



Welcome! Breath Test

H₂ Hydrogen Instructions

WHAT IS A BREATH TEST?

The breath test is a diagnostic tool we use to help determine if certain conditions or diseases are affecting your intestinal tract. By capturing your breath and analyzing the gases contained in it, we can check for some very specific conditions so we can then begin treating you appropriately.

HOW DOES IT WORK?

Hydrogen gas in the body is produced from intestinal bacteria. Bacteria, normally in the large intestine, produces hydrogen through fermentation of carbohydrates. Substrates containing these carbohydrates, like lactulose, is given orally to test for small intestinal bacterial presence. Some of the hydrogen produced from the bacterial fermentation causes bloating, abdominal discomfort or diarrhea. The gases are absorbed by the intestinal mucosa and enter the vasculature and transported to the lungs. The gases are then exhaled through normal breathing. These are recorded from the HBT Sleuth for immediate analysis.

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

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

In Lactose and Fructose intolerance, the individual has 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 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 one breath sample from the HBT Sleuth.

BEFORE YOU SCHEDULE YOUR TEST



Discontinue Antibiotics and Probiotics at least 10 days before your test, unless instructed otherwise by your provider.

Do not take ANY laxatives for at least 2 days before to your test

THE DAY BEFORE YOUR TEST, PLEASE LIMIT YOUR DIET

A low-residue diet that minimizes nonabsorbable 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 like 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, brussels sprouts, cabbage, kale, swiss chard, beans, lentils, corn, etc.
- All nuts, seeds and beans, as well as 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** smoke at least one (1) hour before the test

DURING YOUR TEST

- No eating or drinking anything at all during the breath test
- Do **NOT** sleep or exercise vigorously ½ hour before or anytime during the test
- This test may take up to 3 hours

Please ask questions whenever you'd like during the procedure