

### Five days before the appointment:

Please ensure that your child does not take:  
Prepulsid (Cisapride), Domperidone (Motilium), Metoclopramide (Maxolon), Movicol, Picolax, Lactulose or any laxative.

### Menu for the day before the Hydrogen breath testing

(no fruit, vegetables or wholegrain products)

#### Breakfast

- Rice Krispies or supermarket brand equivalent with milk (not with coco) **or**
- Eggs (scrambled/poached/fried), Bacon
- Toasted white bread with butter (white bread only not brown)

#### Lunch

- Chicken or fish (no batter / breadcrumbs)
  - Boiled potatoes, freshly mashed potatoes or chips (without skins)
- Pudding can be any of the following:*
- Small portion of ice-cream, sugar free jelly, sugar free custard, natural plain yoghurt

#### Evening meal

- Cheese omelette (no vegetables) or
- Eggs (scrambled/poached/fried)
- Toasted/untoasted white bread with butter (white bread only not brown), ham or cheese sandwich (white bread only not brown)

#### Snacks

- Rich tea biscuits

#### Drinks

- plain water

The order of breakfast lunch and evening meal can be altered if required.



# A guide to...

## Hydrogen Breath Test *Patient Information*

### Further information

How to contact us  
Safari Day Care Unit  
Watford General  
West Hertfordshire Hospitals NHS Trust  
60 Vicarage Road, Hertfordshire WD18 0HB  
Tel: 01923 244 366 Ext: 8694

If you need this leaflet in another language, large print, Braille or audio version, please call **01923 217 187** or email [westherts.pals@nhs.net](mailto:westherts.pals@nhs.net)



Author	Dr Kumaraguru
Department	Children's Services
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### **Why does my child need a hydrogen breath test?**

To test whether your child has a problem digesting certain foods. The test will be for one of the following reasons:

#### **Lactose Intolerance**

Lactose is a natural sugar found in milk. The problem is usually caused by a lack of lactase which is an enzyme (a protein that causes a chemical reaction to occur) that is normally produced in the small intestine.

#### **Small Bowel Bacterial Overgrowth**

It is normal for bacteria to live in the large intestine to aid digestion, but the small intestine does not usually contain bacteria. Sometimes bacteria grow in the small intestine and interfere with the digestion of food.

When bacteria digest sugar they produce hydrogen, which escapes from the gut via the lungs. By measuring the hydrogen in your child's breath over a period of time (after a drink of glucose) we can see if small bowel bacterial overgrowth may be the cause of their symptoms.

#### **Oro-caecal transit time**

Oro-caecal transit time is the time it takes for food and liquid to travel from the mouth and reach the small bowel. This test will tell us if your child's transit time is normal, fast or delayed. The breath test measures the hydrogen in your child's breath over a period of time after a drink of lactulose or fructose.

#### **How does it work**

As bacteria digest sugars and carbohydrates some of the sugars are turned into gases, most commonly hydrogen. Some of the hydrogen gas is absorbed by the colon and passed into the blood and then eliminated in the breath where it can be measured.

If the breath sample contains a large amount of hydrogen (more than 20 parts per million above your baseline) it will be deemed a positive test. The baseline is the amount of hydrogen that is present in the breath before drinking the test solution.

### **How do I prepare my child for a hydrogen breath test?**

For the test to work children must fast and be starved of food before the test

- Babies under one year old must be starved of food for 6 hours
- Children over one year old must be starved of food for 12 hours prior to the test
- Only water can be drunk for 24 hours before the test - no milk.

Please follow the diet sheet below for your child's meals the day before the test. If your child is diabetic, please telephone the department for advice before the study.

#### **Antibiotics during six weeks before the appointment**

If your child has to take antibiotics in the six weeks leading up to the appointment, please contact us to re-book the test. If you are not sure which medication you should take please contact the department to check.

#### **Are there any complications or risks?**

The test substance is a sugar solution, that is lactose, glucose, sucrose, fructose or lactulose. In rare cases the test can cause mild diarrhoea.

#### **What will happen on the day of the test?**

Please go to Safari ward which is on the first floor of the maternity block at Watford General Hospital

Your child will drink the test solution (either lactose, Lactulose, sucrose glucose or fructose). The test is very easy to perform. Your child breathes down a mouthpiece connected to a hand-held machine at regular intervals for up to four hours. Younger children can use a special face mask to collect the sample of breath. After the test your child may go back to school or home.

Providing your child has fasted correctly, the first reading should be very low. If this reading is excessively high, we may have to abort the test and ask you to return in a few hours or rebook the test for another day.

#### **What happens afterwards?**

The consultant in charge of your child's care will be informed of the result and they will decide what to do next. It is reasonable to expect to hear from them within four weeks of the test date.