

# Know Your Sugar Level

Keeping your blood sugar close to normal decreases your chances of having problems with your eyes, kidneys, blood vessels and heart and can help you feel better.

There are two different tests that can be used to measure your blood sugar:

## 1. Home Blood Sugar Monitoring

- A test that you can do yourself.
- For most people with type 2 diabetes who are using insulin or taking medications by mouth, testing your blood sugar at least once a day is enough.
- Sometimes you may need to check your blood sugar more than once a day, either before other meals, 2 hours after a meal or before bedtime.
- This test is easy to do using only a small drop of blood and a glucose monitor.
- Someone will show you how to work this monitor so that you feel comfortable and how to interpret and act on your test results. If it is not clear or doesn't seem to be working ask for help.
- When putting the drop of blood on the test strip, use the last three fingers on each hand and prick your finger on the sides (not the tip). Squeeze the blood from the bottom of the finger to the top and use a different finger each day. Apply pressure to the spot where you pricked your finger for a minute after you are done.
- By checking your blood sugar at home, it will help you see how different things like food, exercise, and medicine can affect your blood sugar level and will help you to manage your diabetes day by day.

<b>Test your blood at the following times</b>	
Before breakfast	2 hours after breakfast
Before lunch	2 hours after lunch
Before dinner	2 hours after dinner
Before bed	
Other	

<b>Time your measure</b>	<b>Blood sugar reading you are aiming for (mmol/L)</b>
Before meals	Between 4–7
2 hours after a meal	Between 5–10

## 2. A1C TEST

- This blood sugar test is ordered by your doctor and is done in a lab.
- This is the best test to tell us how well your diet, exercise or medications are working to improve or maintain your blood sugar.
- It tells us what your average blood sugar level has been over the last 3 months and is usually done every 3 to 6 months, depending on whether there have been changes to your therapy or how well your blood sugar has been controlled.
- The higher the sugar level is in your blood, the higher your A1C will be
- Having a high A1C test for a long time can increase your chances for serious health problems.
- When you decrease your A1C by even small amounts, you improve your chances of staying healthy.

Average Blood Sugar	A1C%	Potential for Health Problems
7.5	≤ 6	Very low
9.4	7	Low
11.4	8	Good
13.3	9	Medium
15.2	10	High

← **Target**

### Keep levels lower by:

- Eating a healthy diet. (Canada's Food Guide: [www.healthcanada.gc.ca/foodguide](http://www.healthcanada.gc.ca/foodguide))
- Losing a modest amount of weight.
- Getting 30 minutes of physical activity 5 days a week. ([www.paguide.com](http://www.paguide.com))

### Useful websites

Diabetes Prevention Campaign: Eat Well. Be Active. Have Fun: <http://www.phac-aspc.gc.ca/ccdpc-cpcmc/diabetesdiabete/english/campaign/index.html>

Canadian Diabetes Association: <http://www.diabetes.ca>

National Diabetes Education Program (US): [http://ndep.nih.gov/diabetes/pubs/GP\\_Toolkit.pdf](http://ndep.nih.gov/diabetes/pubs/GP_Toolkit.pdf)

**Note:** References for this tool can be accessed at [www.effectivepractice.org](http://www.effectivepractice.org) (click on Projects)

**Christine:** please cite the seven *numbered* References in the 2-pager. #5 (Gerstein is cited on page 2)

See query in red in #7.

**Also,** I have inserted a Note on page 2 re the References. I believe this is how we are handling them on all documents. The www address is fiction at the moment.

### References

1. IDIS Evidence Document....
2. Holman RR, Thorne KI, Farmer AJ et al. *Addition of biphasic, prandial or basal insulin to oral therapy in type 2 diabetes*. NEJM 2007; 357(17):1716–1730
3. Malone JK, Kerr LF, Campaigne BN et al. *Combined therapy with insulin lispro mix 75/25 plus metformin or insulin glargine plus metformin: a 16 week, randomized, open-label, cross-over study in patients with type 2 diabetes beginning insulin therapy*. Clin Ther 2004; 26 (12): 2034–44
4. Raskin P, Allen E, Hollander P et al. *Initiation insulin therapy in type 2 diabetes: a comparison of biphasic and basal insulin analogs*. Diabetes Care 2005; 28 (2): 260–5
5. Janka HU, Plewe G, Riddle MC et al. *Comparison of basal insulin added to oral agents vs. twice-daily premixed insulin as initial insulin therapy for type 2 diabetes*. Diabetes Care, Feb 2005, 28(2): 254–9
6. Jurcic J. *Insulin use in elderly patients with type 2 diabetes*. Tipps Clinical Update Newsletter, Nov 2004 (adapted with permission, 2008)
7. Papoushek C and Evans M. *Insulin starts in type 2 diabetes*. **Name of publication????** 2001 (adapted with permission, 2008)
8. Gerstein HC, Yale JF, Harris et al. *A randomized trial of adding insulin glargine vs. avoidance of insulin in people with type 2 diabetes on either no oral glucose-lowering agents or submaximal doses of metformin and/or sulphonylureas*. The Canadian Insight—Implementing New Strategies with Insulin Glargine for Hyperglycaemia Treatment. Diabetic Medicine 2006; 23: 736–42