Parent and patient information

What is an Insulin Tolerance Test?

Sharing Best Practice in Endocrinology

Educational Material produced by the Sharing Best Practice in Endocrinology group supported by Merck Serono
What Is Growth Hormone?

Growth hormone is a protein, which is important for the growth of your bones, tissues and organs. Growth hormone is carried around your body in the bloodstream. In children and adults, the amount of growth hormone in the blood varies throughout the day and night, during stress and sleep, and is affected by other hormonal changes.

Growth hormone is released in short spurts. Levels are usually higher during the night and very low during the day. This means it is necessary to stimulate the release of growth hormone to accurately assess how much a person is able to produce. The insulin tolerance test (ITT) is one method for doing this.

Before The Test

Please ensure that you tell the nurse and doctor if your child has any other condition, any allergies, or is on any other medication.

• Please bring your child to

  at  
am.

• Please call  if you are unable to attend for this appointment.

• Your child must have been fasting (have had nothing to eat or drink) from 12 midnight unless you have been told otherwise.

• Please bring along a toy, game, pushchair, etc. to ensure your child is comfortable and occupied throughout the test.

• Please bring a favourite snack with you for your child to eat after the test is finished.

• The test should take 2–3 hours.
What Does The Test Involve?

When you arrive the nurse or doctor will explain what the test involves in more detail. You will then need to sign a consent form before the test can begin. You can stay with your child throughout the test.

The doctor or nurse will use a spray or cream to numb an area of your child’s hand or arm. When the area is numb, a small plastic tube (cannula) is inserted into your child’s vein in order to take the blood samples for the test.

The test starts when the cannula is inserted and remains there until the end of the test. After the first blood sample is taken, a small dose of a medicine called insulin is given through the cannula to stimulate your child’s growth hormone release. During the test, your child may feel light headed, dizzy, irritable, hungry, sweaty and may look pale as their blood sugar drops. The nurse will remain with you throughout the test, taking frequent blood samples. When the blood sugar levels drop low, your child will be given a sugary drink and something to eat. This will help them feel better.

Once the test is completed your child must have their snack. After your child has eaten and the nurse has checked that their blood sugar levels have returned to normal, the doctor or nurse will remove the cannula and you and your child can go home.
After The Test

Make sure you have an appointment to come back and see the doctor.

An endocrine nurse and doctor will review the results of the test before your child's next appointment. It is important that your child eats regular snacks throughout the afternoon and evening after the test. If you have any concerns or any further questions please contact the endocrine department on:

Tel.

If you have any further questions regarding insulin tolerance testing please contact your local healthcare professional.

OPEN-I incorporates the paediatric endocrine nurses from The National Children's Hospital, Tallaght, Dublin, Our Lady's Children's Hospital, Crumlin, Dublin, The Children's University Hospital, Temple Street, Dublin, and Cork University Hospital.