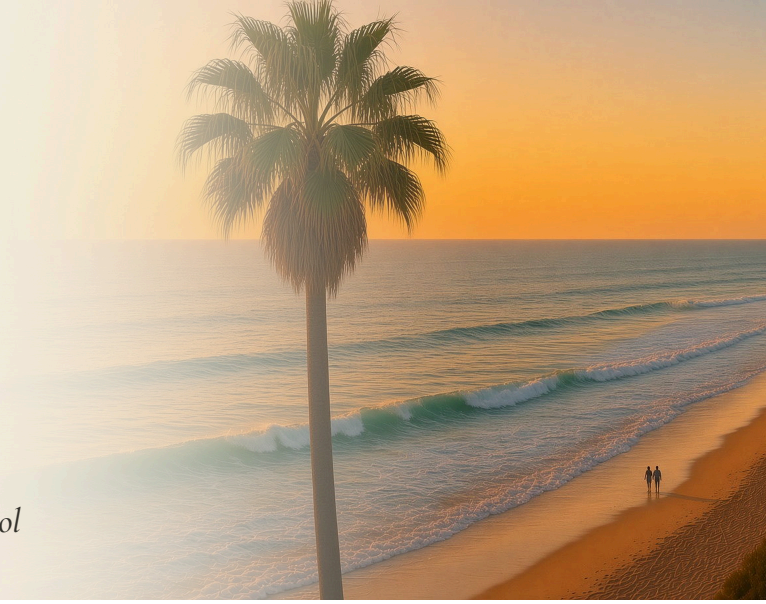
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# Your A1C Report Card

*What the number measures, how it grades your diabetes control and when your own target may sit higher or lower.*

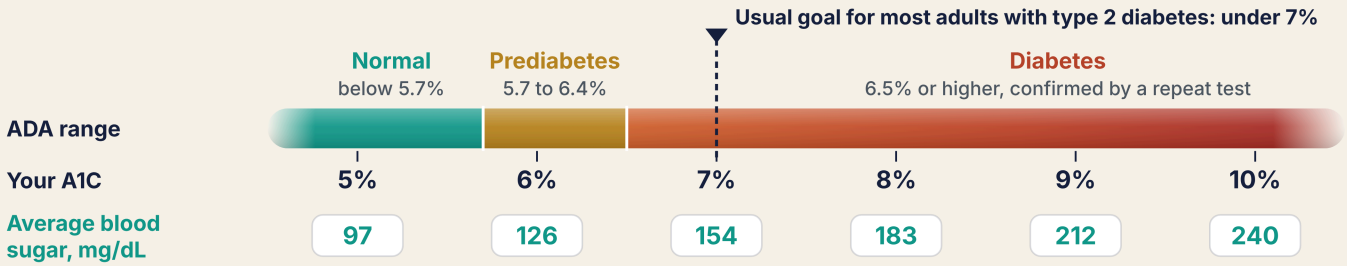
**2 to 3**
months of average blood sugar reflected in one A1C result

**<7%**
the usual A1C goal for most adults with type 2 diabetes

**58%**
less progression to type 2 diabetes with intensive lifestyle change than placebo, Diabetes Prevention Program

WHAT THE NUMBER MEASURES

## Sugar stuck to your red blood cells




As a rough rule, each 1% step in A1C is about 29 mg/dL of average blood sugar

Hemoglobin is the protein in red blood cells that carries oxygen. When blood sugar runs high, glucose sticks to it, and the A1C test measures the share of hemoglobin with glucose attached. Red blood cells live about three months, so the result reflects your average over that window. Each 1 percent rise in A1C means about 29 mg/dL more average blood sugar, which links your finger-stick readings to your lab result.

WHY THE NUMBER COUNTS

## A lower A1C means fewer complications

**Eyes, kidneys and nerves**
In type 1 diabetes, tight sugar control cut eye, kidney and nerve damage by about 60 percent in the DCCT trial.

**Heart attacks**
In type 2 diabetes, each 1 percent drop in A1C came with roughly a 14 percent lower risk of heart attack.

**The biggest gains**
Going from 10 down to 8 helps more than going from 7 down to 6. Getting out of very poor control counts most.

Prediabetes is linked to higher heart risk even before diabetes is diagnosed. It is the window where lifestyle change helps most.

**Lowest safe number**

The goal is the lowest A1C that is safe for you. A low A1C reached through frequent low blood sugars is a red flag, so tell your doctor how often your sugar runs low.

READING YOUR RESULT

# Your grade, your target and what to do

| 5 | 6 | 7 | 8 | Above 8 |
|---|---|---|---|---|
| Grade A | Grade B | Grade C | Grade D | Grade F |
| Normal, non-diabetic range | Excellent control, or the prediabetes range | The standard target, with room to improve | Above target, with a real rise in complication risk | Poor control, time to step up treatment |

This report card is for most people with type 2 diabetes. It is a simplification, and your own target may differ.

## YOUR PERSONAL TARGET

tighter or looser than 7%

| | |
|---|---|
| **Most adults with type 2 diabetes** | Under 7 percent. |
| **Younger, with few other conditions** | Perhaps below 6.5 percent, if it can be reached safely. |
| **Frail older adults and others** | 7.5 to 8.5 percent for frail older adults and people with past severe low blood sugar, advanced kidney disease or limited life expectancy. |

## WHEN A LOW NUMBER IS A PROBLEM

especially below 6 percent

| | |
|---|---|
| **On insulin or a sulfonylurea** | These can drive dangerous low blood sugar. Serious lows raise heart risk and cause falls, injuries and a decline in thinking in older adults. |
| **On other treatment** | A low A1C reached with an SGLT2 inhibitor, a GLP-1 receptor agonist, metformin and lifestyle is a real accomplishment. |

## TESTING AND LOWERING IT

| | |
|---|---|
| **How often** | Every six months if you are at goal on steady treatment. Every three months if treatment changed or you are above goal. |
| **When it can mislead** | Anemia, kidney disease, inherited hemoglobin variants such as sickle cell trait, recent transfusion or blood loss, and pregnancy. A1C also hides daily swings and lows, which a continuous glucose monitor shows. |
| **If yours is above target** | Losing 5 to 7 percent of body weight can drop A1C by a full point. Regular aerobic exercise helps. SGLT2 inhibitors such as empagliflozin and dapagliflozin and GLP-1 receptor agonists such as semaglutide also protect the heart and kidneys. |

## HOW FAST WILL IT CHANGE?

Because A1C reflects about three months of blood sugar, changes take about three months to fully show. Medicines are often what keeps the number at target, so don't stop them without your doctor.

## READ THE FULL ARTICLE

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a1c-diabetes-report-card

For education only, and not a substitute for advice from your own physician. Sources include the ADA Standards of Care in Diabetes 2024, the DCCT (NEJM 1993), UKPDS 35 (BMJ 2000), the Diabetes Prevention Program (NEJM 2002) and the A1C to average glucose study (Diabetes Care 2008).

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