Patient information factsheet

72 hour (three day) fast to test insulin levels

Your doctor has recommended that you have a test which requires you to fast (not eat) for 72 hours (three days) to test your insulin levels. This factsheet aims to answer some of the initial questions you may have about what's involved. If you have further concerns or would like more information, please speak to your healthcare team.

Why do I need to fast?

The aim of the test is to see if your blood sugar level drops when you don't eat or drink anything. The body should be able to maintain a normal blood sugar level even without food, but this may not happen in all patients. This test is undertaken over three days, to determine whether your body is producing excess insulin in the absence of any food or sugar intake.

Insulin is a hormone produced in the pancreas and allows sugar from food or drink to enter the body's cells to provide energy for them to work. If too much insulin is produced it can result in abnormal low blood sugar levels.

You will be admitted to a ward at the hospital for the duration of this test (72 hours) so you can be closely monitored.

Before your test

- Some medication may need to be temporarily stopped before the test. If you are currently taking any medication please let the endocrine nurse know before the test by phone or email.
- Eat a light breakfast, early on the day of the test.

During the test

- First we will take a blood sample for glucose (sugar).
- You will then be given a sugary drink.
- Two hours after this, another blood sample will be taken.

During the test you should rest and avoid moving around too much as exercise could affect your results.

During the test

- Throughout the test you will not be allowed to eat or drink anything except water.
- A small needle called a cannula will be inserted into a vein in your arm or hand. This
 allows your nurse to take the blood samples that are needed to test your blood sugar
 levels.
- Your blood sugar level will also be measured at four-hourly intervals by a finger-prick test (when a small drop of blood is taken from your finger). You will be tested more frequently if your blood sugar level starts to drop.

www.uhs.nhs.uk

Patient information factsheet

- If your blood sugar level drops very low, a sample of blood will be taken from the cannula and analysed in the laboratory. The sample will be used to measure your blood sugar level as well as the level of insulin in your blood.
- If the lab test shows that your blood sugar level is within a satisfactory range, the test will continue. If at any time your lab test shows that your blood sugar has dropped below 2.2 mmol/l, the test will be stopped and you will be given a sugary drink and food in order to return your blood sugar level to normal.
- Throughout the test, you will be monitored closely by nursing staff. If you have any symptoms such as feeling dizzy, shaky or sweaty, or if you feel unwell please let the nurse know and your blood sugar level will be tested.
- If your blood sugar level does not fall low during the test, we may ask you to do some exercise (such as going up and down stairs or taking a brisk walk) at the end of the test.

Side effects

During the test you may experience symptoms including hunger, dizziness, shakiness, sweating or sleepiness and on rare occasions confusion and seizures (fits) may occur. These symptoms can be caused by low blood sugar level, and will resolve when you are given a sugary drink and/or some food.

After the test

When the test has finished your cannula will be removed and you will be given something to eat and drink. Your doctor will then review you and if your blood sugar levels are stable you will be able to go home. If for any reason your test is stopped during the night you will be discharged the following day.

Results

Results will either be sent to you by letter/a phone call or discussed with you at your next clinic appointment. We will also send a letter to your GP. This can take up to three weeks.

Further information

Please contact the endocrine nurse specialist if you require more information or if there is anything you do not understand.

Contact the endocrine nurse specialist:

- Telephone: **023 8120 4710**, Monday to Friday 8.30am to 4pm (answer phone service outof-hours or if the nurse specialist is unavailable).
- Email: endocrinenurse@uhs.nhs.uk

Useful links

www.nhs.uk/conditions/hypoglycaemia/Pages/Introduction.aspx

If you are a patient at one of our hospitals and need this document translated, or in another format such as easy read, large print, Braille or audio, please telephone **0800 484 0135** or email **patientsupporthub@uhs.nhs.uk**

For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **www.uhs.nhs.uk/additionalsupport**

Version 3. Reviewed March 2023. Due for review March 2026. 732

www.uhs.nhs.uk