

diabetes sick day (insulin pump)



When we talk about “sick days” we are usually talking about an illness serious enough that your child has to stay home from school. A mild cold, cough, or headache does not usually qualify and does not warrant following “sick day” guidelines.

Illness is a time when the body is under a lot of stress and needs extra amounts of energy. If your body cannot get the energy it needs from food or sugar, it will quickly start burning body fat. When the body burns the fat, this causes ketones. If enough ketones build up in the blood stream, this can lead to diabetic ketoacidosis (DKA). DKA is a life-threatening diabetes emergency.

what should I do on a sick day?

1. Check blood sugar every 2-3 hours while sick.
2. Check ketones every 2-3 hours even if the blood sugar is not high. Ketones are checked in the urine (pee) or blood. Your doctor may give you a ketone correction scale. This scale will list how many units of insulin to give based on the ketone result.
3. Drink plenty of fluids. If not able to eat at meals, offer fluids with carbs and give insulin for these as long as your child does not throw up the fluids. Between meals, offer sugar-free or diet fluids.

child's weight	how much?	how often?
Less than 20 pounds	4-6 ounces	every 2-3 hours
20-45 pounds	6-8 ounces	every 2-3 hours
Over 45 pounds	8 ounces or more	every 2-3 hours

4. Continue giving insulin. An illness often causes high blood sugar levels. However, if throwing up or having diarrhea, your child's blood sugar may be low. You may need to give less insulin than normal if he/she is throwing up or having diarrhea. The pump site may need to be changed as well.
5. If your child is throwing up:
 - a. Give anti-nausea medicine like Zofran if you have it. If not, contact your doctor to see if this is an option for your child.
 - b. You may need to give a little less insulin to stop the blood sugar from dropping too low.

ketones		treatment	
urine	blood	If throwing up give Zofran if have it	If not throwing up
Negative	Less than 0.6 mmol/L	<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs. Consider mini-dose Glucagon* if blood sugar is not coming up.	<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs.
		<u>Blood sugar 80-150:</u> Correct for carbs like normal.	<u>Blood sugar 80-150:</u> Correct for carbs like normal.
Small (15)	0.6 to 1.0 mmol/L	<u>Blood sugar over 150:</u> Correct for blood sugar & carbs like normal.	<u>Blood sugar over 150:</u> Correct for blood sugar and carbs like normal.
		<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs. Do not give insulin for ketones or carbs used to treat the low blood sugar. Once blood sugar is above 80, give insulin for any additional carbs given. Consider mini-dose Glucagon* if blood sugar is not coming up.	<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs. Do not give insulin for ketones or carbs used to treat the low blood sugar. Once blood sugar is above 80, give insulin for any additional carbs given.
		<u>Blood sugar 80-150:</u> Correct for carbs like normal.	<u>Blood sugar 80-150:</u> Correct for carbs like normal.
Moderate (40)	1.1 to 1.5	<u>Blood sugar over 150:</u> Correct for blood sugar & carbs like normal. Use ketone correction scale.	<u>Blood sugar over 150:</u> Correct blood sugar and carbs like normal. Use ketone correction scale.
		<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs. Do not give insulin for ketones or carbs used to treat the low blood sugar. Once blood sugar is above 80, give insulin for any additional carbs given.	<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs. Do not give insulin for ketones or carbs used to treat the low blood sugar. Once blood sugar is above 80, give insulin for any additional carbs given.
		<u>Blood sugar 80-150:</u> Correct for carbs like normal.	<u>Blood sugar 80-150:</u> Correct for carbs like normal.
Large (80 to 160)	Above 1.5	<u>Blood sugar over 150:</u> Correct for blood sugar & carbs like normal. Use ketone correction scale.	<u>Blood sugar over 150:</u> Correct blood sugar and carbs like normal. Use ketone correction scale.
		<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs. Do not give insulin for ketones or carbs used to treat the low blood sugar. Once blood sugar is above 80, give insulin for any additional carbs given.	<u>Blood sugar under 80:</u> Have some hard candy or fluids with carbs. Do not give insulin for ketones or carbs used to treat the low blood sugar. Once blood sugar is above 80, give insulin for any additional carbs given.
		<u>Blood sugar 80-150:</u> Correct for carbs like normal.	<u>Blood sugar 80-150:</u> Correct for carbs like normal.

* See separate mini dose Glucagon handout for directions with this.

alternative foods/fluids with carbs you can try while sick:

Regular pop	Sports drink like Gatorade or Poweade	Apple juice or other 100% fruit juice
Popsicle	Pedalyte	Toast
Jell-O	Saltine crackers	Chicken noodle soup

when to call the doctor:

- If throwing up and do not have Zofran
- If taking Zofran and still throwing up
- If ketones are small or greater and do not have a ketone correction scale.

- If ketones are not going down after giving insulin 2 times in a row
- Can call if ketones positive, but blood sugar is not high
- If pump is not working, call the pump manufacturer. Your child may also need long-acting insulin until they can get the new pump.

when to go to the emergency room:

- Lethargic (sleepy, not responding like normal)
- Breathing heavily

