

Diabetic Ketoacidosis

By

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What Is Ketoacidosis in Diabetes?

When you have diabetes and there isn't enough insulin, your body is unable to use sugar (glucose) for energy. To continue functioning, your body switches to starvation mode and releases fat to use for energy. However, the fat that gets released is converted to ketones which are utilized more slowly than they are made. As a result, ketones in your blood rise and spill over into your urine. To make matters worse, the high sugar that is also leaking into your urine pulls water out of your body causing dehydration.

Remember, ketoacidosis occurs when [hyperglycemia](#) is not treated promptly. It usually develops slowly over several hours. By recognizing and treating the early symptoms of hyperglycemia, you can avoid ketoacidosis.

What Are the Symptoms of Hyperglycemia and Ketoacidosis?

The symptoms of hyperglycemia and ketoacidosis include:

- Dehydration and excess thirst.
- Excess urination, especially weeks or days before the diagnosis of new onset type 1 diabetes.
- Vomiting.
- Abdominal pain.
- Drowsiness.
- Difficulty breathing.
- Fruity smell to the breath.
- Ketones in your urine.

Call your health care provider immediately if you have any of the above listed symptoms.

What Is the Treatment for Ketoacidosis?

Treatment of ketoacidosis requires insulin and fluids as ordered by your doctor. They may suggest that you increase the dose of your insulin or change your insulin type to a more rapid- or short-acting form. They will also suggest drinking more fluids -- sugar free, of course. You will need to check your sugars frequently and repeat the measure of your urine ketones.

Ketoacidosis can result in coma and possibly death if left untreated

How Can Ketoacidosis Be Prevented?

- To prevent ketoacidosis, take your medicines as directed. If you are on an [insulin pump](#) always check your tube connections for air bubbles and make sure that there are no leaks of insulin. Also, check your insulin to make sure it has not expired and make sure no clumps have formed. Insulin should always be either clear or uniformly cloudy with particles.
- Follow your meal plan closely.
- Follow your exercise program.
- Test your blood sugar on a regular basis.
- Know when to contact your health care provider if you have repeated abnormal blood sugar levels.

Resources: WebMD 2010