

# Managing Your Daily Blood Glucose ("Pattern Control")



Allina Health

# Blood Glucose Levels

**Fasting:** Blood glucose range \_\_\_\_\_ mg/dL

## Goals:

- Blood glucose range before meals \_\_\_\_\_ mg/dL
- Blood glucose range 2 hours after meals \_\_\_\_\_ mg/dL

**Test your blood glucose \_\_\_\_\_ times each day:**

- |  |   |
|--|---|
| <input type="checkbox"/> before breakfast        | <input type="checkbox"/> before dinner        |
| <input type="checkbox"/> 2 hours after breakfast | <input type="checkbox"/> 2 hours after dinner |
| <input type="checkbox"/> before lunch            | <input type="checkbox"/> at bedtime           |
| <input type="checkbox"/> 2 hours after lunch     | <input type="checkbox"/> other: _____         |

## Other goals:

- A1c level of 7 percent or less
- blood pressure less than 140/90
- other: \_\_\_\_\_.

# Managing Your Daily Blood Glucose

## What is blood glucose pattern control?

Your diabetes management plan includes eating healthful foods, doing regular physical activity and exercise, and checking your blood glucose. You may also need to take diabetes medicines.

By writing down and looking carefully at your blood glucose levels over a period of time, you can start to see patterns of when your blood glucose is out of your target range. Making small changes in your eating, activity or medicines (if you take them) can help you:

- maintain or improve your blood glucose levels
- prevent problems (complications) of diabetes
- live well with diabetes.

## Why is pattern control important?

Keeping your blood glucose levels under control using pattern control can help you:

- keep your A1c at 7 percent or less, which can help prevent problems such as heart, kidney, nerve or eye disease
- notice high and low blood glucose levels throughout the day so you can make small changes to bring your blood glucose level back into your target range quickly and safely. When your blood glucose levels are in control, you will likely:
  - have more energy to do your daily activities
  - sleep well at night
  - feel healthier overall and have a more positive attitude about your health.

# How to Manage Your Daily Blood Glucose with Pattern Control

## What do you need?

You will need the following:

- health care team, including:
  - primary care provider
  - diabetes nurse educator
  - diabetes dietitian
- blood glucose meter
- blood glucose record book (Ask your health care team for a copy if you do not already have one.)
- notebook or journal (if you need more space to write than your record book provides)
- highlighter or colored pen
- blood glucose target range
- physical activity and exercise plan
- meal plan.

Talk with your primary care provider if you need help getting any of these things.

## What are the steps to pattern control?

### 1. Gather information

- Check your blood glucose at the recommended times each day, which may include:

- before and 2 hours after breakfast
- before and 2 hours after lunch
- before and 2 hours after dinner
- bedtime.

Write your blood glucose numbers in your record book.

- Write down what you are eating for 2 or 3 days. The days you choose should be days you are eating foods you typically eat. This can help you keep track of how many carbohydrates you are eating and how it affects your blood glucose. It is important to do this 2- or 3-day tracking regularly (for example, once a month).
- Write down your daily physical activity when starting a new exercise plan and regularly after it is routine. Include information about:
  - what activity you are doing
  - what time you begin each activity
  - how long you do each activity.
- You may also want to write down when you have taken your diabetes medicines (if you take medicines) each day.
- Write down notes about when you do and do not feel well. For example, write notes about sick days or stress.
- Use a highlighter or colored pen to mark any blood glucose numbers that are higher and lower than your target range.

Turn to pages 6 to 7 to see an example of what your blood glucose record book may look like. 3

## 2. Look at your patterns and ask yourself a few questions.

Is your fasting or before-meal blood glucose level high for 3 days in a row?  Yes  No

Are you eating snacks too close to (less than 2 hours of) your next meal?  Yes  No

Are you able to follow your physical activity and exercise plan?  Yes  No

## 3. Treat low blood glucose levels right away and think about the cause of each. It may be helpful to ask yourself the following questions:

Did you delay, skip or eat less carbohydrate than usual at your last meal?  Yes  No

Did you do more physical activity or exercise than usual?  Yes  No

Did you take your medicines as prescribed?  Yes  No

### How to Treat Low Blood Glucose

- Eat or drink 15 grams of a carbohydrate such as 4 glucose tablets,  $\frac{1}{2}$  cup fruit juice or regular soda, or 1 cup low-fat milk.
- Wait 15 minutes and re-check your blood glucose. It should be at or above 80 mg/dl.

#### **4. Make small lifestyle changes.**

Changes you can do yourself may include:

- how many carbohydrates you eat and drink
- what time you are eating or drinking carbohydrates
- increasing or adjusting the schedule of your physical activity and exercise.

You may also talk with your primary care provider or diabetes nurse educator to make changes to your:

- medicines
- blood glucose target range.

#### **5. Follow up with your health care team.**

- Make an appointment with your primary care provider:
  - every 3 months if your A1c is above 7 percent
  - every 6 months if your A1c is below 7 percent.
- Make an appointment with your diabetes dietitian and diabetes nurse educator (or check with your clinic to see if a class is available) once each year to:
  - review your daily blood glucose management (pattern control)
  - talk about what is working for you
  - talk about any problems or challenges you are having
  - make changes to your lifestyle, medicines or blood glucose target range (if needed).

### **Whom to Call with Questions**

Call your primary care provider or diabetes educator if you have questions about pattern control.

## Example of Pattern Control

### Blood Glucose Target Ranges

Fasting and before-meal  
blood glucose target range:

80 to 130 mg/dL

2 hours after starting your meal  
blood glucose target:

less than 160 mg/dL

Date	Breakfast		Lunch		Dinner		Notes (diet, exercise, ketones, stress, sick days)
	Before	After	Before	After	Before	After	
Thur	120	201	112	222	170	300	Stress from work, ate out for dinner
Fri	103	177	123	166	128	220	Exercised after lunch, ate ½ cup ice cream before bedtime
Sat	129		122	201	166	224	

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## Example of Pattern Control

### Blood Glucose Target Ranges

Fasting and before-meal  
blood glucose target range:

80 to 130 mg/dL

2 hours after starting your meal  
blood glucose target:

less than 160 mg/dL

Date	Breakfast		Lunch		Dinner		Notes (diet, exercise, ketones, stress, sick days)
	Before	After	Before	After	Before	After	
Mon	128				130	186	No snack
Tues	140				125	168	Ate popcorn before bedtime
Wed	150				130	203	No snack

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Food and Physical Activity Diary**      Date: \_\_\_\_\_

<b>Meal</b>	<b>Food/ beverage</b>	<b>Amount</b>	<b>Fat/carbs grams</b>	<b>Physical activity/ exercise</b>
<b>Breakfast</b>				
<b>Lunch</b>				
<b>Dinner</b>				
<b>Snacks</b>				

# Food and Physical Activity Diary

Date: \_\_\_\_\_

Meal	Food/ beverage	Amount	Fat/carbs grams	Physical activity/ exercise
Breakfast				
Lunch				
Dinner				
Snacks				



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