Glucose Tolerance Test Collection Guidelines

Glucose (GLUE-cose) is a type of sugar. If your child has signs of diabetes or hypoglycemia (low blood sugar), a glucose tolerance test is done. This test shows how well the body uses sugar.

The test must be scheduled with the laboratory. For information about which Nationwide Children’s Laboratory Service Centers offer the test, please call Laboratory Services at (800) 934-6575.

How to prepare for the test

- Make sure your child eats a well-balanced diet for 3 days before the test.
- Your child should have nothing to drink or eat, including gum, mints or candy, for 8 hours before the test. However, water is OK to drink if they get thirsty.
- Bring a favorite book, game, or toy from home to occupy your child during the test.

How the test is done

1. Let the laboratory technician (lab tech) know how long your child was fasting (the last time they ate or drank).
2. A lab tech will prick your child’s finger or draw a blood sample from an arm vein to get a baseline glucose level (the amount of glucose in the blood at the start of the test).
3. The lab tech will weigh your child. This is to know how much of a special drink to give them to do the test. It will be sweet and flavored with lemon-lime, orange or fruit punch. When asked, your child will need to drink all of it within 5 minutes.
4. Depending on the orders, the lab tech will take several blood samples. They will tell you how many samples your child needs to give and at what times.
5. Your child cannot have anything else to eat or drink until the test is over.

6. If your child cannot swallow all the drink for the test or if they vomit it up, they will have to come back to do the test on another day.

7. Your child may be hungry and cranky during the test. It will help if you plan quiet play to keep your child’s mind busy until they can eat.

**When both glucose tolerance and insulin stimulation tests are needed**

If your child needs both a glucose tolerance test and an insulin stimulation test, they will go to the Infusion Clinic at Nationwide Children’s instead of the Laboratory Service Center. There, a nurse will put an IV in your child’s vein to do several blood draws for both tests at the same time. Someone from the Infusion Clinic will call you to make an appointment for your child. If you have any questions or need to cancel an appointment with them, call the Infusion Clinic at (614) 722-6077.

For directions to the nearest Laboratory Service Center, please call Laboratory Services at (800) 934-6575 or visit NationwideChildrens.org/Lab.