

## Coping with illness when you have Type 1 diabetes

Any illness puts an extra strain on your body and can interfere with the way it reacts to insulin. Typically people with type 1 diabetes need MORE insulin to cope with illness.

If you are ill, whether with the cold, diarrhoea, a chest infection – follow these rules.



- Tell someone you trust that you don't feel well. They can help you follow the rest of the rules!
- Keep well hydrated by drinking water or other sugar-free fluids
- If you have diarrhoea or are feverish and sweating, you could still become dehydrated so DON'T take the kind of blood pressure tablets that might affect your kidneys – ACE inhibitors (ramipril, perindopril, lisinopril) or angiotensin receptor blockers (valsartan, irbesartan, candesartan).
- Make sure you eat or drink something containing carbohydrate at each mealtime. If you can't eat normally try something light ( see overleaf for examples)
- Check blood glucose every 4 hours, it may be going up which means you will need to take extra fast-acting insulin.
- You **MUST** take your usual insulin. **NEVER** stop your insulin



**14**

If your blood glucose is over **14** you will need extra fast-acting insulin.

- Fast acting insulins are Novorapid, Humalog, Apidra, Humulin S and Actrapid.
- To figure out how MUCH extra insulin to take, test for **ketones** in your blood.

- If blood glucose is more than 14 but blood ketones are **less than 1.5** take your usual correction dose
- If blood glucose is more than 14 and blood ketones are **more than 1.5** double your correction dose.

- Not everyone uses correction doses.

If you don't know what your "correction dose" is, then add up ALL the insulin you take in a typical day (each mealtime dose plus your background insulin dose). Then test your blood ketones. The table below will tell you how many EXTRA units to take, on top of your usual meal-time insulin dose, of your fast acting insulin, depending on your ketone level.

In 24 hours I usually take	Blood ketones less than 1.5	Blood ketones more than 1.5
Less than 15 units	2 EXTRA units	4 EXTRA units
15-40 units	4 EXTRA units	8 EXTRA units
41-60 units	6 EXTRA units	12 EXTRA units
61-80 units	8 EXTRA units	16 EXTRA units
More than 80 units	12 EXTRA units	24 EXTRA units

If you have taken 3 extra correction doses and you still have ketones more than 1.5 call the diabetes team, your GP or NHS 24 for advice.

If your breathing becomes rapid and deep, or if you feel drowsy you need **urgent** help. Get somebody to call 999. These are signs of diabetic ketoacidosis, which is a life-threatening emergency.



Telephone numbers;

Diabetes Department: 01324 566929

NHS 24 :111

My GP \_\_\_\_\_

## Questions you may have

### **I am not eating, so should I not stop my insulin?**

**NO.**

During times of illness or stress your body will make stress hormones which fight against your insulin and stop it working so well. If you don't have enough insulin your body will start to burn fat and muscle for energy. When it does this ketones are produced as a by-product. Too many of these disturb your body's chemistry and can lead to a dangerous condition: diabetic ketoacidosis.

### **How do I get rid of ketones ?**

1. Extra fast acting insulin
2. Drink plenty of fluids
3. Eat or drink carbohydrates



### **I can't eat my usual meals, what should I do ?**

Try something light like toast, crackers, cereal, soup, jelly or ice-cream. Instead of solid food you could drink milk, fruit juice, or flat sugary cola.

### **I can't stop being sick, what should I do ?**

If you can't keep anything down you should call for help: the diabetes team, your GP or NHS 24. Tell them what insulin you usually take, and what your blood glucose and ketone results are. You may need fluids in a drip if you can't keep anything down.

### **That seems like an awful lot of extra insulin. Won't I have a hypo ?**

**NO.** Ketones make you very resistant to your insulin, so your usual insulin won't work so well

Be prepared:

- Keep a supply of ketone test strips (check the expiry date)
- Have some sugary drinks in the house in case you can't eat
- Get the flu vaccine
- Keep a basic supply of home remedies

**DO NOT use this guide if pregnant.** Call the diabetes team or Maternity Triage on 01324 567098