

# Hydrogen & methane breath test

Fructose malabsorption Information for patients



# What is a hydrogen & methane breath test?

Breath testing provides information on the digestion of certain sugars or carbohydrates, such as those found in fruit (fructose) and can help determine intolerance to certain sugars.

Fructose intolerance can be caused by a lack of fructose carriers in the cells of the small intestinal wall.

This causes an increased amount of fructose in the small intestine which cannot be absorbed. It then passes to the large intestine where it is broken down by bacteria, producing gases such as hydrogen and methane.

These gases are absorbed into the bloodstream and transported to the lungs. They are then exhaled via the lungs and can be collected in breath samples for analysis.

# Are there any risks associated with your test?

There are no risks involved in performing your test, however, you may experience some of your usual symptoms during the test, this is normal.

# What preparation is required for your test?

#### For 4 weeks before your test



Do not take any antibiotics.

### For 1 week before your test

- Do not take laxatives or stool softeners Movicol, Dulcolax, Ex-Lax, Senna, Milk of Magnesia etc.
- Do not take stool bulking agents Metamucil, citrucel etc.
- Do not take motility agents Prucalopride, linaclotide etc.



Do not take probiotics VSL#3, Actimel, Yakult etc.

- You can continue taking any other essential medicines.
- Additionally, there must be a period of one week between any tests which require cleansing of the bowel e.g. colonoscopy, barium enema, before having a breath test.

### The day before your test

You must follow the 'white food diet' which consists of only the following foods and drinks:



- Plain white bread
- Plain white rice
- White potatoes (no skin)
- · Baked/grilled chicken, turkey, lean beef, lean pork, white fish (no oily fish)
- Maximum of 2 eggs
- Water (non-carbonated)
- Non-flavoured black coffee (no milk)

- Non-flavoured black tea (no milk and no herbal teas)
- 1 tbsp butter/margarine/oil
- Salt to flavour food
- Do not eat or drink anything else, eating prohibited foods could give false results for the test.

#### For 12 hours before your test

You must stop eating and drinking and fast for 12 hours before your test.

#### The day of your test

- You can have small sips of water (maximum of 300 ml) until the start of your test.
  - You may take your essential medicines with a small amount of water but do not take anything that may affect your bowel (see previous list).
- You may brush your teeth, but please try not to swallow any toothpaste.
- Do not eat, drink, chew gum, smoke, eat breath mints and/or other sweets on the morning of or during of your test.
- If you are diabetic requiring insulin or diabetes medicine, please ask your doctor if you should change your morning dose. Oral hypoglycaemic medicines are usually not taken that morning until completion of the test and you start eating again.

### What happens during the test?

- Your physiologist will explain your test to you, ask you questions about your symptoms and confirm that you have had nothing to eat in the 12 hours prior to your test.
- You will be asked to give a baseline breath test by blowing into a test tube through a straw.
- 3 The test substrate will be mixed with water and given to you to drink.
- Breath samples will then be collected every 40 minutes for 3 hours and 20 minutes. During this time, you will be invited to sit in our waiting room which has wi-fi and television.
  Please do not eat, chew gum, smoke, sleep or exercise during your test.

#### Your test will last 3 hours and 20 minutes.

You are free to leave straight away after your test and return to your usual diet, medication and daily activity.

### How will I get my results?

Your results will be sent by secure email to both you and your referring consultant/doctor. We aim to send out all patient results within five working days of completion of your test.





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