Hydrogen Breath Test

A hydrogen breath test is done to see whether your child is able to digest and absorb certain sugars. The most common sugar tested is lactose, the sugar found in milk. Other sugars that can be tested include fructose, sucrose, lactulose and even starch. If your child is not able to digest the sugar, the body cannot absorb it. This may cause gas, crampy pain in the abdomen and diarrhea.

Hydrogen gas is produced from the unabsorbed sugar as it reaches the large intestine. This gas can be measured in your child’s breath. During the hydrogen breath test, breath samples are taken and sent to the lab to be checked for hydrogen.

How to prepare for the test

- If your child is taking a proton pump inhibitor (PPI) such as Nexium, Prevacid, Prilosec, Protonix, etc., please stop taking it for 7 days before the breath test. If you are not sure whether the medicine that your child is taking is a PPI, ask one of our nurses.

- If your child recently had antibiotic therapy, runny diarrhea, a colonoscopy, a barium study or any type of enema, please wait 14 days after he has finished any of these before starting the breath test.

- Explain the test to your child in a way he or she can understand.

Appointment

Child’s Name ____________________
Date ____________________________
Arrival time ______________________
Check in at the GI Department, 1st floor J-West (G building)
Parking: You may park in the Visitor Parking Garage or Valet Park at the main entrance of the hospital.
• The test does not hurt.

• If your child is old enough, you can help him or her practice for the test. You will need a noisemaker party favor. Have your child blow into the end of the noisemaker and try to hold the curly end out while you slowly count to 10.

• The test will take **3 to 4 hours** to complete. You may bring books, small toys or a game to entertain your child while the test is being done.

**The day before the test**

• Foods your child can eat include baked or broiled chicken, fish or turkey (seasoned with salt and pepper only), white bread, steamed white rice, eggs, clear chicken or beef broths, water, and non-flavored black coffee or tea (no creamers or sweeteners).

• The last meal of the day should not be a large meal and should contain no fiber (no rice or bread).

• Your child may not have anything to eat or drink (except water) after 9 PM the night before the test, not even mints, cough drops or chewing gum.

• If your child takes morning medicines, check with the nurse to see if the medicines should be taken.

• Your child may drink water up to 4 hours before the test.

**How the test is done**

• Your child will be taught by the technician how to purse his or her lips around a plastic mouthpiece that is connected to the small foil collection bag (Picture 1).

• When your child breathes out, the breath is collected in the foil bag. After the patient drinks the sugar solution of interest, breath samples will be collected at certain times over the next **3 to 4 hours in 30 minute to 1 hour intervals**. The technician will tell you the times that each breath will be collected.

**The day of the test**

• You child may brush his or her teeth up to 2 hours before the test.

• Your child may not eat or drink anything until the test is finished.
• **NO** smoking, including second-hand smoke, for at least 1 hour before or at any time during the breath test.

• **NO** sleeping or vigorous exercise for at least 1 hour before or at any time during the breath test.

• During the test, only a **few small sips of water** are allowed.

**After the test**

• Your child may eat and drink his or her usual foods after the test.

• If your child’s test was ordered by a GI practitioner at NCH, our office will contact you with the results. If you have not heard from us within 2 weeks, please call us at 614-722-3450.

• If your child was referred to us for the test, please contact the practitioner who referred him or her for results and follow-up.

If you have any questions, please ask your nurse or call the GI office.