

# Guidelines for Managing Hyperglycemia

(High Blood Glucose)

## Signs and Symptoms of Hyperglycemia ( high blood glucose )

<b>ONSET</b>	<ul style="list-style-type: none"> <li>• Gradual (hours to days)</li> </ul>	
<b>USUAL CAUSES</b>	<ul style="list-style-type: none"> <li>• Illness, infection, surgery, injury</li> <li>• Stress: emotional or physical</li> <li>• Too little insulin</li> </ul>	<ul style="list-style-type: none"> <li>• Increased food</li> <li>• Exercise (in type 1) with blood glucose over 14 mmol/L</li> </ul>
<b>SIGNS AND SYMPTOMS</b>	<ul style="list-style-type: none"> <li>• Thirst</li> <li>• Excessive urination</li> <li>• Fatigue</li> <li>• Abdominal pain, nausea, vomiting</li> <li>• Blurred vision</li> </ul>	<ul style="list-style-type: none"> <li>• Change in appetite</li> <li>• Dry/itchy skin</li> <li>• Slow healing cuts</li> <li>• Hard to breathe/acetone breath</li> </ul>
<b>TREATMENT</b>	<ul style="list-style-type: none"> <li>• Drink 8 oz (or more ) of carbohydrate-free liquid per hour</li> <li>• Antibiotics for infection</li> <li>• Reduce stress</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce excess intake of foods</li> <li>• Increase diabetes medication on advice of care provider</li> </ul>
<b>Prevent By</b>	<ul style="list-style-type: none"> <li>• Consistency in adhering to meal plan, insulin/oral agent use and exercise</li> <li>• Use stress reduction strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor blood glucose more frequently</li> <li>• Report rising blood glucose to physician</li> </ul>

## REMEMBER

**Insulin should always be taken!**

Extra insulin may be needed by the body when you have hyperglycemia.

**Drink plenty of extra carbohydrate-free fluids.**

**Check blood glucose and urine ketones.**

Before meals and/or every four hours around the clock.

# Guidelines for Managing Diabetic Ketoacidosis

## What is DKA?

Diabetic Ketoacidosis happens when you do not have enough insulin to help your body use glucose for energy. Your body starts burning fat for energy, which releases ketones in your blood. Ketones make your blood more acidic than normal. This can upset the chemical balance in your body and can quickly make you very sick.

## What would cause DKA?

Diabetic Ketoacidosis can occur in people with Type I diabetes if you are not getting enough insulin or if your insulin isn't working well due to sickness, infection, pregnancy, stress and/or high blood glucose.

### Check for Ketones:

- for any unexplained high blood glucose
- if your blood glucose is above 14 mmol/L
- if a fruity odor is detected in the breath
- if abdominal pain is present
- if nausea or vomiting occurs
- if you are breathing rapidly and short of breath

**If a moderate or large amount of ketones register on the test strip, ketoacidosis is present and treatment is required immediately.**

Blood glucose levels (mmol/L)	Ketone bodies	Symptoms**	Suggested actions
13 – 15	– or +	+	Measure your blood glucose level every 6 hours. Drink 250 ml of water every hour. Take 10% extra rapid insulin or use your sliding scale or Correction Factor
15 – 20	++ or +++	++ or +++	Measure your blood glucose level every 4 hours. Drink 250 ml of water every hour. Take 10-20% extra rapid insulin every 4 hours. Contact your doctor or go to the hospital if there is no improvement and/or if symptoms of diabetic acidosis appear.
> 20	– or +++ or ++++	++++	Go to the hospital.
*+ = traces = 0.5 mmol/L ++ = small = 1.5 mmol/L +++ = moderate = 4.0 mmol/L ++++ = large = 8.0-16.0 mmol/L		**+ = excessive thirst and urination ++ = diarrhea and nausea +++ = nausea, vomiting and diarrhea ++++ = nausea, vomiting, diarrhea, with or without ketone bodies	

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