Ketones

**Signs and symptoms:**
*nausea
*vomiting
*signs and symptoms of hyperglycemia (see hyperglycemia handout)

**What are Ketones:**
- Ketones are formed when your body burns fat to use as energy
- This happens when there is not enough insulin in the body
- Ketones can make you feel sick to your stomach
- If ketones are not treated, this can lead to Diabetic Ketoacidosis (DKA)

**When to check for Ketones:**
- When you have 2 unexplained high blood sugars over 300
- If you are sick and/or vomiting
- If you missed your injection of intermediate or long-acting insulin (NPH, Lantus, or Levemir)
- If your insulin pump stopped working

**How to treat Ketones:**

<table>
<thead>
<tr>
<th>Urine Ketones</th>
<th>Blood Ketones</th>
<th>What to do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>0 mmol/L</td>
<td>Normal schedule and activities</td>
</tr>
<tr>
<td>Trace or Small (&lt; 0.6 mmol/L)</td>
<td>Drink extra water and recheck in 2 hours. No exercise.</td>
<td></td>
</tr>
<tr>
<td>Moderate (0.6 - 1.5 mmol/L)</td>
<td>Extra insulin and fluids. No exercise. Call your diabetes team.</td>
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<tr>
<td>Large (1.6 - 3.0 mmol/L)</td>
<td>Extra insulin and fluids. No exercise. Call your diabetes team. Tell operator that situation is urgent.</td>
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<tr>
<td>&gt; 3.0 mmol/L</td>
<td>May need to go to E.R. Call your diabetes team. Tell operator that situation is urgent.</td>
<td></td>
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</tbody>
</table>

If you have Moderate Ketones or higher, Call the 650-497-8000 and ask for the “Diabetes doctor on call”