

All About Blood Glucose for People with Type 2 Diabetes

Toolkit No. 4

Keeping your blood glucose (sugar) in the recommended target range can prevent or delay the long-term health problems caused by diabetes. Most of the steps needed to take care of diabetes are things you do yourself:

- using a meal plan
- being physically active
- taking medications
- trying to reach your blood glucose targets most of the time
- keeping track of your blood glucose numbers using a blood glucose meter and the results of your A-1-C checks

Why should I try to keep my blood glucose on target?

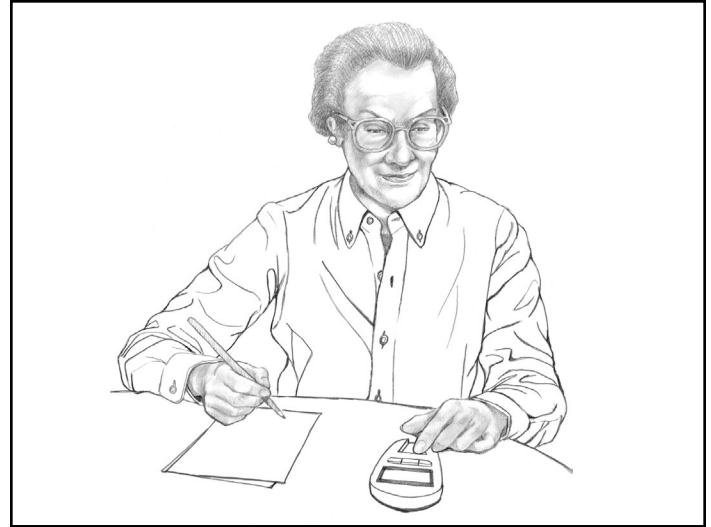
The closer your blood glucose stays to your target range, the more you'll lower your risk of blindness or diabetic eye disease, kidney disease, foot problems, nerve damage, tooth and gum disease, and skin problems. You may also lower your risk for heart attack or stroke.

What makes my blood glucose levels rise or fall?

Blood glucose levels rise and fall throughout the day. One key to taking care of your diabetes is understanding why they rise or fall. If you know the reasons, you can take steps to help keep your blood glucose on target.

What can make blood glucose rise?

- a meal or snack with more food or more carbohydrates (carbs) than usual
- inactivity
- not enough diabetes medication
- side effects of other medications
- infection or other illness
- changes in hormone levels, such as during menstrual periods
- stress



Many people use a meter to check their blood glucose several times a day.

What can make blood glucose fall?

- a meal or snack with less food or fewer carbs than usual
- drinking alcoholic beverages, especially on an empty stomach
- missing a meal or snack
- extra activity
- too much diabetes medication
- side effects of other medications

What are the blood glucose targets for people with diabetes?

The targets recommended by the American Diabetes Association (ADA) are listed below. Talk with your health care team about your personal targets.

ADA Targets for Blood Glucose	My Usual Results	My Targets
Before meals: 90 to 130 mg/dl	_____ to _____	_____ to _____
2 hours after the start of a meal: less than 180 mg/dl	less than _____	less than _____

What's the best way to keep track of my blood glucose levels?

Checking your blood glucose will tell you whether you're reaching your blood glucose targets. There are two ways to do it:

- **using a blood glucose meter** to learn what your blood glucose is at a particular moment
- **getting a blood glucose check called an A-1-C** at least twice a year

Both ways can be useful to you.

Using a blood glucose meter

Many people use their meter to check their blood glucose several times a day. Talk with your health care team about when and how often to check your blood glucose. They can give you a record book where you can write down your blood glucose numbers. You can learn how to use this information to make decisions about food, physical activity, and medications.

Your results tell you how well your diabetes care plan is working. You'll be able to look at your record book and see patterns—similar results over and over. Looking at these patterns can help you and your health care team fine-tune your diabetes care plan in order to reach your targets.

Getting an A-1-C blood glucose check

The A-1-C check is the blood glucose check "with a memory." It tells you what your average blood glucose level has been for the past 2 to 3 months. If your number is 7% or higher, you may need a change in your diabetes care plan.

Translate your A-1-C

Find your A-1-C number on the left. Then, check the chart to learn your average blood glucose for the past 2 to 3 months.

A-1-C	Average blood glucose
6%	135
7%	170
8%	205
9%	240
10%	275
11%	310
12%	345

My A-1-C

My last A-1-C was _____.

My target for my A-1-C is _____.

My next A-1-C check will be _____.
(date)

What if my blood glucose is frequently too high?

Call your health care provider for an early appointment if your blood glucose numbers are often higher than your targets. Talk with your health care team about recommended changes in your meal plan, your physical activity, or your diabetes medications when high blood glucose occurs.

What if my blood glucose is too low?

Low blood glucose, also called hypoglycemia, occurs when your blood glucose level drops below 70 mg/dl. Symptoms include hunger, shakiness and nervousness, sweating, light-headedness, sleepiness, confusion, and anxiety.

If you think your blood glucose is too low, use your meter to check it. If the result is 70 mg/dl or below, follow these treatment guidelines to bring it back up to a safer range. Have one of the items in this list right away to raise your blood glucose:

- 2 to 5 glucose tablets
- ½ cup (4 ounces) of fruit juice
- ½ cup (4 ounces) of a regular (not diet) soft drink
- 8 ounces of milk
- 5 to 7 pieces of hard candy
- 2 teaspoons of sugar or honey

After 15 minutes, check your blood glucose again. If it's still below 70 mg/dl, have another serving. Repeat these steps until your blood glucose is at least 70 mg/dl.

What should I do about frequent low blood glucose?

If your blood glucose is often low, you may need a change in your meal plan, physical activity, or diabetes medications. Keep track of low blood glucose episodes in your record book and note possible causes, such as unexpected physical activity. Then talk it over with your health care team.

