Who is the leaflet for? What is its aim?

This leaflet is for young people with diabetes. The aim is to give information about blood testing; why it is important, when we would like you to do it, and what numbers you are aiming for.

Why should I test?

Unless you test your blood glucose, it is very difficult to know whether your insulin doses are working well for you. Doing regular blood glucose tests will help you to control your diabetes better, meaning the risk of long term complications is less, as well as feeling better in the short term and being safe when doing things such as exercise, driving or exams.

How many tests should I do?

Knowing what your blood glucose levels are at different times of the day means you can keep on top of your diabetes, by adjusting your insulin doses and getting a better understanding on how your blood glucose levels react to different aspects of your daily life. Some examples includes during activity, stress/exams and puberty. So the more tests the better (within reason!)

It is also very important to test when you feel you are hypo (Blood glucose below 4mmol/L) and to retest after your hypo treatment.

As a routine, it is helpful to have blood glucose results from first thing in the morning, and then before lunch, before evening meal and at bedtime. On occasions, doing tests two hours after meals, or overnight may also be helpful to give you more information about your blood glucose levels before changing insulin doses.

If you are unwell, then you may need to test much more frequently to avoid going into Diabetic ketoacidosis (DKA). Please refer to the sick day rules management for more information on the DKA.

You should always check your blood glucose level before driving as required by law. Blood glucose levels should be **5mmol/L** or above.
What should my blood glucose be?

Your blood glucose should ideally be between 4 and 7 mmol/l. We understand that it is not always possible to achieve this on every single blood glucose test. But by checking your blood glucose levels, recording it in blood glucose diary, or even looking at trends using Diasend or Carelink (for Medtronic pumps) over different times of the day and over a period of time (e.g., a week). This can help to get your insulin injections or pump doses right for you, getting more blood glucose levels within target, whilst trying to avoid hypos.

Who can help me?

If you are not sure what to do with your insulin once you have looked at the trends in your blood glucose levels using Diasend or Carelink, any member of the diabetes team will be happy to give advice. Please speak to a member of the diabetes team if you are unable to upload your blood glucose meter, Insulin pump or Continuous glucose monitor (CGM) device.

Using other blood glucose monitoring devices:

You may be using other devices to monitor your blood glucose levels, such as flash glucose monitoring or continuous glucose monitoring (CGM). However, these measure your glucose in your body tissues rather than the blood. So although these devices can be really useful for looking at patterns in your blood glucose trace and filling in those gaps in between meals and overnight. It is still very important to carry out blood glucose testing before meals/when you are unwell and when you are hypo, especially when you are deciding to make insulin dose adjustments. We do not recommend that you fully replace blood glucose testing with any of these devices. The DVLA do not accept flash glucose measurements so blood glucose tests before driving are essential.

What about HbA1c

The HbA1c is the fingerstick test that we do in the measuring room when you come to clinic. We do it on average every three months and it gives an idea of your average blood glucose level over the two to three months before clinic.

The target for HbA1c is 48 mmol/mol
Blood Glucose targets

Contacts/Further information
www.medtronic-diabetes.co.uk/customer-support/carelink/carelink-personal-software-support-your-minimed-system - Support for uploading Medtronic pumps
www.support.diasend.com/hc/en-us/categories/201370625-diasend-Uploader - support for uploading meters, supported pumps and CGMS

E-mail: Kidz.diabetes@addenbrookes.nhs.uk
Telephone: Monday to Friday 09:00 to 17:00 01223 274638
Out of hours: 01223245151, ask for ‘child diabetes on rotawatch’

We are now a smoke-free site: smoking will not be allowed anywhere on the hospital site. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Other formats:
If you would like this information in another language, large print or audio, please ask the department where you are being treated, to contact the patient information team: patient.information@addenbrookes.nhs.uk.
Please note: We do not currently hold many leaflets in other languages; written translation requests are funded and agreed by the department who has authored the leaflet.

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