

National Centre for Inherited Metabolic Disorders



Fasting Study

This leaflet will help to explain what to expect when your child attends Temple Street Children's University Hospital for a fasting study.

What is a fasting study?

A fasting study is a test requested by your child's doctor to help find the cause of your child's low blood glucose (sugar).

Why is it needed?

Everyone should be able to maintain their blood glucose level for a certain number of hours; for example, a healthy adult should be able to last 72 hours without food before their glucose level drops. Children of different age groups should be able to maintain their blood glucose level for a certain length of time before their level will drop. This test is carried out on your child because they had unexplained low glucose levels at some point and this needs to be investigated.

This test can show if the low glucose levels are caused by problems your child may have breaking down and absorbing food. If your child's doctor knows the cause of their low blood sugar they can suggest a way to treat it.

What is a low glucose level?

Blood glucose below the acceptable level is known as hypoglycaemia. This is the point at which the level of glucose is dangerously low and does not provide the body with the fuel it needs to work.

Signs of hypoglycaemia or low glucose

- Sweating
- Irritability
- Vomiting
- Paleness
- Change in mood/behaviour
- Tiredness
- Generally not being well.

What is involved in the test?

A date for the test will be arranged and will be sent to you by post. Your child will be admitted to hospital for a minimum of 3 days. When you arrive you will meet your child's doctor who will explain the test and ask you to sign a consent form. It is important to tell the doctor all the medication your child may be taking and any allergies they may have.

Day 1

For 24 hours before the start of the test your child will have their glucose level checked. This involves pricking a finger (same as for children with diabetes) and filling a little tube with blood which will be tested on the ward. The glucose levels are taken before meals and an hour and a half after finishing meals. It is important to tell the nurse caring for your child when they have finished eating their meal. In between meals your child will only be allowed drink water. Your child will be allowed to have what they would normally eat or drink before they settle to sleep, but will be allowed to drink only water during the night. Your child's glucose level will be checked every 4 hours during the night.

Day 2

The next evening your child will be fasting from a particular time and throughout the night. During this time, they will not be allowed to eat but can drink water. Your child will have a cannula (straw) put into a vein which will allow blood samples to be taken easily.

Day 3

The next morning, for safety reasons a second cannula will be put in to your child's arm. During this stage your child will be fasting and any urine passed by your child will be collected. Your child's nurse will give you a urine jar or an easily removable urine bag will be applied if they are not toilet trained.

It is important that your child does not eat or drink during the fast (except for water). If they do, the test will be stopped and repeated at another time. When the test is finished, more blood will be taken and then your child will be able to eat and drink as usual.

What happens when the test is finished?

The nurse caring for your child will continue to check the blood glucose levels after the fast and every 4 hours during the night.

Your child will go home the next morning and will be given an appointment for 3-4 months time. Your doctor will meet with you on the morning of discharge and will advise you on how to proceed if your child becomes unwell in the future. It is always a good idea to write down any questions you may have so that you are clear about the testing.

If have any questions when you go home you can contact the Metabolic Outpatient's Department to speak to a specialised doctor, nurses or dietitian Monday – Thursday 9am-4pm Friday 9am-2pm 01 8784317 or 01 8784646 or St. Brigid's Ward 01 8784200 at other times

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