

700 Children's Drive  
Columbus, Ohio 43205-2696  
nationwidechildrens.org

## **HYDROGEN BREATH TEST (Lactose Tolerance 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 can't absorb it. This may cause gas, crampy abdominal pain, 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**

**Your child should have nothing to eat or drink after midnight the night before the test.**

- He should not even have gum, mints, or cough drops. If your child takes medicines in the morning, check with the nurse to see if he should take them.
- Your child may brush his teeth, but *should not swallow* the toothpaste.
- The test does not hurt. Explain the test to your child in a way he or she can understand.
- If your child is old enough, you can help him 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.
- You may bring books, small toys, or a game to entertain your child while the test is being done, as the test will take 4 hours to complete.

<b>APPOINTMENT</b>	
<b>Child's Name</b>	_____
<b>Date</b>	_____ <b>Time</b> _____
<b>Registration Time:</b>	_____
<ul style="list-style-type: none"><li>▪ Enter the hospital through the Outpatient Care Center (555 S. 18th Street)</li><li>▪ Follow the purple circles on the left side of the lobby floor to the elevators on your left marked A1 and A2. Take the elevator to the second floor and turn left. You will see a sign for <b>G I Procedures</b>. Register your child at the reception window.</li><li>▪ You may ask for directions to the G I Procedure Room at the information desk in the lobby.</li></ul>	



**Picture 1** Having a hydrogen breath test.

## HOW THE TEST IS DONE

- A breath sample will be collected and then your child will drink the sugar solution.
- Breath samples will be collected at certain times over the next 4 hours. Your nurse will tell you the times that each breath will be collected.
- Your child may not eat or drink anything until the test is finished.

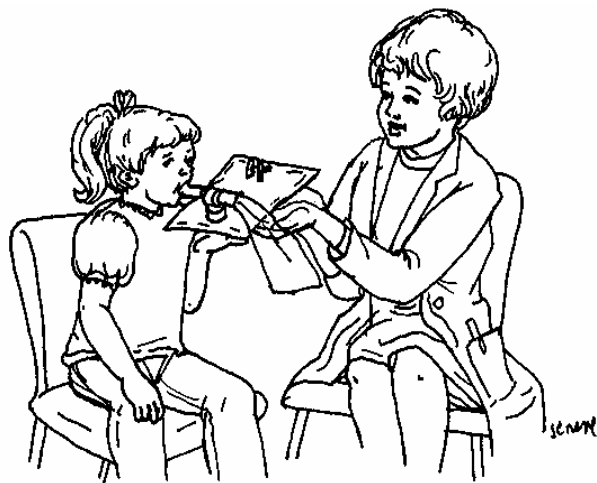
## HOW THE BREATH IS COLLECTED

### Young Children

- A small child who can't breathe into a bag will have a small plastic tube passed to the back of his or her nose and taped in place. The tube will stay there for the entire test.
- A large syringe (without a needle) is attached to the end of the tube each time a breath needs to be collected. When your child breathes out, the breath is drawn through the tube and into the syringe (Picture 1, page 1).

### Older Children

- Your child will be taught by the nurse how to purse his lips around a plastic mouthpiece that is connected to the small foil collection bag (Picture 2).
- When your child breathes out, the breath is collected in the foil bag.



Picture 2 Breath is collected in the foil bag.

## AFTER THE TEST

- Your child may eat and drink his usual foods after the test.
- Call the G I office at (614) 722-3450 in three weeks to get the results of the test and to see if any change in your child's medical treatment is needed.

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