



Diagnostic fast

This leaflet explains about diagnostic fast tests and what to expect when your child comes to Great Ormond Street Hospital (GOSH) to have one.

What is a diagnostic fast?

This is a test which helps us to find out the cause of your child's low blood sugar level. It also gives the medical team evidence of the length of time for which your child can safely fast. It is done by checking samples of your child's blood for certain chemicals which help control blood sugar levels.

Why is it needed?

Your child needs this test because his or her low blood sugar levels are causing problems and the cause needs to be investigated further. This test can show whether your child's low blood sugar levels are caused by an endocrine or metabolic problem. Once the doctors know why your child's blood sugar levels are low, they can suggest treatment.

What happens before the test?

You will already have received information about how to prepare your child for the test in your admission letter.

The doctors will explain about the test in more detail, discuss any worries you may have and gain your consent for the test. If your child has any medical problems,

particularly allergies, please tell the doctors about these. Please also bring in any medications your child is currently taking.

Your child will need to have a cannula (a thin plastic tube) inserted into a vein, so blood samples can be taken more easily. A nurse will apply some local anaesthetic cream first so the skin is numb.

What does the test involve?

Your child will not be allowed to eat anything during the test, and will only be allowed to drink water. It is important to follow these instructions – otherwise the test will need to be stopped and rescheduled for a later date.

Every hour, a small sample of blood will be taken from the cannula to check your child's blood sugar level. This will continue for the duration of the test until your child's blood sugar level drops to a low level or a set period of time which is stipulated by the doctor. When it reaches this level, blood samples will be taken by the nurses before the test is stopped.

During the test, your child will need to stay on the ward so the nurses can keep a close eye on them.



What happens afterwards?

Once the nurses have taken the final blood sample, your child will be able to eat and drink as usual. The nurses will give your child a choice of what to eat and drink, which usually helps. When your child has finished eating, the nurses will take a urine (wee) sample.

Your child will need to stay on the ward for an hour or two after eating, so the nurses can continue to check his or her blood sugar level. Once this has returned to normal, the nurses will remove the cannula and you will be able to return home.

Are there any risks?

There is a very small risk your child's blood sugar level could drop to a dangerously low point, but as he or she will be closely watched on the ward, this is unlikely to happen. The nurses will stop the test if they have any concerns about your child.

Your child will probably feel tired and miserable during the test because he or she will not be allowed to eat as usual. It is important to continue the test so we can get accurate results. However tempting it is, giving your child anything other than water will mean the test will need to be stopped and rescheduled for a later date.

While your child is not eating, it is easy for you to forget to eat too. There is a kitchen on the ward and also the coffee shop and restaurant in the hospital, so please try not to forget your own needs.

There is a small risk your child's blood sugar level could fall when you get home, especially if he or she is vomiting. This is called 'rebound hypoglycaemia'. Signs of hypoglycaemia include:

- vomiting
- irritability
- sweating
- pallor
- change of mood or behaviour
- tiredness
- generally not being well

Please treat any hypoglycaemic episodes according to your individual hypo plan.

How long will it take to get the results?

It can take six to eight weeks for the laboratories to analyse your child's blood samples as there are so many chemicals to check. Your child's test results will be given to you at your next outpatient appointment at the hospital. However, if there is a need to start on new treatment before the appointment, the hospital will contact your family doctor (GP).

You should call the ward or your family doctor (GP) if your child shows any of the symptoms of hypoglycaemia. If your child becomes extremely unwell call 999 or take them to the nearest Accident and Emergency department.

If you have any questions, please telephone Kingfisher Ward on 020 7405 9200 ext 5784

Compiled by Kingfisher Ward in collaboration with the Child and Family Information Group

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