

Ketone & illness guidelines

Follow the *OzDAFNE ketone and illness guidelines*:

- At the first sign of feeling unwell, even if your GLs are in target.
- When your blood ketones are 0.6 mmol/L or more, even if you feel well.
- When your GL is 15.0 mmol/L or more for 6 hours or more, even if you feel well.

The *OzDAFNE ketone and illness guidelines* must be used whether it is day or night.

The *OzDAFNE ketone and illness guidelines* are based on ketone checking. Use blood ketone checking if you can, as this is the best way to check ketones.

If you are not able to check your ketones, you must get medical help so that ketones can be checked for you and treatment given as needed.

The *OzDAFNE ketone and illness guidelines* are divided into 2 flowcharts:

1. When blood ketones are less than 0.6 mmol/L (see page 2), and
2. When blood ketones are 0.6 mmol/L or more (see page 3).

Supplemental doses are extra doses of quick-acting insulin that you take when your blood ketones are 0.6 mmol/L or more. Supplemental doses are a percentage of your total daily dose of insulin, given as quick-acting insulin. Whether you take a 10 % or 20 % supplemental dose will depend on your level of blood ketones.

Your **Total Daily Dose**, or **TDD** for short, is the total of all the insulin (both quick-acting insulin and long-acting insulin) that you had on your last usual day. This includes any correction doses of quick-acting insulin.

Guidelines for blood ketones less than 0.6 mmol/L

Always keep taking your long-acting insulin.

Check GLs and ketones **at the recommended OzDAFNE checking times.**

Sip half a cup or more of water or sugar-free fluids every hour.

Take your usual quick-acting insulin ratio for CPs.

Take your usual long-acting insulin.
If you are unwell for more than a day, you may need to increase your long-acting insulin dose by 1 to 2 units.

- To begin with, take your usual quick-acting insulin corrections, but no more than every 3 hours.
 - If after 2 quick-acting insulin corrections your GL is still above target, you may need larger quick-acting insulin corrections than usual.
 - If you're not eating, you still need to correct above target GLs at mealtimes and bedtime.
- Do not correct overnight if your GL is less than 15.0 mmol/L.
- You can correct overnight if your GL is 15.0 mmol/L or more.
 - Check your GL 2 hours after the quick-acting insulin correction to avoid a hypo.
 - If you are using a CGM, set the low alarm at a GL above hypo.

If ketones increase to 0.6 mmol/L or more, follow the OzDAFNE guidelines for blood ketones of 0.6 mmol/L or more.

Call your doctor or diabetes educator if, after 2 quick-acting insulin corrections:

- Your GL is still 15.0 mmol/L or more, OR,
- Your ketones are not decreasing.

Keep checking the emergency box on [page 4](#) to make sure that you are safe to keep taking care of yourself. You may need to go to hospital.

Guidelines for blood ketones 0.6 mmol/L or more

Always keep taking your long-acting insulin.

Check GLs and ketones **every 2 hours.**

Sip half a cup or more of water or sugar-free fluids every hour.

Take your usual quick-acting insulin ratio for CPs.

Add up TDD from your last usual day
(total long-acting insulin + total quick-acting insulin including corrections).

Work out 10 % and 20 % of TDD for supplemental doses of **quick-acting insulin.**

**Blood ketones
0.6 to 1.4 mmol/L**

Take 10 % supplemental dose every 2 hours:

- If GL less than 10.0 mmol/L, have 1 to 2 extra CPs with supplemental dose to avoid a hypo.

**Blood ketones
1.5 mmol/L or more**

Take 20 % supplemental dose every 2 hours:

- If GL less than 15.0 mmol/L, have 1 to 2 extra CPs with supplemental dose to avoid a hypo.
- **If ketones are 3.0 mmol/L or more, go to hospital after taking the supplemental dose. High risk of DKA.**

Keep checking the emergency box on [page 4](#) to make sure that you are safe to keep taking care of yourself. You may need to go to hospital.

Emergency box

Go to hospital, if:

You have symptoms of DKA:

- Fast or unusual breathing.
- Abdominal pain.
- Vomiting.
- Feeling drowsy or confused.

You have been following the *OzDAFNE ketone and illness guidelines* and any of the following applies:

- You are vomiting and cannot keep fluids down.
- You cannot take enough CPs to keep GLs in target.
- You cannot keep your GL above 4.0 mmol/L after 2 hypo treatments.
- You have ketones of 3.0 mmol/L or more, even if you feel well.
- After 2 supplemental doses of quick-acting insulin either:
 - Your ketones are not decreasing.
 - Your ketones are still 1.5 mmol/L or more.
- The cause of your illness or infection has not been treated.
- You are too unwell to follow these guidelines.
- You or the people caring for you are not sure what to do or are exhausted.
- You are pregnant and have ketones of 0.6 mmol/L or more.