

## 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:

Urine Ketones	Blood Ketones	What to do?
Negative	0 mmol/L	Normal schedule and activities
Trace or Small (15 mg/dL)	< 0.6 mmol/L	Drink extra water and recheck in 2 hours. No exercise.
Moderate (40 mg/dL)	0.6 - 1.5 mmol/L	Extra insulin and fluids. No exercise. Call your diabetes team.
Large (80 mg/dL)	1.6 - 3.0 mmol/L	Extra insulin and fluids. No exercise. Call your diabetes team. Tell operator that situation is urgent.
	> 3.0 mmol/L	May need to go to E.R. Call your diabetes team. Tell operator that situation is urgent.

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