

# Blood Glucose Monitoring Guidance - Type 2 Diabetes

## Information on Self-Monitoring of Blood Glucose (SMBG)

- The level of SMBG will vary according to the treatment regime and target level of control set for the patient
- At treatment initiation, or when treatment is altered, the frequency may need to be increased
- Patients should be taught how to INTERPRET and ACTION results
- Patient education is vital - SMBG is only as good as the way it is used

## Frequency of Self-Monitoring

Type 2 diabetes treatment	Suggested SMBG frequency	Boxes to prescribe each month *Check notes on additional SMBG
<ul style="list-style-type: none"> <li>• Diet and exercise alone</li> <li>• Metformin</li> <li>• Pioglitazone</li> <li>• DPP-4 inhibitor</li> <li>• GLP-1 mimetic</li> <li>• SGLT2 inhibitor</li> </ul>	Not routinely recommended (unless patient is also using a sulfonylurea or insulin). HbA1c testing should be adequate once or twice per year (depending on level & target).	NONE
<ul style="list-style-type: none"> <li>• Sulfonylureas (e.g. gliclazide)</li> <li>• Rapid acting insulin secretagogue ('glinides') (e.g. nateglinide)</li> </ul>	Initially: At least twice daily  Maintenance: Three times per week (non-drivers) Twice daily (drivers)	<ul style="list-style-type: none"> <li>• One box (50 strips) in first month, then</li> <li>• One box (50 strips) every 4 months (maintenance) non drivers or one box monthly (50 strips) drivers</li> </ul>
<ul style="list-style-type: none"> <li>• Insulin <i>Once daily</i></li> </ul>	1 to 2 times per day	One box (50 strips)
<ul style="list-style-type: none"> <li>• Insulin <i>Twice daily</i></li> </ul>	2 to 3 times per day	Two boxes (100 strips)
<ul style="list-style-type: none"> <li>• Insulin <i>Basal bolus</i></li> </ul>	4 times per day	Three boxes (150 strips)

NICE also suggests self-monitoring of plasma glucose can be offered to a person newly diagnosed with type 2 diabetes but only as an integral part of his or her self-management education. Please ensure it is reviewed and withdrawn if the patient doesn't meet the above criteria.

## Circumstances in which additional Self-Monitoring is required

- **Driving (see below)**
- Lifestyle changes
- Concurrent illness
- Periods of fasting
- Patients co-prescribed glucocorticoids
- Impaired awareness of hypoglycaemia
- Frequent hypoglycaemia
- Changes in treatment
- Pregnancy/pre-conception
- Patients with persistent hyperglycaemia

## Driving and Diabetes

DVLA information on diabetes

<https://www.gov.uk/diabetes-driving>

Diabetes UK information on driving

[https://www.diabetes.org.uk/Guide-to-diabetes/Living\\_with\\_diabetes/Driving/](https://www.diabetes.org.uk/Guide-to-diabetes/Living_with_diabetes/Driving/)

Patients with a car or motorbike license who are prescribed insulin must notify the DVLA

Patients on insulin should check blood glucose 1hr to 30mins before driving & every 2hrs whilst driving

Patients with a car or motorbike license on sulfonylureas/glinides may need to notify & test - see guidance above

There are additional requirements for patients with a bus, coach or lorry license - see guidance above

First choice of blood glucose monitoring equipment in primary care

Meter	Accu-chek Performa Nano	Contour TS	Glucomen Areo	GluNEO	GlucorX Nexus and GlucorX Mini	Accu-chek Mobile Casette
<b>Company</b>	Roche	Ascensia Diabetes Care	Menarini	Neon Diagnostics	GlucorX	Roche
<b>Features</b>	Good all round device	Good all round device	Transfer of data to smart phone or tablet by bringing them together	Good all round device	Large and small versions	All-in-one system
<b>Test Strips</b>	Accu-chek peforma	ContourTS	Glucomen Areo	GluNEO	GlucorX Nexus	Mobile cassette
<b>Expiry</b>	1 pack of 50 strips with 18 month expiry on opening	1 pack of 50 with no change in expiry on opening	1 pack of 50 with 12 months expiry on opening	2 packs of 25 strips with 6 months expiry on opening	2 packs of 25 strips with 6 months expiry on opening	50 tests with 90 days expiry after inserting
<b>Lancets</b>	Acc-chek FastClix contains 6 lancets in a drum	Microlet lancets	GlucoJect lancets PLUS 33G	Greenlan lancets	GlucorX lancets	Acc-chek FastClix
<b>Patient Support</b>	0800701000 <a href="https://www.accu-chek.co.uk/">https://www.accu-chek.co.uk/</a>	0845 600 6030 <a href="http://www.diabetes.ascensia.com">www.diabetes.ascensia.com</a>	0800243667 <a href="http://www.glucomen.co.uk">http://www.glucomen.co.uk</a>	08000093378 <a href="http://neondiagnostics.co.uk/gluneo.html">http://neondiagnostics.co.uk/gluneo.html</a>	01483 755133 <a href="http://www.glucoRx.co.uk">http://www.glucoRx.co.uk</a>	0800 701000 <a href="https://www.accu-chek.co.uk/">https://www.accu-chek.co.uk/</a>
<b>Supplies of meters to professional</b>	0800 407221	07717 92201 <a href="mailto:Nicholas.cull@ascensia.com">Nicholas.cull@ascensia.com</a>	07710062413 <a href="mailto:jmills@menarinidiag.com">jmills@menarinidiag.com</a>	07860265642 <a href="mailto:alan@neondiagnostics.co.uk">alan@neondiagnostics.co.uk</a>	07551 57424 <a href="mailto:amanda@glucorx.co.uk">amanda@glucorx.co.uk</a>	0800 407221
<b>Photo</b>						

If the meters above are not appropriate for a patient an alternative meter with test strips that are sub £10/50 strips could be used.

References and further guidance

NICE Clinical Guideline NG28

<http://www.nice.org.uk/guidance/NG28>

'Blood Glucose Monitoring – Type 2 Diabetes' NHS Bristol, North Somerset and South Gloucestershire CCGs 1.1 (Sept 2017)  
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