

# Acute Complications of Diabetes



# Getting Ahead of Hypoglycemia

Hypoglycemia is the deficiency of glucose in the bloodstream, or in other words, low blood sugar readings. Numerically, hypoglycemia is seen at 70 mg/dL or lower on the glucometer. Blood sugar readings that are too high or too low are both dangerous. With that in mind, blood sugar readings need to be closely monitored. Using the information below, you will be ready to take action on getting ahead of hypoglycemia.

## Signs & Symptoms of Hypoglycemia:

Most common signs & symptoms include, but are not limited to, the following: **fatigue, dizziness, weakness, shakiness, sweating, confusion, pallor, irritability, sleepiness, lack of coordination, and excessive hunger.**

Each person may react to hypoglycemia differently, and some may show no symptoms at all. For that reason, it is very important to check your blood sugar as directed by your doctor.

## What Causes Hypoglycemia?

Common causes of hypoglycemia include excessive physical activity without food, skipping meals, wrong dosage of medications, low food intake, and not balancing meals by including carbohydrates, fats, and proteins.

If you are experiencing low glucose readings with or without symptoms, follow the "15-15 rule".

### Applying the "15-15 rule":

1. Eat or drink 15 grams of carbs to increase your blood sugar.
2. After 15 min, recheck your blood sugar.
3. If your blood sugar remains below 70 mg/dL, repeat these steps until blood sugar rises above 70 mg/dL.

# 5 Tips to Manage Low Blood Sugar



**1**

Keep carbohydrate snacks with you to increase blood sugar levels, in case your blood sugars drop suddenly.

**2**

Eat three moderate-sized meals plus 2-3 snacks throughout the day. Eating smaller meals every few hours can help stabilize blood sugar levels.

**3**

Monitor your blood glucose levels before beginning to exercise. If the reading is below 100 mg/dl, you should consume 15–20 grams (g) of carbs.

**4**

Eat breakfast as soon as possible after waking up, as blood sugar levels may have dropped during the night.

**5**

Consuming a healthy bed-time snack can help keep blood sugars from dropping during the night.

# Hyperglycemia ABOVE 400mg/dL

Your blood sugar levels will naturally go up and down during the day. Sometimes, you may have abnormally high blood sugar, which is called hyperglycemia. Just like low blood sugar, high blood sugars can cause major health issues if not treated right away. High blood sugar can occur due to the wrong amount of insulin or medication. Other reasons may be illness, infection, lack of activity, or high carbohydrate and sugar intake. Use the information below to know the signs, symptoms, and treatment plans for hyperglycemia.

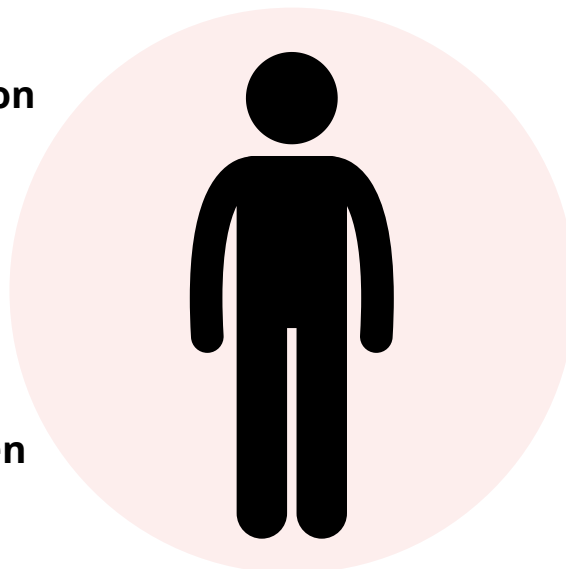
Hyperglycemia is when your blood sugar is higher than normal. You may find your blood sugar spiking after you eat a large portion of carbohydrate-rich foods in one sitting. If you skip medication doses, are sick, or are under a lot of stress, you also might experience high blood sugars.

**It is important to know the signs and symptoms of hyperglycemia. These include:**

**blurred vision**

**development of an ulcer or sore that doesn't heal**

**urinating often**



**excess thirst**

**weakness**

**dry and itchy skin**

**feeling tired**

**You know yourself and your treatment plan best. If you feel off, typical self care is to follow the plan your doctor gave you. If you don't remember your doctor's guidance, contact your doctor and notify your health plan's nurse case manager. In case of emergency, call 911.**



# 5 Tips to Manage High Blood Sugar



**1**

Move daily! Regular exercise can maintain blood sugar within normal range.

**2**

Manage your stress and practice stress management techniques like yoga, meditation, or deep breathing exercises

**3**

Control your food portions using the plate method to consume accurate amounts of carbohydrates.

**4**

Consistently eat three meals a day, and try not to skip meals.

**5**

Go for a walk after meal times. Movement after eating can decrease blood sugar spikes

# Diabetic Ketoacidosis

Diabetic Ketoacidosis, or DKA, is a rare, but serious complication of diabetes that results from not having enough insulin. When there is not enough insulin, many cells of the body are starved for glucose (also called blood sugar) and the body tries to make energy in other ways. This makes your blood more acidic. When that happens, your breathing can become labored, you can become severely dehydrated and some people can go into a coma.

## Signs & Symptoms:

DKA usually develops slowly. Early symptoms include:

- Being very thirsty.
- Urinating a lot more than usual.

If untreated, more severe symptoms can appear quickly, such as:

- Fast, deep breathing
- Dry skin and mouth
- Flushed face
- Fruity-smelling breath
- Headache
- Muscle stiffness or aches
- Being very tired
- Nausea and vomiting
- Stomach pain

## Causes:

The two most common causes are:

- Illness. When you get sick, you may not be able to eat or drink as much, which can make blood sugar levels hard to control.
- Missing insulin shots or taking the wrong amount of insulin.

Other causes of DKA include:

- Heart attack or stroke
- Physical injury, such as from a car accident
- Alcohol or drug use
- Certain medicines, like diuretics (water pills) and corticosteroids (used to treat inflammation in the body).

## Test for Ketones:

Anytime you are sick or your blood sugar is 240 mg/dL or higher, use an over-the-counter ketone test kit to check your urine or a meter to test your blood every 4 to 6 hours. You should also test for ketones if you have any of the symptoms of DKA. Call your doctor if your ketones are moderate or high.

**Go to the emergency room or call 911 right away if you can't get in touch with your doctor and are experiencing any of the following:**

- Your blood sugar stays at 300 mg/dL or above
- Your breath smells fruity
- You are vomiting and can't keep food or drinks down
- You're having trouble breathing
- You have multiple signs and symptoms of DKA



## Prevention:

**DKA is a serious condition, but you can take steps to prevent it by:**

- Checking your blood sugar often, especially if you're sick.
- Keeping your blood sugar levels in your target range as much as possible.
- Taking your medicines as prescribed, even if you feel fine.
- Talking to your doctor about how to adjust your insulin based on what you eat, how active you are, or if you're sick.

## Treatment:

If you have DKA, you'll be treated in the emergency room or admitted to the hospital. Your treatment will likely include:

- Hydration to replace fluid you lost through frequent urination and to help dilute excess sugar in your blood.
- Electrolyte replacement (minerals in your body that help your nerves, muscles, heart, and brain work the way they should).
- Insulin to reverse the conditions that cause DKA.
- Treatment for any underlying illness that caused DKA, like antibiotics for an infection.