

**Digestive Disease Associates
10710 Charter Dr. Ste. 110
Columbia, MD 21044**

Breath Test Instructions (H₂ Hydrogen and CH₄ Methane)

WHAT IS A BREATH TEST?

A breath test is a diagnostic tool used to help determine if specific conditions or diseases are affecting your intestinal tract. By capturing your breath and then analyzing these gases within it, allow us to check for some very specific conditions so we can start to treat you properly.

HOW DOES IT WORK?

Hydrogen and/or methane gas are produced from intestinal bacteria. Bacteria, normally in the large intestine, produce hydrogen or methane through fermentation of carbohydrates. Substrates containing these carbohydrates, such as Lactulose, are given orally to test for small intestinal bacteria presence. Some of the produced hydrogen or methane from bacterial fermentation causes abdominal discomfort, bloating, or diarrhea. The gases are absorbed by the intestinal mucosa and enter the vasculature, then transported to the lungs. These gases are then exhaled during normal breathing. The gases are collected in a bag for immediate analysis.

In SIBO, Small Intestinal Bacterial Overgrowth, bacteria is found in the small intestine. Lactulose, as a challenge dose, is poorly absorbed in the gastrointestinal tract, therefore, making it the ideal substrate to test for bacterial overgrowth throughout the length of the small bowel (21 feet).

NOTE: If lactose, sucrose, or fructose is the given substrate, bacteria compete with the natural digestive process before it is absorbed, and could possibly cause an early rise in breath hydrogen as well. Dedicated intolerance testing for these sugars are performed separately.

In Lactose and Fructose intolerance, there is a deficiency in the enzymes needed for its absorption. Normally, it is broken down in the small intestine, absorbed, and very little lactose or fructose reach the large intestine. If by chance it reaches the colon in its raw form, it is metabolized by colonic bacteria producing a large amount of gas which can be measured distally in the breath sample (Positive Intolerance Test).

BEFORE YOU SCHEDULE YOUR TEST

- Wait 28 days to have a breath test after bowel prep (i.e. colonoscopy, capsule endoscopy, barium radiography, or other related procedures)
- Discontinue Antibiotics, Probiotics, Antimicrobial Herbs (i.e. oregano oil), and Bismuth Products at least 28 days before your test, unless instructed otherwise by your provider.
- Do not take **ANY** laxatives for at least 7 days prior to your test
- Wait 2 days after your last dose of motility agents (i.e. Metoclopramide, Loperamide)

To schedule your breath test, call Maurica at (443) 304-3452

THE DAY BEFORE YOUR TEST, PLEASE LIMIT YOUR DIET

A low-residue diet that minimizes non-absorbable carbohydrates (starches and sugars) is strongly recommended.

Here are examples of foods that you CAN eat:

- Baked or broiled chicken, fish, or turkey (salt and pepper only)
- White bread only
- Plain steamed white rice
- Eggs
- Clear chicken or beef broth
- Drink water, non-flavored black coffee, or tea

AVOID foods like:

- Pasta, whole grain products, bran, high fiber cereals, granola, etc.
- Fruit juices, applesauce, apricots, bananas, cantaloupe, canned fruit cocktail, grapes, honeydew melon, peaches, watermelon. Raw and dried fruits such as raisins and berries.
- Vegetable juices, potatoes, alfalfa sprouts, beets, green/yellow beans, carrots, celery, cucumber, eggplant, lettuce, mushrooms, green/red peppers, squash, zucchini, broccoli, cauliflower, Brussel sprouts, cabbage, kale, Swiss chard, beans, lentils, corn, etc.
- All nuts, seeds, beans, and any foods that may contain seeds
- Milk, cheese, ice cream, yogurt, butter

*****FAST FOR 12 HOURS BEFORE THE TEST, CONSUMING NO FOOD EXCEPT WATER*****

THE DAY OF YOUR TEST

- Medications (except antibiotics) may be taken with water 6 hours before the test. Please call if unsure
- Do **NOT** sleep or exercise vigorously 30 minutes before or anytime during the test
- This test may take up to 3 hours or more
- We have a television you can watch and magazines you may read during the test
- Please ask any questions whenever you would like during the procedure

Any questions? Call Kathleen at (410) 992.9797

Advance Beneficiary Notice of Noncovered Services

Hydrogen Breath Test

NOTE: If your test is inconclusive due to incorrect or incomplete prep and needs to be performed again, your insurance may not cover it and you will be charged a \$55.00 fee for each test.

If the take home test(s) that you receive is not performed or returned you will be charged a \$84.00 fee for each test.

Signing below means that you have received and understand this notice. You may also receive a copy.

Signature: _____

Date: _____

Patient Name:

Patient ID: