



NHS Tayside Diabetes Managed Clinical Network Patient Information Leaflet

A Guide to Blood Glucose (Sugar) Monitoring

Your blood sugar will be tested at your regular diabetes check up. A blood test called 'HbA1c' provides information about your blood sugar control over a three month period. Your diabetes healthcare team should discuss your result and target with you.

You may be asked to monitor your blood sugar levels over a short period of time, such as:

- when you are first diagnosed with diabetes
- if you have symptoms of a low blood sugar
- if you are prescribed steroid tablets or steroid injections
- if you have Type 2 diabetes and you are planning a pregnancy
- if you are pregnant
- if you have gestational diabetes (diabetes during pregnancy)
- to let you know how your blood sugar levels are affected by a change in medication, what you eat and/or how active you are.

Long term use of blood sugar monitoring is recommended in the following:

- people with Type 1 diabetes
- people treated with insulin
- people with Type 2 diabetes treated with certain tablets who drive.

The benefit of blood sugar testing in people with non insulin treated Type 2 diabetes is unclear. Some research studies show that self monitoring can be associated with an increase in anxiety levels.

Testing advice

Your diabetes healthcare team will discuss and agree with you **when** and **how often** to test your blood sugar levels and whom to report your results. It may not be necessary to check your blood sugar level every day.

Treatment with insulin

If you are treated with insulin test your blood sugar before each insulin injection for two to three days. If the results are within your target then you may be able to reduce the number of tests. For example, test once per day before a meal to check that your blood sugar levels are still within target. If your blood sugar levels are outwith target you may need to adjust your insulin. Guidelines are available to help you assess why your blood sugar levels are outwith target in our leaflet “Insulin Adjustment” available on www.diabetes-healthnet.ac.uk or from your diabetes healthcare team. Contact your diabetes healthcare team for advice if necessary.

Treatment with tablets

If you are treated with tablets for diabetes it may be suitable to test your blood sugar once per day, before a meal, at different times of day. If the trend of your blood sugar level is within your target you can reduce the number of tests. If the trend of your blood sugar level is outwith your targets then increase the number of tests for two to three days and report the results to your diabetes healthcare team for advice.

Testing advice for both treatment with insulin and tablets

- Remember to test more often if you are ill. If your blood sugar levels are outwith your targets then contact your diabetes healthcare team for advice. Further information is available in our leaflets “Sick Day Rules” available on www.diabetes-healthnet.ac.uk or from your diabetes healthcare team.
- Test more often if your treatment has changed.
- **If your blood sugar levels are outwith your targets consistently this can indicate that your diabetes is not well controlled with your current management. Please report to your diabetes healthcare team for advice.**
- Test your blood sugar level before driving and during your journey. Further information is available in our leaflet “Diabetes and Driving” available on www.diabetes-healthnet.ac.uk or from your diabetes healthcare team.
- Always remember to wash your hands before you do a test
- Follow the manufacturer’s instructions
- Complete and return the warranty card issued with your meter
- Always ensure your test strips are ‘in date’
- Use a new strip and lancet for each test and dispose of them safely
- Diaries can be obtained from the meter company, or from the hospital diabetes clinic or your GP surgery, to record your results

Why are blood sugar levels sometimes high?

An occasional high blood sugar level from time to time is impossible to avoid. The reason for high blood sugar levels can include:

- Infection
- Certain foodstuffs for example cakes, biscuits, some sauces
- Stress
- Treatment with steroids
- Insufficient insulin or medication
- Problem with injection technique or injection sites

If the trend in your blood sugar level is above your target, or if you are ill, you can contact your healthcare professional for advice. Further information is available in our leaflets “Sick Day Rules” available on www.diabetes-healthnet.ac.uk or from your diabetes healthcare team. You may require advice about lifestyle or a change in your medication.

Why are blood sugars sometimes low?

The reason for low blood sugar levels can include:

- Missed or delayed meals
- Not enough or no carbohydrate (bread, pasta, rice, potato, cereal type foodstuffs) in meals
- Too much insulin or diabetes medication
- Increased or unexpected exercise
- Alcohol
- Problem with injection technique or injection sites

Low blood sugar levels (below 4mmol/L) are undesirable and unsafe; you need to act promptly if this happens to you. Further information is available in our leaflet “Having a Hypo” available on www.diabetes-healthnet.ac.uk or from your diabetes healthcare team. You may need a change in your insulin or diabetes medication or advice about lifestyle to avoid problems with low blood sugar levels.

Blood glucose meter company helpline telephone numbers:

- Abbott Optium Exceed/ Freestyle Lite tel. 0500 467 466
- Bayer Ascencia Contour tel. 0845 600 6030
- Lifescan One Touch Ultra/ Ultra Smart tel. 0800 121 200
- Roche Accucheck Compact/ Aviva tel. 0800 701 000

Diabetes Specialist Nurses (Mon. – Fri. 9.00 - 5)

Ninewells Hospital, Dundee Tel. 01382 632293

Perth Royal Infirmary, Perth Tel. 01738 4713476

Abbey Health Centre Arbroath Tel. 01241 447811

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