

Sick Day Guidelines When You Have Type 1 Diabetes

Any type of illness can raise blood sugar. You may think that your blood sugar will be low because you are not able to eat or drink. When you are sick, stress hormones are produced in the body, which raise blood sugar. Blood sugar levels may become hard to control and lead to diabetic ketoacidosis or DKA.

Diabetic Ketoacidosis or DKA

DKA comes from not having enough insulin in the body. It can be life threatening. When you are sick, it often develops quickly. It can even happen within a few hours. When you do not have enough insulin, the body burns fat for energy. This breakdown of fat produces ketones (an acid). DKA can occur when high levels of ketones build up in the blood. If not treated, it can lead to coma and death.

Causes of High Blood Sugars

- Any illness, infection, surgery
- Missed or skipped insulin doses
- Physical or emotional stress
- Some medicines may increase blood sugar levels

Signs and Symptoms

- Increased thirst
- Increased urination
- Fatigue
- Weight loss
- Dehydration
- Nausea or vomiting
- Abdominal pain
- Rapid, labored breathing
- Fruity odor to the breath
- Severe dehydration

Be careful! Signs and symptoms of DKA are often the same as the flu. If you live alone, you should tell a family member or close friend that

you are ill and have them call to check on you several times each day.

Preventing DKA

Monitor More Often

- Check your blood sugar every 2 hours.
- Check urine or blood for ketones every 4 to 6 hours or more often if advised when:
 - you are sick (for example, with a cold or flu) or have an infection
 - your blood sugar is more than 240 mg/dL

Adjust Insulin Doses

Always take your insulin when you are sick to avoid DKA. Your doses may change when you are sick.

Guidelines When Eating

- Take your usual dose of basal insulin (NPH, Levemir[®], or Lantus[®]).
- Keep taking your Regular, Humalog[®], Apidra[®], or Novolog[®] to cover your meals.
- Use correction insulin.
- Call your health care team to decide if your correction scale doses need to be changed while you are sick.
- If you use an insulin pump, do not change basal rates unless discussed with your provider. Take your usual correction per the pump bolus calculator.

Guidelines When Not Eating

It is always best to discuss insulin changes with your health care team. The chart on the next page shows what changes are often made when you are not able to eat your usual meals.

Types of Insulin You Take	Doses To Take When Sick and Not Eating
NPH	<ul style="list-style-type: none"> ▪ Take ½ dose of NPH
Levemir [®] (detemir)	<ul style="list-style-type: none"> ▪ Take usual dose of Levemir[®] (detemir)
Lantus [®] (glargine)	<ul style="list-style-type: none"> ▪ Take usual dose of Lantus[®] (glargine)
Regular Novolog [®] , Apidra [®] , Humalog [®]	<ul style="list-style-type: none"> ▪ If you are not eating, do not take meal insulin. Only use your normal correction scale.
Pre-mixed Insulin (70/30, 75/25, 50/50)	<ul style="list-style-type: none"> ▪ Take ½ of usual dose and call your health care team for direction.
Concentrated insulin (U-500, U-300, U-200)	<ul style="list-style-type: none"> ▪ Call your health care team for direction.

Prevent Dehydration

- Drink water and other liquids.
- Take small amounts of fluid every 10 minutes (8 ounces per hour is best).
- With vomiting and diarrhea, your body loses electrolytes like potassium and sodium. Replace these losses with bouillon, soups, sports drinks, and juices.

If you cannot eat your normal meals, replace carbohydrates from the meal with foods that have sugar. These foods **must have sugar** (regardless of your blood sugar level) to prevent the breakdown of fat into ketones. If you use insulin with meals, take insulin for the carbohydrates in the liquids or food that you have.

Examples are:

- Soda
- Jell-O

- Pudding
- Juices
- Popsicles
- Sports drinks
- Cooked cereals
- Soups
- Crackers or toast
- Sherbet or ice cream

Remember, these choices should not be diet or sugar-free. Also, soda that is warm and flat are better tolerated than cold, carbonated sodas.

When to Call Your Health Care Team

Make plans with your health care team about when to call and what to do if they are not available. If you have not discussed this, call as follows:

- If your blood sugar is greater than 250 mg/dL and you have moderate to large urine ketones
- If you have symptoms of DKA and are unable to control your blood sugar
- If your health care provider is not available, go to the nearest Emergency Room.
- **Do not delay treatment. Ketoacidosis needs to be treated right away. This can be a life threatening condition.**

Information to have ready when calling

- How long you have been sick
- Current symptoms (especially those related to DKA)
- Blood sugar levels
- Urine ketone levels
- What you have been able to eat and drink
- Your temperature (whether or not you have a fever)
- Amount of insulin taken

The Spanish version of this *Health Facts for You* is #4505s.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright ©10/2016. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4505.