you should not eat any foods that are not included here as other foods can affect the test. If you would prefer to fast for 24-hours, this is also an option.

White bread includes bread of all shapes and sizes (baguettes, rolls etc), and includes gluten free bread products. Toasted white bread is permitted.

Milk and milk substitutes including oat, almond, rice, soya and rice are not permitted.

For more information please contact us at admin@functionalgutdiagnostics.com

\*Our kits are compliant with the requirements of the Hydrogen and Methane-based Breath Testing in Gastrointestinal Disorders: The UK Consensus – Association of GI Physiologists and the British Society of Gastroenterology. Four kits available - SIBO (lactulose), SIBO (glucose), Lactose & Fructose.





## Do I need to fast before the test?

Yes. You need to fast for at least 12 hours before the test. You should also follow a strict low-fermentable diet on the day before the test.

## What foods can I eat on the day before the test?

- plain white bread
- plain white rice
- plain white potatoes (no skin)
- baked or grilled white meat or fish (no oily fish, no skin)
- plain tofu
- a maximum of two eggs
- water
- non-flavoured black coffee or black tea (no milk or herbal teas)
- only salt may be used to flavour your food.
- a little butter, oil or margarine is permitted (1tsp)

No other foods or drinks are allowed.

### I don't usually eat any of the foods on the list what can I do?

We understand that this is a very bland diet and not everyone eats the foods listed, but unfortunately any other foods may impact the results of the test. Some patients that don't like the foods listed may choose to fast for the full 24hrs before the test before the test.

### What happens if eat a food that's not on the list?

It is important to not eat anything that is not listed as permitted foods the day before the breath test. This is to make sure the bacteria in your gut are producing as little gas as possible when you start the test (giving you a low baseline reading of hydrogen). If you eat something that is not listed as permitted foods during the bland food diet, you risk getting an invalid baseline, hence an invalid test and you may have to pay for another breath test. If you eat something that is not listed, you are doing so at your own risk.

## Where is the analysis done?

The breath tests are analysed at our laboratory by trained gaschromatography scientists and clinical physiologists.

### Once I start the test can I eat and drink?

You cannot eat during the test, but you can have small sips of water.

# There's a lot of information and I can't quite understand when to do the diet/fast?

For example, if you wish to start your test at 8am on Friday then you follow the diet from 8am-8pm Thursday and fast from 8pm until the test is complete.

### I've got a cold/illness can I still do the test?

If you're feeling unwell it is best to postpone the test until you are feeling better.

# Do I have to drink the lactulose solution as part of my lactulose breath test?

Yes. This is a very important step, failure to drink the whole sugar substrate diluted in a glass of water (whether your test contains lactulose, glucose, lactose, or fructose) will make your test invalid.



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### Is lactulose going to give me diarrhoea?

This test only uses a very small amount of lactulose and it is likely to only reproduce normal symptoms you experience. A small number of patients may experience diarrhoea, but this should only be mild and short lived.

## What is the difference between glucose and lactulose?

Glucose is absorbed in the first third of the small intestine so it will not be able to detect SIBO that is further along in the small intestine (distal jejunum/ileum). However, because of this, glucose is considered to be more sensitive than lactulose, providing less false positives with colonic bacteria.

Lactulose is not absorbed by the digestive tract and will travel through the entire small intestine so it can provide a complete depiction of all intestinal segments, including the colon (large intestine).

### Will the results be sent securely to the referrer?

Yes. All results are sent encrypted, and/or password protected.

## How do I give a breath sample?

Unscrew the lid. Put one end of the straw in the collecting tube then blow through the straw into the tube for 3-5 seconds until you see condensation forming on the inside of the tube. Immediately screw the lid back on (not too tightly). The video on our website will take you through all the steps.

### How long are the samples valid for?

The breath samples are stable for up to two weeks and across a wide temperature range (-20°C to 40°C). Samples received after two weeks of collection may be invalid.

# Can I take more than one test on the same day? For example, lactose and fructose.

No, the test must be done on different days. Each test must be taken after fasting for 12 hours and following a subsequent 12-hour pre-study diet. Taking two tests on the same day will produce invalid results.

### Why do you (the patient) need a referral?

We require a referral for hydrogen and methane breath tests because if the test leads to a positive result, then it may require specific medical or dietetic treatment from a healthcare practitioner.

## How long until you (the patient) gets the results?

Once the kit arrives back to our lab the results will typically be available within 2-3 working days. If you are a private patient the results will be emailed to you. If you are an NHS patient please contact the hospital that referred you for the results.

### How is the test analysed?

The test is analysed by a state-of-the-art Agilent gas chromatography system, which measures hydrogen, methane, and carbon dioxide levels in line with recommendations by the UK and North American Consensus on Hydrogen and Methane-based Breath Testing.

## What happens if I vomit during the test?

If the event was within 0-30 minutes after consuming the substrate, the test needs to be repeated. If the event was more than 30 minutes after consuming the substrate, the test can be continued as normal.



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