



NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.

Helping Hand™

Health Education for Patients and Families

Hydrogen Breath Test

A hydrogen breath test is done to see if your child can digest and take in (absorb) certain sugars. The most common sugar tested is lactose, the sugar found in milk. Other sugars that can be tested are fructose, sucrose, lactulose, and starch.

If sugar can't be digested, it can't be absorbed either. The unabsorbed sugar moves through the intestine and makes hydrogen gas. Hydrogen may cause gas, cramps in the belly (abdomen), and diarrhea. It can be measured in your child's breath. During the test, breath samples are taken and sent to the lab.

How to Prepare for the Test

- If your child is taking a proton pump inhibitor (PPI), like Nexium®, Prevacid®, Prilosec®, Protonix®, **they need to stop taking it for 7 days before the breath test.** If you're not sure if the medicine is a PPI, ask one of the nurses.
- If your child recently had antibiotic therapy, runny diarrhea, a colonoscopy, a barium study, or any type of enema, **wait 14 days before the breath test.**
- Explain the test to your child in simple words they can understand. Let them know the test doesn't hurt, and you'll be with them.
- If your child is old enough, you can help them get ready for the test. You'll need a noisemaker party favor (Picture 1). Have your child blow into the end of the noisemaker. Hold the curly end out while you slowly count to 10.
- The test will take **3 to 4 hours.** You may bring books or small toys for your child. You can also bring a board, card, or handheld game.



Picture 1 Noisemaker

Day Before the Test

- Your child can eat/drink:
 - Eggs
 - White bread
 - Baked or broiled chicken, fish, or turkey (seasoned with salt and pepper only)
 - Black coffee or tea (no flavors, creamer, or sweetener)
 - Water
 - Steamed white rice
 - Clear chicken, beef, or vegetarian broths
- **The last meal should be small, without any fiber. Do not give your child any rice or bread for the last meal.**
- Your child may **not have anything to eat or drink** (except water) **after 9 p.m.** the night before the test. No mints, cough drops, or chewing gum – **nothing**.
- If your child takes morning medicines, check with a nurse to see if they should be taken.
- Your child may drink water up to 4 hours before the test.

How the Test is Done

- The technician will teach your child how to wrap their lips around a plastic mouthpiece that's connected to the small foil collection bag (Picture 2).
- When your child breathes out (exhales), the breath goes into the foil bag. They will be given a sugar solution to drink. Then, breath samples will be collected over the next **3 to 4 hours, every 15 minutes to 1 hour**. The technician will tell you the times that each breath will be collected.



Picture 2 Breath is collected in a foil bag.

Day of the Test

- Your child may brush their teeth up to 2 hours before the test.
- **Your child may not eat or drink anything until the test is over.**
- No smoking, including second-hand smoke, for at least 1 hour before or at any time during the breath test.

- No sleeping or intense exercise for at least 1 hour before or at any time during the test.
- During the test, your child will only be able to drink a **few small sips of water, which the nurse will give them.**

After the Test

- Your child may eat and drink their usual foods.
- If your child's test was ordered by a GI practitioner at Nationwide Children's Hospital, we will contact you with the results. If you have not heard from us in 2 weeks, call (614) 722-3450.
- If your child was referred to us for the test, contact the doctor or health care provider who referred you for results and follow-up.

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