

LACTULOSE BREATH TEST FOR BACTERIAL OVERGROWTH

A lactulose breath test is used to diagnose small intestinal bacterial overgrowth (SIBO). SIBO results when bacteria that normally reside in the large intestine (colon) migrate into the small intestine, a section of the bowel that is typically sterile. This can cause bloating, diarrhea, and/or abdominal pain, and may interfere with the absorption of nutrients. The goal of this test is to determine how much hydrogen and methane you create in response to lactulose sugar. Abnormal hydrogen and methane levels in the first 90 minutes of this test usually indicate the presence of bacteria in the small intestine.

DIET & PREPARATION FOR BREATH TESTING

1 MONTH BEFORE BREATH TEST: No Antibiotics

1 WEEK BEFORE BREATH TEST: No pro-motility medications (Reglan and Erythromycin), laxatives (Miralax, Dulcolax, Ex-Lax, Senna) or fiber supplements (Citrucel, Metamucil, Benefiber, etc.).

BEFORE YOU START THE BREATH TEST a 24-hour preparation is required consisting of a 12-hour bland diet followed by a 12-hour fasting period. You may choose from any of the foods listed below. If you do not see a food or beverage listed, please avoid it, to ensure accurate test results.

➤ **Foods allowed:**

- White bread
- Clear chicken or beef broth
- Plain white rice, steamed
- Non-fried chicken, turkey, or fish (no pork or beef)
- Eggs
- Salt and pepper (avoid other seasonings)
- Water, coffee, tea (no sugar, artificial sweeteners or cream)

Sample Meal Plan:

Breakfast: white toast, 1 scrambled egg, black coffee (black)

Lunch: grilled chicken breast with white rice, water

Dinner: broiled fish, white rice, chicken or beef broth, unsweetened iced tea

12 HOURS BEFORE BREATH TEST BEGINS: DO NOT eat or drink anything except water. If you will begin your test at 8AM, you will need to start fasting at 8PM the night before.

THE DAY OF BREATH TEST:

- Your test will take 3 hours to complete so please plan time appropriately.
- No sleeping or vigorous exercise for at least 1 hour before or at any time during the test.
- No smoking or second-hand smoke for at least 1 hour before or at any time during the test.
- No food or drink except water during the test.

Other Miscellaneous Instructions:

- If you have been given more than one kit, you may only complete one kit per day.
- There should be at least one day in between each test. Don't forget to follow diet instructions again for the next test.

INSTRUCTIONS FOR COMPLETION OF LACTULOSE BREATH TEST

Resource video may be accessed at www.midwestgi.com, under Our Services, Breath Hydrogen, scroll to video link or directly at https://www.youtube.com/watch?v=bs5LgJ6_A8w.

Kit contents:

- EasySampler with attached tube holder
- 10 vacuum-sealed collection tubes
- Labels for collection tubes
- 10-gram packet of lactulose sugar
- 2 bubble bags



Getting Ready:

A few minutes before your test begins, fill out each label with your name, test date, and the times you plan to collect your samples. You will take breath samples in the order you mark the tubes. *Be careful to NOT mix up the tubes or your results will be invalid!*

STEP ONE: COLLECT YOUR FIRST BREATH SAMPLE (you will be in a fasting state)

- Hold the EasySampler in one hand and test tube in the other hand.
- Take a normal breath in, then close your mouth around the mouthpiece and exhale (blow out) into the bag. *Keep blowing.*
- Once the bag has inflated, *keep blowing*; then insert the test tube into the needle holder completely so that the stopper is punctured. Hold punctured tube for 2 seconds, then remove and set aside.
- Place sticky label around the tube and put it in the bubble bag (make sure name, date, and time are all filled out on label!)

STEP TWO: EXPOSURE TO SUGAR SOLUTION

- Immediately after collecting sample #1, it's time to drink the sugar solution. Mix the entire packet of lactulose sugar in 8 ounces of water, stirring vigorously, and finish drinking the entire contents within 5 minutes.

You may resume quiet activity, but do not eat, smoke, sleep or exercise for the remainder of the test.

STEP THREE: COLLECT REMANING BREATH SAMPLES

- Repeat step one, collecting a breath sample every 20 minutes (beginning 20 minutes after sample #1) with the remaining tubes. This should take approximately 3 hours total.

STEP FOUR:

- After collecting your final breath sample, make sure all tubes are in the bubble bag provided. Place the bubble bag in the box and return to MGI within 1 week (in person or by mail).

After you return your kit(s), please allow 10-14 business days for your test(s) to be processed. Your nurse will call you with the results and your doctor's recommendations once complete.

Please call _____ @ 402-397-7057 if you have questions.