

Breath Hydrogen Testing: (BHA)

What is BHA? Breath Hydrogen Analysis testing is done to detect maldigestion and malabsorption of sugars or carbohydrates. This is most commonly the assessment of lactose intolerance. Carbohydrates (sugars, starches or vegetable fibers) are broken down in your small intestines. In lactose intolerance, lactose is not absorbed. Instead, bacteria will break down the unabsorbed lactose. As this bacteria works, it produces hydrogen which is exhaled in your breath. This test measures exhaled hydrogen.

What can we test for with BHA equipment?

- Lactose intolerance
- Sucrose intolerance
- Fructose intolerance (Not done with family history of fructose intolerance.)
- Small Intestinal Bacterial Overgrowth (SIBO)

What symptoms indicate need for Lactose test?

- Unspecified abdominal cramping
- Gas
- Bloating
- Diarrhea

What symptoms indicate need for SIBO test?

- Chronic diarrhea
- Weight loss
- Steatorrhea (Fatty stools)
- Macrocytic anemia (anemia due to a vitamin deficiency)

What Can I expect to happen during test?

During the study your child will be asked to blow into a mouthpiece to collect breath samples several times in a 4 hour time period. After the initial breath your child will drink a solution that is a mixture of a sugar and water. Your child is required to drink this solution in **5 minutes**. (usually 6oz.) We recommend that you practice this at home prior to testing. Dr. Strobel will go over your results at the end of the test.

Our Office has the equipment available to do Breath Hydrogen Analysis. Be sure to talk with your primary care physician regarding your child's symptoms. We welcome referrals for this testing. Please call our office for an appointment at (865)522-4116

To obtain a printable copy or this form with prep instructions, click here.

Breath Hydrogen Analysis (BHA) Prep Instructions:

What are we required to do or not do to prepare for this test?

- For 4 weeks prior to the test, your child should not have any antibiotics.
- If your child has had a colonoscopy or barium enema, wait for 4 weeks before being tested.
- Stop taking anti-reflux or proton pump inhibitors 7 days before testing.
- Do not take laxatives or stool softeners 3 days before the test.

What foods can my child eat 24hrs prior to this test?

- Avoid: high fiber foods, whole grain products, fruits and fruit juices, vegetables and vegetable juices, corn, nuts, seeds and beans, and all dairy products. Do not take any fiber or lactase enzyme supplements.
- Limit food intake to the following: plain white bread (no white wheat breads), plain white rice, plain white potatoes (no peeling), eggs, baked or broiled chicken, turkey or fish. Food may be seasoned with salt and black pepper only. Drink plain water only.
- **Your child should have nothing to eat or drink after 9pm other than plain water and he/she can have nothing to eat or drink after midnight.**

What do we need to know for the day of testing?

- Before leaving home, make sure your child has brushed their teeth well. Bring a toothbrush and toothpaste with you to the office. Your child will need to brush their teeth again after drinking the sugar solution.
- Do not eat, drink, chew gum, eat breath mints or candy before or during the test.
- Do not smoke in the car or around your child prior to testing.
- Do not allow your child to sleep or exercise while the test is being done.