Sick Day Management

BAYER HEALTH FACTS

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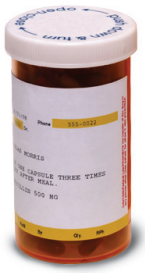
FAVORABLY REVIEWED
American Association of Diabetes Educators

Bayer HealthCare

SICK DAY MANAGEMENT FOR PEOPLE WITH DIABETES

As a person with diabetes, you know how important it is to take good care of yourself. It may be more challenging when you're sick, but that's when you need to take special care with good nutrition, medications, and with monitoring your blood sugar and urine ketones.

Whether it's a sore throat, cold or flu, an infection, or recent surgery, illness puts your body under extra stress.



To help you fight an illness, your body releases hormones that cause your liver to release glucose (sugar), and interfere with the action of insulin. That can make your blood sugar rise, sometimes to dangerously high levels.

This can lead to Diabetic Ketoacidosis (DKA) in people with type 1diabetes, and Hyperosmolar Hyperglycemic Nonketotic Syndrome (HHNS) in people, especially the elderly,with type 2 diabetes.

Avoid a risky situation — make a sick day plan and discuss it with your doctor before you become ill. Your plan should cover monitoring of both blood sugar and ketones, and intake of medicines, food and liquids.

THE SICK DAY PLAN

Monitoring

Check your blood sugar and urine ketones every 2 – 4 hours around the clock, especially before meals and at bedtime. Check your urine for ketones with Bayer's Ketostix® Reagent Strips, or use Bayer's Keto-Diastix® Reagent Strips to test for both ketones and sugar, each time you empty your bladder. Record all test results.

Continue monitoring blood sugar and urine ketones as long as:

- your blood sugar is greater than 250 mg/dL
- your ketone numbers are moderate to high
- you cannot follow your regular meal plan
- you are not feeling well.

Medication

Although you're feeling sick, do not change your medication routine. Continue taking your insulin and other prescribed medications as usual. Depending on how ill you are, and on your blood sugar and ketone values, you may need to take an additional dose of short or rapid acting insulin every three to four hours. To find out how much to take, use a scale or algorithm similar to the sample below. Ask your doctor or diabetes educator to give you your own.

Blood Sugar	Urine Ketones		Humalog or Regular
Below 90 mg/dL	Negative-positive	——	Units less
234-289 mg/dL	Negative-low	——	Units more
234-289 mg/dL	Moderate-high	——	Units more
290-397 mg/dL	Negative-low	——	Units more
290-397 mg/dL	Moderate-high	——	Units more
399 mg/dL	Negative-low	——	Units more
399 mg/dL	Moderate-high	——	Units more

SAMPLE

Food

You may not be able to eat according to your usual meal plan while you're ill, but it's important to consume carbohydrates regularly to keep your blood sugar from going too low. Depending on your blood sugar (BS) values as measured before a usual meal time, you need to drink or eat carbohydrate (CHO) according to the following schedule:

BS less than 180 mg/dL	**15 grams CHO/hour**
BS from 180-252 mg/dL	**15 grams CHO at meal, or within one hour**
BS less than 180 mg/dL	**8 ounces calorie-free liquid/hour plus at least 150 grams CHO/ day to prevent starvation.**

Liquids

Drinking enough fluids is extremely important, since dehydration can make your illness worse. If you are losing fluids due to diarrhea, fever, or vomiting, or you're drinking less than usual or urinating more than usual, you are at risk of becoming dehydrated. As a general rule, drink eight ounces of liquid every hour while you're ill, and avoid drinks that contain caffeine. Your choice of liquids should be guided by your blood sugar. If your blood sugar is over 250 mg/dL, drink calorie-free liquids such as water, broth, or sugar-free, caffeine-free soda. If you have low blood sugar, drink regular soda, milk, or fruit juices.

FOODS AND LIQUIDS THAT CONTAIN 15 GRAMS OF CARBOHYDRATE:

- 1 cup chicken soup (broth based)
- 1 cup cream soup (made with water)
- 1/2 cup cooked cereal
- 1/2 cup vanilla ice cream
- 1/2 cup regular Jell-O® gelatin
- 1/2 cup ginger ale (not diet)
- 1/3 cup grape juice
- 1/2 cup apple juice
- 1/2 cup orange juice
- 1/2 cup cola (not diet)
- 1/2 cup cranberry juice

CALL YOUR DOCTOR OR HEALTHCARE PROFESSIONAL WHEN:

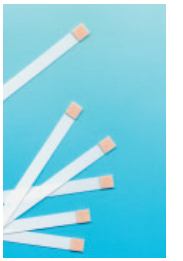
- You've been vomiting or had diarrhea for more than sixhours.
- You've been unable to eat or drink for more than four hours.
- Your illness is not improving after two days.
- You've had high blood sugar for longer than 24-48 hours, with or without urine ketones.

- You've taken additional short or rapid-acting insulin as recommended by your physician.
- You're not sure what to do.
- You have any of the following signs of ketoacidosis:
  - Stomach pain
  - Nausea or vomiting
  - Rapid breathing or heart beat
  - Fruity-smelling "ketone breath"
  - Thirst and frequent urination
  - Weakness or tiredness
  - Visual disturbances
  - Sleepiness, difficulty staying awake
  - Cracked lips or dry mouth (signs of dehydration)

BE PREPARED!

Create a Sick Day Box that contains this brochure along with the following items. Keep it some place handy that's out of children's reach. Check expiration dates of supplies and medicines on a regular basis. Replace them if they are outdated. When you are ill, inform a family member or friend, so that someone can check on you every four to six hours.

- Blood glucose and ketone strips (check expiration dates!)
- Meter and Lancets
- Record book and pen (for test results)
- Chart from your doctor or diabetes educator showing dosage adjustment for insulin/oral diabetes medication according to blood sugar and ketone values.
- Important telephone numbers, e.g. family members, physician, diabetes educator, taxi, emergency room, etc.
- Over-the-counter medications for sore throat, cough, nasal congestion, fever, headache, upset stomach, diarrhea, and vomiting, as recommended by your doctor or pharmacist.
- Liquids with and without carbohydrates.
- A list of 15 gram CHO foods and fluids that are usually on-hand (discuss with your dietitian)
- Thermometer
- Money for taxi fares
- Copy of this Bayer Health Facts brochure for future reference



Testing for Ketones in urine.

Knowing how to manage a sick day is very important. Avoid a risky situation — make a sick day plan and discuss it with your doctor before you become ill. Just remember — the power to manage your diabetes is in your hands.

For more information about Diabetes Care Systems and support from Bayer, or help with your diabetes testing supplies, call our toll-free Customer Service Help Line at 1-800-348-8100 (24 hours, 7 days a week).

You can also visit our web site at:

www.BayerDiabetes.com/us

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For more help in managing your diabetes, see a diabetes educator. To find an educator: www.diabeteseducator.org

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