

# Did you know

blood glucose monitoring in individuals with type 2 diabetes **NOT on insulin** will vary depending on an individual's unique situation? Purposeful blood glucose monitoring is the recommended way to improve diabetes control and patient safety. However, monitoring without intention to take action on results **may not** improve diabetes control or safety.

Your patient (or a family member/caregiver) must have the knowledge and skills to use a home blood glucose monitor and to record the results in an organized fashion. Also, the patient and/or members of the healthcare team must be willing to review and act upon the SMBG results in addition to the A1C results.

Please encourage glucose testing only when the values will be used by the patient, caregiver and/or healthcare provider to guide changes in diabetes management such as in the following circumstances:

- At diagnosis— to learn how meal and activity choices affect blood glucose
- Pregnant or planning pregnancy
- Experiencing symptoms consistent with low blood sugar on oral medication that may cause hypoglycemia (see list below)
- During illness, travel or other circumstance that may result in unstable blood glucose values
- To guide changes in pharmacotherapy, diet or physical activity
- Occupations that requires strict avoidance of hypoglycemia
- Starting a new medication that is known to cause hyperglycemia (e.g. steroids)

It is, however, essential that all patients are regularly screened with an A1C test, either 2, 3 or 4 times per year, based on their clinical status. Although individual target A1C's will vary, in appropriate patients maintaining an A1C at 7% or less will significantly lower their risk of developing diabetes related complications.

## List of medications and risk of hypoglycemia

### Group 1: Agents with a low risk of hypoglycemia

- Metformin (Glucophage, generics)
- Acarbose (Prandase, generics)
- Sitagliptin (Januvia)
- Saxagliptin (Onglyza)
- Linagliptin (Trajenta)
- Exenatide (Byetta)
- Liraglutide (Victoza)

### Group 2: Agents with a higher risk of hypoglycemia

- Glyburide (Diabeta, generics)
- Gliclazide (Diamicon/ Diamicon MR, generics)
- Glimepiride (Amaryl, generics)
- Nateglinide (Starlix)
- Repaglinide (Gluconorm)
- Chlorpropamide, tolbutamide

**Endorsed by the New Brunswick Diabetes Task Group, September 21, 2012**

*This information is intended for general education purposes only and should not be relied upon as a substitute for professional judgement of individual patient needs.*



## For more information, see the following resources:

Canadian Diabetes Association 2008 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada  
<http://www.diabetes.ca/files/cpg2008/cpg-2008.pdf>

Optimal Therapy Recommendations for the Prescribing and Use of Blood Glucose Test Strips  
<http://cadth.ca/en/products/cadth-overviews/vol-1-issue-2/vol-1-issue-2-09>

GROUP 1 – Agents with a low risk of hypoglycemia (Diabetes Care Program of Nova Scotia)  
<http://diabetescare.nshealth.ca>

Self-Monitoring of Blood Glucose (SMBG) Recommendation Tool for Healthcare Providers  
[http://www.diabetes.ca/documents/for-professionals/SMBG\\_HCP\\_Tool\\_9.pdf](http://www.diabetes.ca/documents/for-professionals/SMBG_HCP_Tool_9.pdf)

Self-Monitoring of Blood Glucose in People with Type 2 Diabetes: Canadian Diabetes Association Briefing Document for Healthcare Providers  
[http://www.diabetes.ca/documents/for-professionals/CJD--Sept\\_2011--SMBG.pdf](http://www.diabetes.ca/documents/for-professionals/CJD--Sept_2011--SMBG.pdf)

Managing your blood glucose  
[http://www.diabetes.ca/documents/about-diabetes/Blood\\_Glucose\\_Management\\_6.pdf](http://www.diabetes.ca/documents/about-diabetes/Blood_Glucose_Management_6.pdf)

Highs and lows: blood glucose levels  
[http://www.diabetes.ca/documents/about-diabetes/Lows\\_and\\_Highs\\_7.pdf](http://www.diabetes.ca/documents/about-diabetes/Lows_and_Highs_7.pdf)