

sick days & type 1 diabetes

Everyday illnesses or infection will nearly always cause a rise in blood glucose levels when you have type 1 diabetes. Therefore, at the earliest sign of any form of illness such as a cold or virus, it is important to follow your personalised sick day management plan. Be prepared before you get sick! It is essential to discuss and prepare a sick day management plan with your diabetes team.

What do I do when unwell?

There are five important steps for you to take:

1. Always take your insulin

When unwell, you must continue to take your insulin.

Contact your diabetes specialist, credentialled diabetes educator or your hospital emergency department for advice before you make any changes to your insulin dose.

Only in rare cases is the insulin dose reduced during illness. In most cases, even during gastrointestinal illness, the insulin dose needs to be increased.

2. Test your blood glucose levels more frequently

If your blood glucose level is more than 15mmol/L and you have ketones, you need extra insulin and hourly blood glucose testing.

When blood glucose levels are 15mmol/L and under, it is recommended to continue testing blood glucose levels 2 hourly until levels are back to normal.

3. Test for ketones

Test for ketones regularly, using either ketone urine test strips (available from your pharmacy or through the National Diabetes Services Scheme) or a meter that checks blood ketones. Ask your diabetes educator for more information about this.

4. Rest and let someone know you are unwell

If possible have a friend or relative either stay with you or check on you frequently.

5. Keep drinking and (if possible) eating

Drink and eat fluids and food containing carbohydrate if your blood glucose levels are 15mmol/L or under. Drink and eat non-carbohydrate containing fluids and food if your blood glucose levels are above 15mmol/L.

See page 3 for Guidelines for Carbohydrate/Fluid Replacements.

When unwell or unable to eat, do not stop taking your insulin! Test your blood glucose levels often, check for ketones, keep drinking and, if possible, eating – and rest.

Be aware that there may be times when you will need to contact your doctor or diabetes educator.



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When do I need to call my doctor?

There are certain times during illness when you need to contact your diabetes health professional for management and insulin dose adjustment advice.

Contact your doctor or diabetes educator if:

- Urine ketones are moderate/large and blood glucose level is over 15mmol/L.
- Blood ketones are more than 0.6mmol/L (moderate to high when using urine testing strips) and blood glucose level is over 15mmol/L.

When to contact your doctor IMMEDIATELY!

- > If you can't keep food or fluids down and have persistent vomiting, diarrhoea and/or abdominal pain
 - > If you have deep rapid breathing or breathlessness
 - > If you are extremely drowsy
 - > If you have a 'fruity' odour to your breath
- (See ketoacidosis below).

What are ketones?

When there's not enough insulin in the body, glucose can't enter cells to provide energy. The body then begins to break down fat as a source of energy. This process causes ketones to be produced. Ketones can be used as an alternative form of energy but they also need insulin to enter the cells. If there is a lack of insulin, ketones build up in the blood and are eventually passed through the kidneys and into the urine. While large quantities of ketones can be serious, small amounts of ketones are not harmful. Ketones can also be present in people who do not have diabetes, for example at times when they are unwell or losing weight.

What is ketoacidosis?

Ketoacidosis is a life-threatening condition that can occur when you are ill or have a very high blood glucose level resulting from a lack of insulin. The presence of large amounts of ketones in the blood or urine indicates ketoacidosis.

Signs of ketoacidosis can include:

- Nausea, vomiting and/or abdominal pain
- Deep rapid breathing or breathlessness
- Extreme drowsiness
- A 'fruity' odour to the breath.

Seek urgent medical attention if you have any of these symptoms!

Guidelines for carbohydrate and fluid replacements

To avoid dehydration and hypoglycaemia when you are ill, it is very important to keep up your fluid and carbohydrate intake.

If you can eat normally

- If you are able to eat normally, do so and sip extra fluids each hour, about $\frac{1}{2}$ – $\frac{3}{4}$ cup, a little less for children. To prevent dehydration, drink unsweetened fluids such as water, diet soft drinks, diet cordial, weak tea or broth.

If you can't eat normally

- Have some easy to manage carbohydrate drinks, snacks or small meals. If you are unable to eat at all and your blood glucose levels are under 15mmol/L, drink carbohydrate-containing fluids. See the list below for ideas. To prevent dehydration, drink unsweetened fluids such as water, diet soft drinks, diet cordial, weak tea or broth, about $\frac{1}{2}$ – $\frac{3}{4}$ cup each hour.

Remember, if you can't keep food or fluids down and have persistent vomiting or diarrhoea, seek urgent and immediate medical advice.

Here are some suitable carbohydrate fluids and snacks that you can have to provide 15 grams of carbohydrate if your blood glucose levels are 15mmol/L or under. Drink or eat one of these each hour when you are unwell:

Drinks providing approximately 15 grams of carbohydrate	
Milk	1 cup (250ml)
Milk + flavouring	$\frac{3}{4}$ cup milk + 1 tablespoon of Milo®, Actavite® or Quik®
Fruit juice*	$\frac{3}{4}$ cup
Tea	Add 1 tablespoon of sugar or honey
Hot lemon juice	Add 1 tablespoon of sugar or honey
Herbal tea	Add 1 tablespoon of sugar or honey
Gastrolyte	4 sachets
Ordinary soft drink* or cordial* (not diet)	$\frac{3}{4}$ cup
Sports drink (eg: Gatorade®)	1 cup

continued over...

* Care should be taken with sweetened, or hypertonic, fluids if diarrhoea occurs. For best absorption, sweetened fluids may need to be diluted by 5 measures of water to 1 measure of ordinary soft drink or cordial, for example, 5 cups of water to 1 cup of cordial or soft drink.

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Snacks providing approximately 15 grams of carbohydrate	
Crackers or crispbread	3 Sao [®] /Ryvita [®] etc
Dry toast	1 slice
Plain sweet biscuits	3 Milk Arrowroot/Morning Coffee etc
Mashed potato	½ cup
Rice	⅓ cup
Breakfast cereals	½ cup Special K [®] , 2 Weetbix [®]
Porridge (made with water)	⅓ cup
Ordinary jelly or custard	½ cup
Ice cream	3 scoops
Ice blocks	1½ sticks

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SA	www.diabetessa.com.au	TAS	www.diabetestas.com.au
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The design, content and production of this diabetes information sheet have been undertaken by:

- > **ACT** Diabetes ACT
- > **NT** Healthy Living NT
- > **SA** Diabetes SA
- > **VIC** Diabetes Australia – Vic
- > **NSW** Australian Diabetes Council
- > **QLD** Diabetes Australia – Queensland
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