High Blood Glucose and Type 2 Diabetes

Your diabetes is well controlled when your blood glucose levels are in the normal range between 3.5 – 8mmol/L.

High blood glucose levels are readings over 8mmol/L before meals, over 10mmol/L after meals or an HbA1c over 7%. When your blood glucose levels are high:

- You may not experience symptoms until blood glucose levels are mostly above 15mmol/L. However, even levels above 8mmol/L can cause damage.
- Occasional high blood glucose levels may occur and this is not usually a problem. Your risk of developing diabetes complications depends on your average blood glucose level, as shown by your HbA1c level.

Blood glucose levels above 15mmol/L (known as hyperglycaemia) may cause the following symptoms:
- extreme thirst
- tiredness
- passing large amounts of urine
- blurred vision

If high blood glucose levels continue, you may also have weight loss and ongoing infections, such as thrush. Sometimes people do not have symptoms even when the blood glucose level is higher than normal.
What causes high blood glucose levels?

Blood glucose levels may rise during illness, infection, stress, and cortisone treatment. Inactivity, weight gain or eating large amounts of food containing carbohydrates may also cause levels to rise. During stress and illness, increased levels of some hormones are produced, which in turn raise the level of glucose in your blood. Extra insulin can manage this rise, but with diabetes the pancreas is unable to produce this extra insulin on demand.

For some people, the pancreas produces less insulin over time. This means that blood glucose levels may no longer be controlled with diet and exercise alone. The natural progression in most people with type 2 diabetes is for tablets to be needed after a few years. Many people will also eventually need insulin.

If blood glucose levels remain above 8mmol/L for many years, damage may occur to your body’s blood vessels and organs. Your heart, nerves, eyes, kidneys and feet may be particularly affected.

Tips for lowering high blood glucose levels

• Check your blood glucose levels often – up to four times per day. Check before and 2 hours after meals to identify problem times. Record them in your meter or diary to discuss with your health professional.

• Be more physically active. Exercise makes your insulin work more effectively and helps with weight loss. Even a small amount of weight loss will improve your blood glucose levels.

• Check your eating habits to see if there is room for improvement. Keep a food record over 2 to 3 days to help you identify changes that would improve your blood glucose.

• If stress is a problem, try to reduce it. Strategies include taking a walk, talking to a friend or counsellor, or trying some “time-out” for meditation or relaxation. Try to identify the cause of your stress and ways you can change what is happening around you. Changing the way you think and feel about it can also help.

• Speak to your doctor about changing your dose and/or medication. You need to take all of your prescribed medication for it to be effective. Don’t change your dose or stop taking tablets without discussing this with your doctor.
If your blood glucose levels are very high (above 15) or you are unwell

- Check your blood glucose levels more frequently – at least 4 times per day. Record them in your meter or diary to discuss with your health professional.
- Drink plenty of sugar-free fluids, such as water, mineral water, diet soft drinks. Dehydration can develop quickly, especially if you have diarrhoea or vomiting.
- If you take diabetes medication, continue your usual dose, even if you are not eating. Your doctor may need to increase your dose or you may need a change of medication or insulin.
- If you are not currently taking medication, you will most likely need to start tablets or possibly insulin, at least until you are well again.
- Continue eating if possible. Light meals such as toast, dry biscuits or fruit may be preferred. If you cannot eat and your blood glucose is under 15mmol/L, sip sweetened fluids instead.
- Rest until you are feeling well.

Contact your doctor if

- Your blood glucose levels remain higher than 10mmol/L for a week, or more than 15mmol/L for 24 hours
- You become unwell or drowsy
- You are vomiting or have diarrhoea for more than 24 hours
- You are unable to keep fluids down for more than 12 hours