

# Hydrogen & methane breath test

Lactose malabsorption Information for patients



## What is a hydrogen & methane breath test?

Breath testing provides information on the digestion of certain sugars and carbohydrates, such as those found in dairy products (lactose).

People who are intolerant to lactose have very little or not enough of the enzyme lactase, which means ingested lactose cannot be broken down as normal in the small intestine.

This means any lactose ingested passes through the large intestine where it is broken down by bacteria, producing large amounts of 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.
- Y ou may take your essential medicines with a small amount of water but make sure you 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 your test?

- You should have followed the diet and had nothing to eat for the 12 hours prior to your test.
- You will give a baseline breath test sample by blowing into a test tube or breath collection bag.
- 3 You will mix the test substrate (lactose) with water and drink it.
- You will give a breath sample every 40 minutes for 3 hours and 20 minutes. Please do not eat, chew gum, smoke, sleep or exercise during your test.
- Your test will last 3 hours and 20 minutes.
- After your test you are free to 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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