

What the Numbers Mean: Interpreting Blood Glucose Readings

Your glucose numbers tell a story. Learning how to read them helps you take control of your diabetes.

Glucose is what fuels the body and is ordinarily maintained at stable concentrations in the blood.¹ In diabetes, blood glucose levels can fluctuate outside the healthy range, which is why regular monitoring is important. One of the main goals of diabetes management is keeping blood glucose concentrations as close to normal as possible.

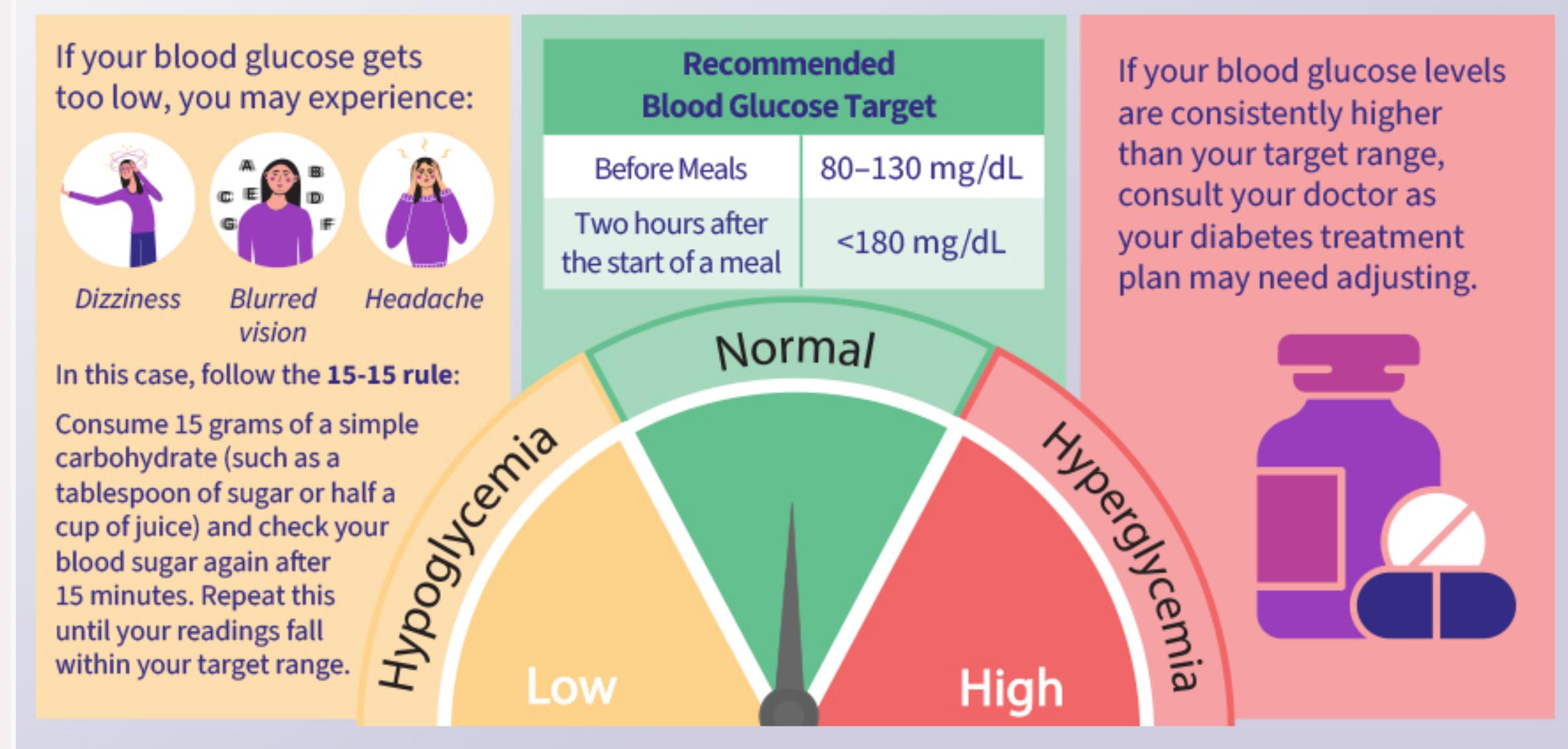
| Target Blood Sugar | Range |
|---|--------------------------------|
|  | Before meals 80–130 mg/dL |
|  | After meals <180 mg/dL |

Blood glucose levels can naturally vary depending on certain factors, like food. Taking blood glucose readings at specific times helps take these variations into account. Fasting blood sugar (FBS) refers to your blood glucose levels when you have not eaten. It is usually measured in the morning after a period of 8 to 12 hours without eating or drinking. Post-prandial blood glucose (PPBG), on the other hand, refers to blood glucose levels after eating. It is usually measured two hours after the start of a meal.

Home blood glucose monitors have made keeping track of blood glucose concentrations more accessible for people with diabetes. In general, a target of 80 to 130 mg/dL for FBS and < 180 mg/dL for PPBG among people with diabetes is suggested by clinical practice guidelines.² It is important to remember that these targets may change depending on different factors like your age or if you have any other diseases.

Your ideal blood glucose target is unique to you and can change over the course of your life depending on the situation. Consult your doctor to help determine the target range ideal for you.

Dialing in what treatment plan works for you takes time. Even then, uncontrolled changes in blood glucose levels may still occur. Work with your doctor and figure out a plan for those situations.



Individual targets may vary depending on age, comorbidities, and treatment plan. Please consult your healthcare provider for personalized guidance.

You may start to feel symptoms of hypoglycemia if your blood glucose levels drop below 70 mg/dL. In this case try to follow the 15-15 rule.³

If your blood glucose levels are consistently higher than your target range, known as hyperglycemia, consult your doctor to make adjustments to your diabetes treatment plan. If your blood glucose levels reach dangerously high levels (i.e., above 600 mg/dL) you may experience chest pains and tightness.⁴ Seek medical attention immediately.

Monitoring isn't just about numbers – it's about knowing when to take action. [Learn why monitoring matters](#) and discover tips to make monitoring easier.

1. McMillin JM. Blood Glucose. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths; 1990. Chapter 141. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK248>

2. American Diabetes Association. (n.d.). *Checking your blood sugar*. <https://diabetes.org/living-with-diabetes/treatment-care/checking-your-blood-sugar>

3. American Diabetes Association. (n.d.). *Signs, Symptoms, and Treatment for Hypoglycemia (Low Blood Glucose)*. Available from: <https://diabetes.org/living-with-diabetes/hypoglycemia-low-blood-glucose/symptoms-treatment>

4. Adeyinka A, Kondamudi NP. Hyperosmolar Hyperglycemic Syndrome. [Updated 2023 Aug 12]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK482142/>