

What is an oral glucose tolerance test?

We do a glucose tolerance test to measure the amount of glucose and insulin in the bloodstream after a strong glucose drink. Samples are taken over a two hour period. We can see from the laboratory analysis of the blood samples if the pancreas, which produces insulin, is working normally or is over-stressed as happens in some forms of obesity and with diabetes.

Other blood samples may be taken for fat levels and other hormones in the blood.

Why do an oral glucose tolerance test?

Diabetes is a condition where levels of glucose (sugar) in the blood are too high. There are several different types of diabetes. The usual type in children is insulin-dependent (Type 1) diabetes. This is usually easy to diagnose. There are other rarer types of diabetes in children and these are less easy to be certain about. Sometimes blood glucose levels vary quite a lot during the day so just measuring occasional levels during the day may not tell us when a child or young person has diabetes. It is also sometimes important that we measure blood levels of insulin.

Preparation for the test

Children and young people having the test should have nothing to eat after midnight on the night before their test, and will not be able to eat during the test

(approximately 2 1/2 hours). They can only drink water if thirsty but no other fluids as these will interfere with the test. They will be able to eat and drink again normally as soon as the test is finished.

Please follow the instructions on the admission letter for time of arrival at the hospital. Children and young people undergoing the test should be free to go home after lunch.

How do we do the oral glucose tolerance test?

A small needle/plastic tube (a cannula) is inserted into a vein into the child or young person's hand or arm and left in place for the duration of the test. Often a local anaesthetic cream is put on the hand/arm an hour before cannula is inserted to make it less painful.

A sample of blood will be taken from the cannula. The cannula is prevented from blocking by flushing/washing through with saline (salty water).

The child/young person will be asked to drink a measured amount of glucose drink within the next 10 minutes.

Further blood samples will be taken from the cannula every half an hour for the next two hours and these will sent to the laboratory to be analysed. During the sampling, blood sugar levels will be measured on SSPAU using a BM stix.

After the test is completed

The child or young person will be offered a hot meal or sandwiches and a drink and then may go home.

The results will be available at your next clinic appointment or as arranged by the doctor.

Glossary

BM Stix: A way of measuring the blood glucose level on the Short Stay Paediatric Assessment Unit.

Fasting: A period of time without food or drink.

Glucose: Another name for sugar.

Insulin: A hormone produced by the pancreas which maintains normal level of glucose in the blood.

Hormones: Chemical messengers or substances in the blood or chemicals that carry messages from one cell to another via the bloodstream

Pancreas: An organ/gland found just below the stomach which produces insulin



**PATIENT
INFORMATION**

**For more information
contact:**

**Short Stay Paediatric
Assessment Unit**

**Telephone: 01803
655492**

**Monday to Friday
8.30am to 9.00pm**

Patient Information Service

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**Information for
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**Oral Glucose
Tolerance Test**

