Diabetes: sick day care



S	I	C	K
Sugar	Insulin	Carbs	Ketones
			-
Check blood sugar	Continue to give	Your body needs	Check for ketones
every 2-4 hours	insulin	carbs & fluids	at least every 2-4
 through the day & night illness can both raise & lower blood sugars 	Always give long acting (Lantus, Basaglar) insulin Short acting insulin (Humalog, Novolog) • give your high blood sugar correction every 3-4 hours • dose for carbs per insulin to carb ratio if able to eat	Carbohydrates • about 15 grams of carbs an hour Fluids • about 4-8 ounces of fluids an hour • blood sugar less than 200, give fluids that have carbs • blood sugar more than 200, give carb free fluids	always check with nausea, vomiting, fever ✓ check even if your blood sugar is in range ✓ check with 2 routing



Keep track of Sugar, Insulin, Carbs & Ketones while your child is sick.

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When should you call your doctor?

Pediatrician/	Diabetes provider	Go to the
Family provider	503-216-6050	Emergency Department
		with any of the following**
for non-diabetes- related illness, like - sore throat - earaches - fever - rashes	Sugar: - repeated lows, despite treatment - repeated high blood sugars, despite high blood sugar correction Insulin: need advice on dosing Carbs: can't keep fluids down Ketones: moderate to large, despite 2 ketone corrections	Dehydration: little or no urination, no tears, dry mouth or skin Vomiting: repeated vomiting Lethargy: little to no energy Breathing heavily
	vomiting more than once	

^{**} these are risk factors for developing DKA (diabetic ketoacidosis)

What is DKA?

The body needs sugar (glucose) for energy. If the body doesn't have the sugar it needs, either from not enough sugar and/or not enough insulin, the body breaks down fat for energy. Fat is not the best fuel for the body, as using it causes ketones (an acid) to be in the urine and in the blood. High levels of ketones cause the blood to become acidic, causing diabetic ketoacidosis, or DKA. Being sick can increase ketone production. DKA is a severe life-threatening condition requiring immediate treatment. Symptoms of DKA include nausea, vomiting, abdominal pain, rapid breathing, and, in severe cases, unconsciousness.

Ketones = not enough insulin

Sick Day Supplies Before your child gets sick, make sure you are prepared. Supplies on hand should include ketone strips, glucagon, medication, and thermometer. To support fluid and energy needs you should have carb containing beverages, carb free beverages, soup, crackers and both carb containing and carb free frozen juice/fruit bars.

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Ketone Correction

How much insulin should I give if my child has ketones?

Ketones, urine	Ketones, blood	Humalog or Novolog	
Trace, 5	0.6-1.0	take your usual high blood sugar correction	
Small, 15	1.0-1.4		
Moderate, 40	1.5-3.0	1.5 x your high blood sugar correction dose	
Large, 80 +	3.0 +		



- ✓ If ketones are moderate or large, but no high correction blood sugar is indicated (such as with a blood sugar of 105) call diabetes provider for dosing
- ✓ If blood sugar meter reads "Hi", use blood sugar of 500
- ✓ Continue to check blood sugar and ketones (urine or blood) every 2-3 hours
- ✓ You can give extra insulin for ketones as often as every 3 hours, as needed
- ✓ Call diabetes provider if ketones are not between negative-small after 2 ketone corrections.

<u>Example:</u> blood sugar is: <u>324</u> ketones are: <u>moderate</u>

your high blood sugar correction dose is: 1 unit for every 50 above 150

high blood sugar correction for blood sugar of 324 = 4 units

4 units x 1.5 for moderate ketones = 6 units for ketone correction

Mini Dose Glucagon

What if my child's blood sugar is low and can't keep any food down?

A mini dose of glucagon can be used to raise the blood sugar gently. Glucagon can be mixed and given just like insulin, using an insulin syringe. Mixed Glucagon is good in the fridge for 24 hours.

Dose: 1 unit per age, at least 5 units and not more than 15 units *For example:*

- a 6 year old would get 6 units
- a 16 year old would get 15 units
- ✓ If the blood sugar is not above 90 in 15-20 minutes then repeat the dose.

