

INFORMATION FOR PATIENTS, PARENTS, GUARDIANS AND CARERS

Paediatric diabetes annual review



Every child and young person with diabetes is required to have an annual review once a year. One of your clinic appointments will be classed as your annual review.

The review provides an opportunity to take a look at all aspects of your diabetes, such as what is going well, what may not be going so well and to check for any early signs of other health concerns which may be related to it. If problems are picked up at an early stage, they can be dealt with before they go on to become more serious. This leaflet will explain what to expect, who you will see, what will be checked and why.

Apart from the usual height, weight, blood pressure and checks, the additional things you will have in the annual review are an examination of your feet, a blood test, an injection/cannula sites check for lumps, and a urine test. You will also be asked if you have had retinopathy screening (an eye test).

As per current NICE guidelines, children below the age of 12 do not need to have the feet examination, a urine test or an eye examination.

When you arrive at clinic

On arrival in clinic 11, you will be seen by clinic staff who will measure your height, weight and blood pressure as usual. You will be asked to provide a urine sample.

Clinic 11 staff will do the blood test, which will include the 3-monthly check and other tests such as thyroid function, coeliac, lipid profile (cholesterol) and kidney function.

We can use 'magic' cream or cold spray to help to make the blood test less painful. The 'magic' cream takes 30-45 minutes to work. When you arrive for your annual review clinic appointment, please ask the nurse in clinic 11 whether you would prefer to have 'magic' cream or cold spray for the test.

There will be a play therapist to help you to feel relaxed and calm during the blood sampling.

Remember – these checks are all about keeping you well and preventing the development of any long-term complications.

Height and weight

Height and weight are checked as a part of each appointment and are plotted on growth charts called centile charts. These allow us to make sure you are growing as expected.

Blood glucose levels that are well-controlled will allow children to grow and develop normally. However, blood glucose levels that are too high can prevent a child from growing as well as they should.

If a child does not grow as expected it can sometimes indicate other possible problems, which would then be looked into.

Blood pressure

Blood pressure is checked to make sure it is not too high. It is unusual to see high blood pressure in children and young people, but if this is present it could indicate that the kidneys are not working as well as they should be. However, if coming to clinic makes you worried, this can make your blood pressure higher than usual.

Blood tests

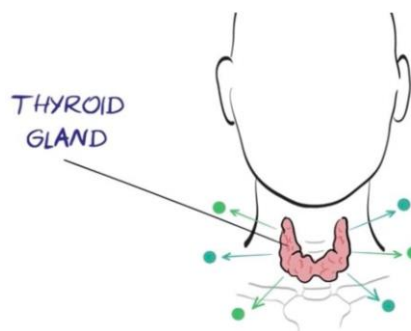
Glycosylated haemoglobin

This blood test is done in the clinic using a single drop of blood and measures the amount of glucose being carried around by the red blood cells. Glucose binds to a particular part of the red blood cells called haemoglobin. As red blood cells have a lifespan of around 2-3 months, this gives an average of the blood glucose control over this time. Ideally, this should be close to the level of someone without diabetes to reduce the risk of complications developing. The target we aim for is less than 48 mmol/mol.

Thyroid function test

The thyroid is a small, butterfly-shaped gland located at the base of your neck, just below the Adam's apple.

It produces hormones (thyroxine and triiodothyronine) that play an important role in your body's metabolism (the process that turns food into energy) and brain development. It also helps in heart and digestive function and muscle control.



We test for thyroid stimulating hormone (TSH) and the thyroid hormones T4 and T3.

Too much or too little thyroxine can affect your weight, mood, energy level and body temperature.

People with diabetes may have a slightly increased risk of having an underactive thyroid, which is an autoimmune disease. It is treated by taking thyroxine tablets.

Coeliac screen

This is an autoimmune condition sometimes associated with diabetes where the body has a reaction to gluten, which is found in wheat, barley and rye. You may have symptoms such as diarrhoea, constipation or tummy pain. Sometimes there are no specific symptoms but you will notice unexplained high or low sugar levels. A gluten free diet is the only treatment for coeliac disease. You may hear this test called a TTG (tissue transglutaminase) test.

Lipid profile (cholesterol check)

Cholesterol is a type of blood fat (lipid). We all need some cholesterol in our blood to stay healthy. However, having too much cholesterol can clog up your arteries and lead to health problems in the future.

There are two types of cholesterol; good cholesterol (HDL) and bad cholesterol (LDL). Bad cholesterol causes fatty deposits to stick to blood vessel walls making them narrow and in turn this affects blood circulation and impacts on heart function. Good cholesterol helps to prevent the vessels blocking.

There is another type of blood fat called triglycerides. Raised triglycerides can add to your overall risk of developing heart disease.

Eating a healthy balanced diet with regular physical exercise helps to reduce cholesterol and also helps to maintain the right balance between good and bad cholesterol.

Kidney function

The kidneys have a few important functions. One is to filter and clean the blood to get rid of any waste by making urine. They also regulate the amount of fluid and various salts in the body which also helps to control blood pressure, and they release several hormones. If blood sugar levels stay high most of time, then this can put a strain on the kidneys and the kidneys will not work as well as they should. This is called nephropathy.

Feet examination

Both your feet will need to be seen, so be prepared to remove socks/tights etc.

Your pulses will be felt to ensure there is good blood flow to the lower part of your body. Your touch and vibration sense will be checked. Healthy feet with no nerve damage should be able to detect the small amount of pressure used to touch various areas of your feet.

A visual check can also pick up on issues such as verrucae/ingrowing toenails/fungal infections etc.

High blood glucose levels over many years can damage the nerves (neuropathy).

Retinopathy screening

Retinal screening is where a photograph is taken to check that the back of the eye is healthy.

High blood glucose levels over time can cause some blocking of small blood vessels at the back of the eye. This is called diabetic retinopathy which, if allowed to progress, can seriously affect eyesight.

However, if this is caught at an early stage, it is reversible and is treatable with improved blood glucose control.

Although this screening is not done in the diabetes clinic, we will ask whether this has been done and check the results (if available). Please check that your GP has made a referral to the retinopathy screening service.

Injection sites

We will check your injection/cannula sites for any lumpy areas. This includes a visual check and sometimes feeling and lightly pressing on the area. This is important as lumpy areas will not absorb insulin effectively causing erratic blood glucose results. Checking of injection sites should be done regularly at home. The best practice is to rotate the insulin injection/cannula sites regularly to avoid lumps.



Urine test (albumin creatine ratio)

Urine is tested to detect the amount of protein if present. Protein should not usually be detected in people with normally functioning kidneys as they should retain this within the body. The presence of protein in urine tells us the kidneys are not doing their job properly.

It is important we receive a urine sample on the day of the annual review clinic; we may have to ask you to wait if this has not been done.

Results of blood and urine tests can take as little as 2 days or as long as 2 weeks to come back to us. We review results regularly and will contact you if there is a problem or something we need to talk to you about.

Additional appointments that make up your annual review

Dietetic annual review

You will be offered a dietetic annual review appointment to discuss healthy eating, carbohydrate counting and other dietary concerns. This may not be at the same time as your annual review clinic appointment.

Psychology annual review

You will be offered a psychology review appointment to discuss your emotional health and wellbeing. This usually takes place during your annual review clinic appointment. Should any difficulties be identified, the specialist practitioner for emotional health and wellbeing can offer additional support or provide information on appropriate services as needed.

Please feel free to ask for more information or clarification on your annual review checks if needed.

Further sources of information

Diabetes UK: <https://www.diabetes.org.uk/>

NHS Choices: www.nhs.uk/conditions

Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

King's Mill Hospital: 01623 672222

Newark Hospital: 01636 685692

Email: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you. External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them.

If you require a full list of references for this leaflet (if relevant) please email sfh-tr.patientinformation@nhs.net or telephone 01623 622515, extension 6927.

To be completed by the Communications office Leaflet code: PIL202505-03-PDAR Created: September 2021 / Revised: May 2025/ Review Date: May 2027
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