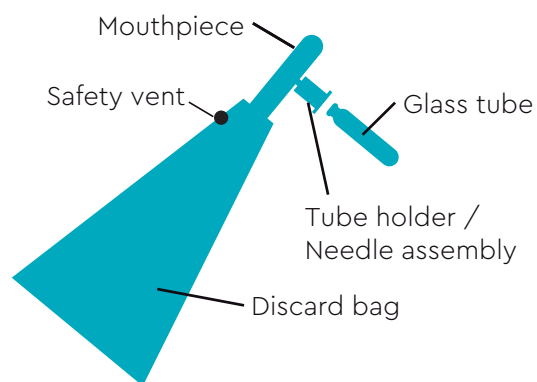


## USE OF THE BREATH SAMPLER

### HOW TO COLLECT SAMPLES

TEST RESULTS CAN ONLY BE USEFUL IF THE SAMPLES ARE PROPERLY COLLECTED. Please read the directions completely BEFORE collecting a sample! If you do not completely understand all aspects of sample collection, please contact Healthpath for further instructions.

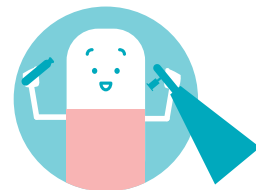
**Do not insert your finger into the tube holder of the breath sampler at any time; it contains a sharp needle.**



### GETTING READY

1. The breath sampler device is pre-assembled.  
Write your name, date of birth and date and time on the sample tubes and complete the Patient Request Form.  
Use the white capped sample tube (Pre Lactulose/Fasting sample) for the first breath sample.

### TAKING THE TEST



2. Hold the breath sampler in one hand and the white capped tube in the other hand. DO NOT attempt to loosen or remove the tops of the glass tubes; this may destroy them and make the tubes useless for this test.



3. Place the white capped tube halfway into the needle assembly, cap first. DO NOT PUSH THE TEST TUBE ONTO THE NEEDLE IN THE HOLDER YET! Take a normal breath, close your mouth around the mouthpiece and exhale normally.



4. As you exhale, the discard bag will be filled with air which will vent through the small opening at the end of the bag. Continue to exhale into the mouthpiece to keep the bag inflated and press the glass tube to the end of the tube holder so that the stopper is punctured by the needle in the tube holder.



5. Keep the bag inflated until after the test tube is removed from the tube holder. After 1-2 seconds, pull the glass tube out of the tube holder and set aside.

6. Repeat steps 1-5 with the remaining 6 glass tubes as per the time intervals on the colour coded tubes and Patient Request Form.



## SIBO LACTULOSE BREATH TEST

### INSTRUCTIONS (BIOVIS)

*Thank you for purchasing this test. We're delighted to join you on your health journey.*

#### The science behind the test

As the bacteria in your gut digest sugars, they produce the gases hydrogen and methane. Lactulose is a special sugar (derived from the milk sugar lactose) that isn't absorbed by your body. Your gut bacteria like it though, which means we can use it to form a picture of their activity.

By measuring the amount of hydrogen and methane you breathe out, we can work out how quickly bacteria are breaking down the Lactulose, and how much gas they're producing. This information helps us to work out what type of bacteria are present, and where they are.

This test requires a little bit of time and preparation, but the insight it provides can be invaluable. The data allows us to make targeted recommendations to support your gut health and enhance your wellbeing.

Most people with a lactose intolerance have no issue taking the Lactulose but if you have any concerns, please contact us. Lactulose can act as a laxative at high doses, but the amount included in this test is unlikely to have that effect.



### IMPORTANT Before you take the test

To make your test results as accurate as possible, it's important you follow these guidelines. Please note the sample times on the colour coded sample tubes.



**Do NOT eat high-fibre**, slowly digesting foods on the day before the test. See the enclosed list of foods for further details.



You must **not eat for 8-12 hours before** taking the test, but you can drink water. You also must avoid eating during the 2.5 hour test period. Most people prefer to take the test first thing in the morning, as they would have naturally fasted overnight. No water for 1 hour after taking the Lactulose solution, small sips after this time is ok.



**Do not exercise vigorously** for at least 1 hour before the test or during the test.



**Do not smoke** 3-4 hours before taking the test or during the test.



If you're taking **antibiotics or herbal antimicrobials**, wait 4 weeks after finishing the course of treatment before taking this test.



We suggest that **laxatives, antacids** (containing aluminium or magnesium hydroxide) and **promotility drugs** should be stopped at least 1 week prior to the breath test and **avoid taking probiotics or drinking alcohol** for 48 hours before taking the test.

## TEST KIT CONTENTS

We've partnered with a functional testing lab called **Biovis Diagnostik MVZ GmbH** to provide this test. Your test kit contains the following:

- 1 x test instructions (this sheet)
- 1 x breath sampler mouthpiece and bag
- 1 x patient request form
- 1 x 15ml lactulose dose
- 7 x colour coded glass sample tubes
- 1 x glass tubes protective sleeve
- 1 x bubble wrap bag
- 1 x pre-paid return envelope

**This test should take a total of 2.5 hours to complete.**

- **Do NOT remove** the coloured caps from the glass tubes. It's normal for some of the rubber caps to be inverted while others may be protruding.
- **PLEASE NOTE** the sample times printed on the colour-coded sample tubes. Please refer to your Patient Request Form for further clarity.

## TAKING THE TEST

1. Read the 'IMPORTANT: Before you take the test' box on the first page.
2. Check you have all the kit contents using the list above, and fill in the Patient Request Form.
3. Collect your first sample after 8-12 hours of fasting using the Breath Sampler Instructions on Page 4. You must use the white capped sample tube for this Pre Lactulose/Fasting sample.
4. Drink the enclosed Lactulose dose with a small glass of water.
5. After drinking the Lactulose, wait **30 minutes**. Then collect the next breath sample. You must use the green capped tube and ensure the label is completed.
6. Repeat this process at **50 mins** (blue tube), **70 mins** (pink), **90 mins** (black), **120 mins** (yellow) & **150 mins** (purple) completing the tube labels and Patient Request Form each time.
7. After completing all **7 samples**, put the sample tubes in the bubble wrap bag and slide inside the protective sleeve. Place this, along with your completed Patient Request Form, inside the return envelope.
8. Breath samples should be returned as quickly as possible, but must be received within 14 days of sample collection.

- If you're **late collecting** a sample, collect the sample at the earliest opportunity and record the time accurately. Collect further samples on the original timescale.
- You may **resume quiet activity** between samples, but don't go to sleep.

**Return your samples using the pre-paid returns envelope via post box (choose a priority post box where available). Your sample will be sent to our partner in London (please note the tracking number), and then sent to our lab in Germany. You will receive an update when it arrives in Germany 2 to 5 working days after posting.**

## DIETARY ADVICE BEFORE TAKING THE SIBO TEST

**On the day before taking your SIBO test, before fasting for 8 to 12 hours overnight, please eat from the list of foods below. You can create your own meals or follow the sample menu.**

### Foods you can eat



Meat (not red) & fish  
(baked or grilled)  
*Plain Chicken, Turkey,  
Fish*



Eggs



Tofu

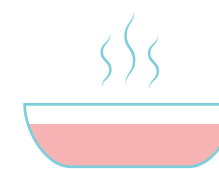


Plain boiled  
white rice



Black or green tea  
*(not herbal)*

Black coffee  
*(without milk)*



Clear chicken or beef broth  
*(no vegetable pieces)*

Still Water



Salt and pepper  
*(no herbs)*



### Sample menu

#### Breakfast

Scrambled eggs (no butter)  
with grilled salmon (or any other plain fish)  
or  
Scrambled tofu

Cup of black coffee or black tea

#### Lunch

Fish with white rice seasoned with salt and  
pepper  
or  
Tofu with white rice seasoned with salt and  
pepper  
Cup of green tea

#### Dinner

Chicken broth with grilled chicken breast  
and white rice  
or  
Grilled tofu and white rice

#### Snacks

Boiled eggs  
Clear chicken or beef broth



#### WHAT HAPPENS NEXT?

**Results take 14 working days** from receipt of sample. As soon as your results are ready, you'll receive an email notification from Healthpath. You can then log onto your Healthpath account to view your results and see personalised recommendations.