# VA Palo Alto Health Care System

# How to Prepare and Complete Your Breath Test at Home

#### What Is a Breath Test?

A Breath Test is a simple, noninvasive test used to determine whether a person has Small Intestine Bacterial Overgrowth (SIBO). SIBO can be the cause of symptoms such as diarrhea, constipation, bloating, gas, and abdominal cramps.

#### What is Small Intestinal Bacterial Overgrowth (SIBO)?

It is normal to have bacteria in your intestines. However, SIBO is caused by having excess bacteria in the small intestine. These bacteria encounter food that has not yet been fully broken down in the small intestine. This makes the bacteria produce more hydrogen or methane gas than usual. This excess gas is then absorbed into the blood stream and exhaled in the breath.

Please read all directions and familiarize yourself with the test procedures. The test results will be useful only if the samples are properly collected. Some aspects of this test require preparation at least three weeks in advance.

The SIBO Breath Test asks you to complete **four key steps**:

- 1. You will collect one initial breath sample.
- You will consume a sugar drink (Lactulose) to stimulate the digestive process in the small intestine.
- 3. You will collect breath samples in twenty-minute intervals for three hours. In total, you will collect ten samples.
- 4. You will mail back the tubes with the breath samples you collected.

Once we receive your samples, we will measure the methane and hydrogen gases in your breath to determine whether you have SIBO. This information will be given to your doctor.



## **Pre-Test Guidelines**

To make sure we can rely on the results of your breath test, we ask you to follow a few rules in the weeks and days before your test.

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#### **Three Weeks Before Your Test**

• **DO NOT** take any antibiotics. If you are currently prescribed antibiotics, do not stop taking them. Please Call (650) 493-5000 ext. 63739 or 68973 to reschedule this test to a date after you finish taking all your prescribed antibiotics.

## **Seven Days Before Your Test**



- **DO NOT** have a colonoscopy or Barium Enema.
- **DO NOT** take any laxatives, probiotics, stool softeners or bulking agents, such as:

- Colace - Metamucil

DocusateMilk ofMiral AX

Magnesia

Ex-Lax

## **One Day Before Your Test**



• ONLY eat items from this list of foods for the entire day or test results will not be valid:

Plain white bread
 Non-flavored black

– Plain white rice– Plain white potatoes– Salt (no other

Baked or broiled seasonings or spices)

chicken – Eggs

Chicken brothFish (white)

-Water

#### **The Night Before Your Test**

**DO NOT EAT or DRINK** anything other than plain water for **12 hours before** beginning the test.

# **Test Day Instructions**

#### **The Morning of Your Test**

- **DO NOT** sleep or exercise vigorously for at least 1 hour prior to the test.
- **DO NOT** smoke for at least 1 hour prior to the test.
- **DO NOT** loosen or remove the tops of the vacuum-sealed collection tubes; this will destroy the vacuum and make it useless for this test.

#### **Before You Start Your Test**

Please read the directions completely **BEFORE** collecting a sample. If you do not understand any part of the instructions, please contact GI Endoscopy Unit at (650) 493-5000 ext. 64841 to ask any questions. It is important that you follow all the directions so we can be confident in the results of your test.

## **Verify Kit Contents:**

- 1. This instruction sheet
- 2. 15 ml of the sugar drink "Lactulose"
- 1 x Blue "EasySampler" with mouthpiece, tube holder (including a needle assembly), and discard bag
- 4. SIBO Breath Test Sampling Log

5.  $10 \times glass$  capped tubes (do not remove caps - it is normal for the rubber caps to look different; some of the rubber caps may be inside of the tube while others

may be sticking out of the tube)

- 6. 10 x sample tube labels
- 2 x bubble wrap packets to place tubes in to return them to Biolab
- 1 x Laboratory Pak to mail your samples that is pre-paid by the VA and is already addressed for return
- 9. Box supplies came in to return test tubes in



Contact the GI Endoscopy Unit at (650) 493-5000 x64841 if any of the kit contents are missing.

## **During the test:**

- **DO NOT** sleep or exercise.
- DO NOT smoke, chew gum, or eat anything.

# **How to Collect your Breath Samples**

You will need to collect breath samples during a **3-hour period**. You may drink plain water during this time.

Please ensure that you take the **FASTING** sample **before** drinking the Lactulose solution.

## **Prepare Test Solution – DO NOT DRINK YET!!!**

- 1. Stir the Lactulose solution into 8 oz of water.
- 2. Set the drink aside, you will consume the solution after you collect your baseline sample.
- 3. This is the timeline of how the samples will be collected, continue to the next section on how to perform the test

Sample	Collection Time
Baseline - #1	Before drinking
Drink the Lactulose solution	
#2	20 min. after drink
#3	40 min. after drink
#4	1 hour after drink
#5	1 hour 20 min. after drink
#6	1 hour 40 min. after drink
#7	2 hours after drink
#8	2 hours 20 min. after drink
#9	2 hours 40 min. after drink
#10	3 hours after drink

## **Performing the Test (Collection Steps)**

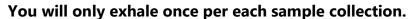
**Do not** insert your finger into the tube holder of the EasySampler at any time; it contains a **sharp needle!!!** 



1. Collect your baseline sample following steps a-d below.



a. Hold the EasySampler device in one hand and a collection tube in the other hand.





Take a normal (*not deep*) breath in; close your mouth around the mouthpiece then blow out normally.

b. Exhale once per each sample collection. As you exhale the bag fills with air. Keep it inflated.



(There is a small hole in the bag, this is intentional).

During your exhalation, insert the test tube into the needle holder completely so the stopper on the tube is punctured.



c. Remove the test tube after 1-2 seconds. Keep the bag inflated until after the test tube is removed from the test tube holder.



d. Complete the tube label provided. Make certain you label the Sample Number correctly or your results will be inconclusive. If you have symptoms fill out the Sample and Symptom Log and return when you return the test.

#### 2. Drink the entire Lactulose solution and then wait 20 minutes.

- 3. Collect one breath sample every 20 minutes until all test tubes are used. Follow steps a-d above to collect the samples.
  - a. Note: If you are late collecting a sample, please collect the sample as soon as possible. Write down the time you collected your sample accurately on the tube label. Collect further samples every 20 minutes until you have collected all samples.

## What Happens After Completing Sample Collection?

- Confirm you have placed all 10 sample tubes into the two bubble wrap bags.
- Remove the original shipping label and replace it with the pre-paid UPS return shipping label on the outside of the package
- Place the bubble wrap bags back in the box and seal it within the UPS
   Laboratory Pak provided. Be sure to include the SIBO Breath Test Sample Log in
   the package.
- Drop off the package at your local UPS store. **You MUST send your samples** within 3 days of collection.
- Return to your regular diet and activities.

## What if I Have Questions About the Test?

Call the GI Endoscopy unit at (650) 493-5000, ext. 64841 (Palo Alto) between 8:00 a.m. to 6:00 pm