

Outreach Resources

High Blood Sugar: Definition and Symptoms

High blood sugar, or hyperglycemia, occurs when the body has too much food or glucose, or too little insulin. The following are all potential reasons that a person with type 1 diabetes (T1D) might have high blood sugar:

- Taking too little insulin
- Eating more than usual
- Eating earlier than usual
- Eating food with higher glucose content without injecting extra insulin
- Injecting insulin at a site on the body where the absorption rate is slower
- Missing or skipping an insulin dose
- Developing a clog in insulin pump tubing
- Exercising less than normal
- Stress
- Illness or injury
- Other hormones
- Medications

High blood sugar generally does not immediately put the person with T1D in danger. However, high–blood-sugar levels over long periods of time can lead to serious complications such as heart disease, blindness, kidney failure, and amputation.

Very high–blood-sugar levels can lead to diabetic ketoacidosis (DKA), or a “diabetic coma.” DKA occurs when the cells can’t get the energy they need from glucose, and the body begins to burn fat and body tissue for energy. This causes the release of byproducts called ketones, which are dangerous when released at high levels. Ketones act like poison to the body and are passed in the urine as they build up in the blood.

A person with T1D and high blood sugar may exhibit one or more of the following symptoms:

- Thirst (dehydration)
- Frequent urination
- Blurry vision
- Stomach pain
- Increased hunger
- Nausea
- Drowsiness, lethargy, exhaustion
- Confusion
- Sweating
- Fruity, sweet, or wine-like odor on breath
- Vomiting
- Inability to concentrate
- Weight loss (a longer-term symptom) that eventually leads to coma