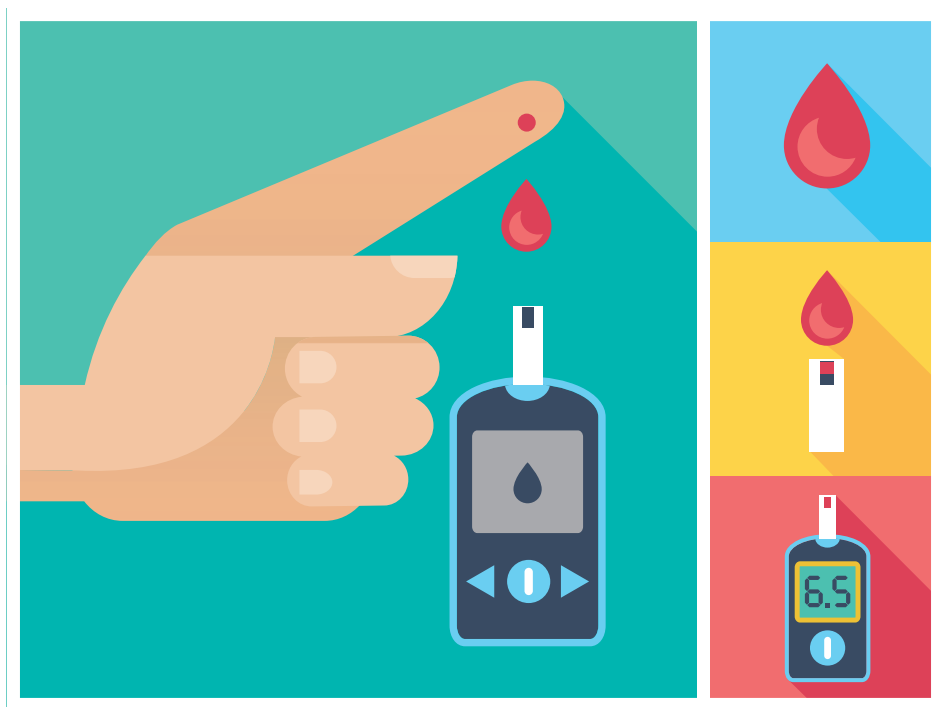


# Guide to Blood Glucose (Sugar) Testing

## Type 2 Diabetes



## The purpose of this guide:

If you have been diagnosed with diabetes, you may be advised to self-test your blood glucose levels. Your doctor, nurse or dietitian will agree blood glucose targets with you. This guide sets out how often you should self-test and what to look for when testing. It also tells you about structured diabetic education programmes which can help you manage your diabetes and where you can find further information on your condition.

## How often should I test my blood glucose levels?

This depends on your treatment. Learning when to self-test your blood glucose is an important part of your diabetes education. Your doctor, nurse, dietitian or pharmacist will advise you about when to test your blood. They will also talk to you about attending a diabetes education programme.

The following guidelines are the recommended practice for blood glucose testing for people with Type 2 diabetes. Some people may not need to self-test.

Diabetes treatment:	Guidelines for testing your blood glucose testing:
People with stable Type 2 diabetes on diet alone.	<ul style="list-style-type: none"><li>Do <b>not</b> need to self-test.</li></ul>
People with Type 2 diabetes taking: <ul style="list-style-type: none"><li><b>Metformin alone, or</b></li><li><b>Metformin with any of the following</b> diabetes medications:<ul style="list-style-type: none"><li>a DPP-IV inhibitor, or</li><li>a GLP-1 analog, or</li><li>a TZD, or</li><li>SGLT2 inhibitor.</li></ul></li></ul>	<ul style="list-style-type: none"><li><b>Test up to three times a week.</b></li></ul>
People with Type 2 diabetes taking a <b>Sulphonylurea or glinides</b> (such as Gliclazide - Diamicron) on its own or taking it with any of the following diabetes medications: <ul style="list-style-type: none"><li>a DPP-IV inhibitor, or</li><li>a GLP-1 analog, or</li><li>a TZD, or</li><li>a SGLT2 inhibitor</li><li>Metformin.</li></ul>	<ul style="list-style-type: none"><li><b>Test 1 - 2 times a day.</b></li><li><b>Test more often if you are:</b><ul style="list-style-type: none"><li>driving (see driving guidelines),</li><li>doing extra physical activities such as gardening or sports,</li><li>experiencing hypoglycaemia 'hypo',</li><li>feeling ill or stressed,</li><li>consuming alcohol.</li></ul></li></ul>
People with Type 2 diabetes on insulin alone or insulin with other diabetes medications.	<ul style="list-style-type: none"><li><b>Test up to four times a day.</b></li><li><b>Test more often if you are:</b><ul style="list-style-type: none"><li>driving (see driving guidelines),</li><li>doing physical activities such as gardening, sports and so on,</li><li>experiencing hypoglycaemia 'hypo',</li><li>during illness,</li><li>feeling stressed,</li><li>consuming alcohol.</li></ul></li></ul>
People with Type 2 diabetes planning a pregnancy or who are pregnant.	<ul style="list-style-type: none"><li><b>Test up to seven times a day.</b></li><li><b>Test more often if your doctor, nurse or dietitian advises you to.</b></li></ul>

## ‘Testing for a reason’

Remember that when you are self-testing your blood glucose, you may need to do something as a result. There is little point, testing your blood if you do not fully understand what the reading is telling you. If you are unsure of what the test result means, please ask your healthcare professional (doctor, nurse, dietitian or pharmacist) for help.

### The results of blood glucose testing can help you to:

- understand how food and exercise affect your blood glucose levels;
- see how well your diabetes treatments are working for you;
- identify if your blood glucose level is too low (below 4mmol/L – hypoglycaemia);
- monitor (check) your blood glucose levels when you are ill or stressed;
- make sure that your blood glucose is at a safe level to drive or do other activities such as gardening or sports;
- identify changes you need to make to your diet, activity levels or drug treatments.

## I don’t know if I am at risk of hypoglycaemia or ‘hypo’. What should I do?

It is **very important** that you ask your pharmacist, doctor, nurse or dietitian if your diabetes medications put you at risk of hypoglycaemia or “hypo”. This is where your blood glucose level is too low (below 4 mmol/L).

## What are the signs of low blood glucose levels?

You may have some of the following symptoms if your blood glucose falls below 4 mmol/L.

Feel weak or shaky  
Headache  
Cold sweats  
Pounding heartbeat

Be nervous or cranky  
Hunger  
Unclear thinking  
Upset stomach

Your doctor, nurse, dietitian or pharmacist will advise you on how to manage hypoglycaemia.

## Does driving affect how often I should test my blood?

No, **unless** you are on medication that puts you at risk of hypoglycaemia. If you drive and you have Type 2 diabetes and you are taking insulin, sulphonylureas or glinides, please test your blood glucose as advised by the Road Safety Authority of Ireland (RSA)\* and as follows:

- Test your blood glucose before driving and stop to test **every two hours** while driving.
- If your blood glucose is less than 5mmol/L or you are worried that you may experience a hypoglycaemic event during the drive, take a snack before driving.
- If your blood glucose is less than 4mmol/L or you feel hypoglycaemic, treat and do not drive until your blood glucose reading is corrected (above 5mmol/L) for at least 45 minutes.
- If you have a hypoglycaemia event while you are driving, stop the vehicle as soon as is safely possible, switch off the engine, remove the keys from the ignition and move from the driver’s seat. Treat the ‘hypo’.
- Do not start driving until 45 minutes after the blood glucose has returned to normal.
- Always carry a blood testing meter and testing strips in your vehicle.
- Always keep an emergency supply of fast acting carbohydrate (for example, Lucozade or Dextro-Energy Tablets, Lucozade original, fruit juice, Coke, 7-Up (non-diet) in your vehicle.
- Take regular meals, snacks and rest periods on long journeys.
- Always avoid alcohol if driving.
- Always carry personal identification to show that you have diabetes.

\* Source: RSA (Jan 2015)

## Structured Diabetes Education - what is it?

Structured Diabetes Education is a group programme that provides you with the knowledge, skills and ability to manage your diabetes. It will help you to live healthily, maintain and improve the quality of your life and take an active role in managing your diabetes. If you have Type 2 diabetes, it is recommended that you should attend a structured diabetes education programme. Please discuss this with your healthcare professional (doctor, nurse, dietitian or pharmacist) as they will be aware of courses available to you.

It will also help you understand your blood glucose readings and any action you may need to take. Ask your doctor, nurse or dietitian for information on structured education available to you.

## Where can I get further information?

You can find more information on your condition on:

[www.hse.ie/diabetes](http://www.hse.ie/diabetes);

[www.diabetes.ie](http://www.diabetes.ie); and

[www.rsa.ie/medicalfitnessdrive](http://www.rsa.ie/medicalfitnessdrive)

Did you know that you might be able to get assistance for your diabetes under the Long Term Illness Scheme? For more information please visit: [www.hse.ie](http://www.hse.ie) or contact your HSE Local Health Office.

For more information on the  
National Clinical Programme for Diabetes, go to  
[www.hse.ie/diabetes](http://www.hse.ie/diabetes)  
[www.hse.ie/yourmedicines](http://www.hse.ie/yourmedicines)

**For further copies of this leaflet go to [www.healthpromotion.ie](http://www.healthpromotion.ie)**