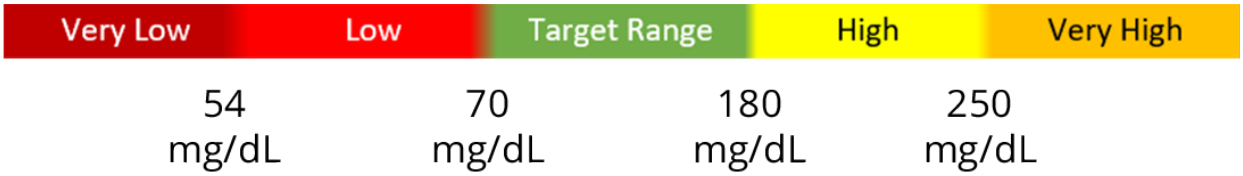
Your glucose meter and/or continuous glucose monitor (CGM) displays a number. You might wonder what the number "means".

It's important to look at these numbers without judgment. The numbers themselves are not "bad" or "good". Instead, they are an indication of whether some kind of action needs to be taken.



Taking Action

High or very high glucose is called hyperglycemia. Insulin needs to be given to bring the glucose down into the target range. Refer to the instructions given to you by your doctor to determine how much insulin to give (usually based on a correction factor or sliding scale). If the blood glucose level is above 300 (for injections) or 240 (for pumping), you will also need to check for ketones.

Low blood glucose is called hypoglycemia. This must be treated immediately using the Rule of 15.

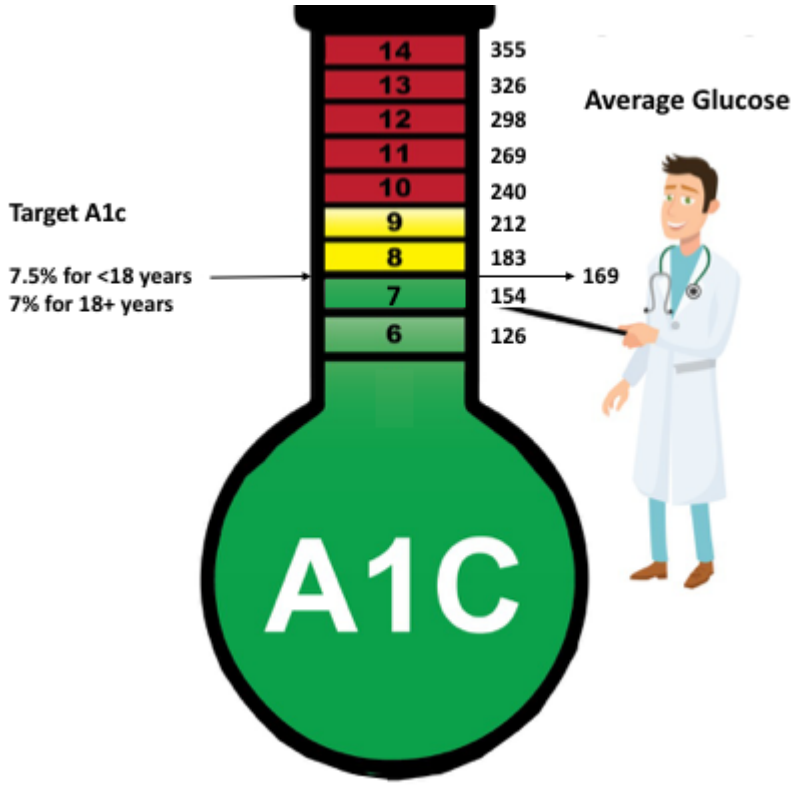
Very low blood glucose may be associated with confusion and can quickly progress to a loss of consciousness. This is an emergency and may require glucose gel or glucagon.

At every doctor's visit, your hemoglobin A1c is measured. You may be wondering how the numbers on your meter are related to your A1c. The chart below shows how your average meter or CGM readings over the last three months translate into your A1c.

Blood glucose range and A1c

Every 3 months at our doctor's visit, your hemoglobin A1c is measured. You may be wondering how the numbers on your meter are related to your A1c. The chart below shows

how your average meter or CGM readings over the last three months translate into your A1c.



Reviewed by Anastasia Albanese-O'Neill, PhD, APRN, CDCES on 11/26/25

This document is not intended to take the place of the care and attention of your personal physician or other professional medical services. Our aim is to promote active participation in your care and treatment by providing information and education. Questions about individual health concerns or specific treatment options should be discussed with your physician.

Recommended

Causes of Highs and Lows

What is Hyperglycemia?

What is Hypoglycemia?

Tracking and Reviewing Blood Glucose Data

Understanding Glucose Numbers

Sources

Blood sugar testing: Why, when, and how – Mayo Clinic

Know Your Blood Sugar Numbers: Use Them to Manage Your Diabetes — NIDDK

Research Articles

Translating the A1C Assay Into Estimated Average Glucose Values — Diabetes Care

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