What is hypoglycemia?
Hypoglycemia, or low blood sugar, happens when blood glucose drops below normal levels, usually less than 70 mg/dL.\(^1\, ^2\)

Hypoglycemia can occur suddenly, but it can be treated by eating or drinking a small amount of glucose-rich food.\(^1\)

If left untreated, hypoglycemia can lead to confusion, clumsiness, or fainting. In its most severe stage, hypoglycemia can lead to seizures, coma, and even death.\(^1\)

Remember that “hypoglycemia” is low blood sugar and should not be confused with “hyperglycemia,” which is high blood sugar.

Who is at risk for hypoglycemia?
Hypoglycemia may be a side effect of diabetes treatment, including insulin and oral medications that increase insulin production.\(^1\)

It is, therefore, imperative for health care professionals and patients being treated for diabetes to be able to identify and also help manage hypoglycemia.\(^3\)

If the blood glucose reading is below 70 mg/dL, one of these quick-fix food items should be consumed immediately to raise blood glucose\(^1\):

- 3 to 4 glucose tablets
- 1 serving of glucose gel—the amount equal to 15 grams of carbohydrate
- 1/2 cup (or 4 ounces) of a regular—not diet—soft drink
- 5 to 6 pieces of hard candy
- 1 cup (or 8 ounces) of milk
- 1 tablespoon of sugar or honey

Patients should then re-check their blood glucose 15 minutes after eating or drinking one of these quick-fix foods. If their blood glucose is still below 70 mg/dL, the normal limit, another serving of a quick-fix food should be eaten. Once the quick-fix food brings their blood glucose to 70 mg/dL, patients should eat a small snack if their next meal is 1 hour or more away.\(^1\)
Symptoms of hypoglycemia include:

- Shakiness
- Nervousness or anxiety
- Sweating chills and clamminess
- Irritability or impatience
- Confusion
- Rapid heartbeat
- Lightheadedness or dizziness
- Hunger and nausea
- Sleepiness
- Blurred/impaired vision
- Tingling or numbness in the lips or tongue
- Headaches
- Weakness or fatigue
- Anger, stubbornness, or sadness
- Lack of coordination
- Nightmares or crying out during sleep
- Seizures
- Unconsciousness

Hypoglycemia unawareness

Very often, people whose blood glucose level has fallen below 70 mg/dL may not feel any of the symptoms of hypoglycemia. This is referred to as “hypoglycemia unawareness.” Hypoglycemia unawareness occurs more frequently in people with type 1 diabetes, but it can occur in people with type 2 diabetes. People with hypoglycemia unawareness need to check their blood glucose regularly so they know when their blood glucose has fallen below 70 mg/dL. Patients should consult with their doctor if they think they are hypoglycemia unaware.

Other impacts of hypoglycemia

The incidence of hypoglycemia is often measured in clinical trials; however, the data may not approximate true rates in real-world populations. Current research shows that the effects of hypoglycemia are already placing an economic burden on payers. With the Centers for Disease Control estimating that diabetes will be diagnosed in 1 of 3 people by the year 2050, management of complications associated with diabetes, such as hypoglycemia, will be of even greater concern in upcoming years.
Tips on how to manage hypoglycemia

People taking insulin or an oral diabetes medication should always be prepared to prevent and treat low blood glucose. Things they can do to help prevent or treat hypoglycemia include:\(^1\):

- Learning what can trigger low blood glucose levels
- Having a blood glucose meter available to test glucose levels
- Having several servings of quick-fix foods or drinks handy
- Wearing a medical identification bracelet or necklace
- Telling family, friends, and coworkers about the symptoms of hypoglycemia and how they can help if needed


For additional resources, contact your AstraZeneca Account Director.