

Ketone Testing – at a glance

Please use this in conjunction with ‘Sick day management for adults with Type 1 diabetes’
https://bathdiabetes.ruh.nhs.uk/documents/managing_illness/Type_1_Diabetes_Sick_Day_Management_Adults.pdf

If there is not enough insulin in the body, the body cells cannot use glucose for energy as they would normally.

Insulin = available glucose = energy

If there is not enough insulin (and therefore not enough glucose), the cells will switch to fat for its energy source.

Breakdown of fat can cause the build-up of substances known as **ketones**. During severe illness blood glucose and ketones rise to levels that cause the blood to become acidic. If left untreated **diabetic ketoacidosis (DKA)** can develop. DKA can develop and progress quickly therefore knowing what to do is important.

The only treatment for DKA is insulin and fluids.

Ketones can be measured by blood or urine test strips. Check the expiry date on urine and blood strips before use.

Managing Illness if glucose levels are high. When to test?

- If blood glucose levels are more than 14 mmol/l
- Feeling generally unwell

<p>Blood Ketone Meter</p>	<p>Below 0.6 mmol/l Normal Range</p>	<p>0.6-15 mmol/l Potential Problem</p>	<p>Above 1.5 mmol/mol Potential Risk of DKA</p>	
<p>Urine Test</p>	<p>Normal Range</p>	<p>+ Potential Problem</p>	<p>++ Potential Problem</p>	<p>+++ Potential Risk of DKA</p>