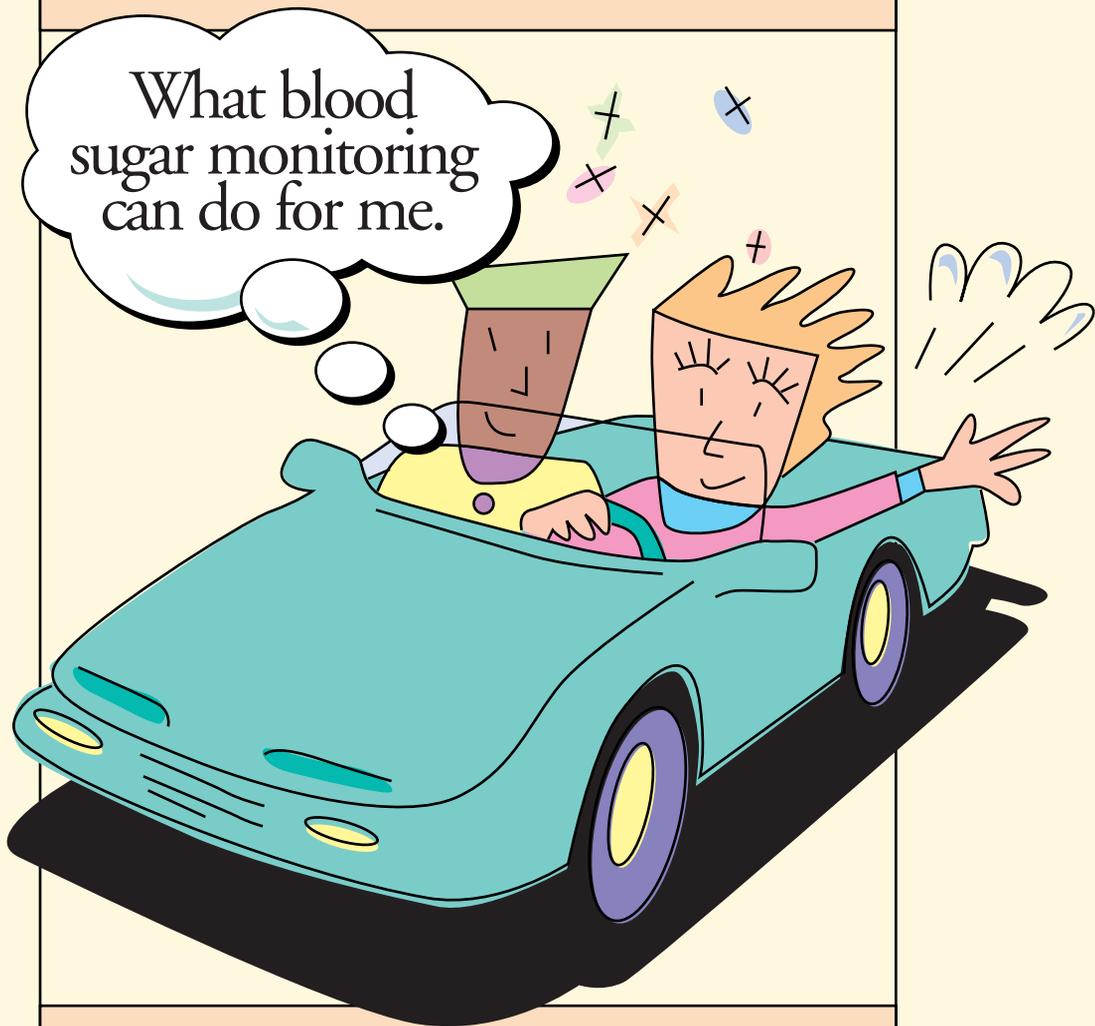


# Blood Sugar Monitoring Owner's Manual

What blood  
sugar monitoring  
can do for me.



When you need directions, blood sugar monitoring gives you information to get through traffic and past the roadblocks of diabetes management.

# Why it is important to check your blood sugar.

Blood sugar monitoring helps you, your family and your health care team manage your diabetes.

**T**he information you get from blood sugar monitoring helps create the best and safest diabetes management program. You, your family and your health care team believe that checking your blood sugar is important. In this booklet you will read about why it is important and learn strategies to keep blood sugar monitoring a routine part of your diabetes treatment plan. Let's start with a few facts:

**1** When you check your blood sugar, you get information that

helps you to react appropriately and quickly.

**2** There is no such thing as a *bad* blood sugar; any result you get is *good* information.

**3** Blood sugar levels always vary. They vary from person to person and from time to time in the same person. So you should expect to see wide ranges of blood sugar results.

Monitoring your blood sugar lets you know when and how to react to different situations in your life.



This sign tells travellers where to find information. You will find helpful information in this guide, too.

# Blood sugar monitoring: Your diabetes safety belt.

Just as safety belts protect you, blood sugar information can help preserve your well-being.

**I**n the following pages you will learn why you should use blood sugar monitoring to keep you on the road towards successful diabetes management. You will learn the importance of:

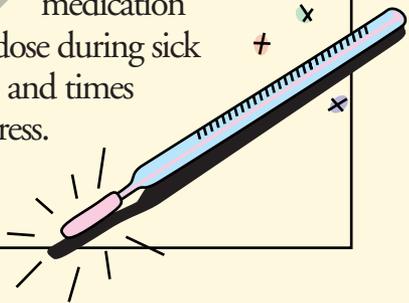
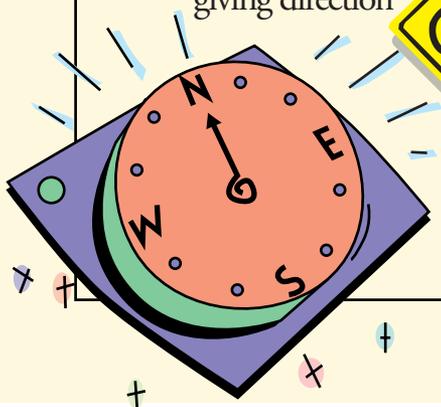
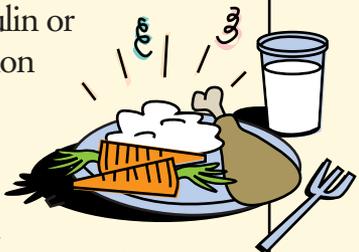
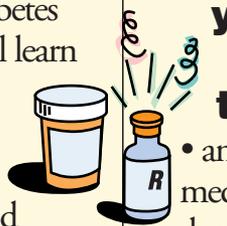
- starting to monitor;
- staying on track with monitoring; and
- getting back on track with monitoring.

Blood sugar monitoring is like a map or a compass giving direction

and providing information so you can find your way.

## **Monitoring helps you and your health care team choose:**

- an insulin or medication dose;
- a meal plan;
- a snack for exercise; and
- an insulin or medication dose during sick days and times of stress.



# Why and how you check your blood sugar.

## Why you check your blood sugar.

The information you get from blood sugar monitoring can help you and your health care team. It helps you to make daily decisions about your insulin or medication dose, meal plan and exercise.

It gives you greater lifestyle flexibility, like sleeping late; choosing where, what, and when you eat; and when and how much physical activity you get. It protects you today and in the future from the symptoms and difficulties brought about by high and low blood sugars.



## How you check your blood sugar:

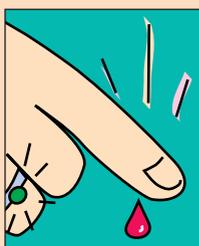
Check your blood sugar using a meter with matching strips or visual blood sugar strips alone. In less than 2 minutes, you know your blood sugar. You'll need:



A meter with blood sugar strips or visual blood sugar strips alone. Follow the directions for your meter. Review the basics of operating your meter with your diabetes educator once a year;



A lancet or lancet device to prick your fingertip;



A drop of blood from your fingertip; and



A logbook to record your information.

# When to check your blood sugar.

## Check your blood sugar:

✓ Before you take insulin.

✓ Before, sometimes during, and/or after exercise.

✓ When you want to change your meal plan.

✓ When you are shaky, tired, sweaty, hungry, confused, or have a headache and you

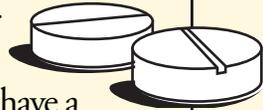
want to know if your blood sugar is low.

✓ When you are sick, thirsty, hungry, going to the bathroom often, or tired and you want to know if your blood sugar is high.

✓ When you have a cold, the flu, or are vomiting and you want to adjust your insulin or medication when you are sick.

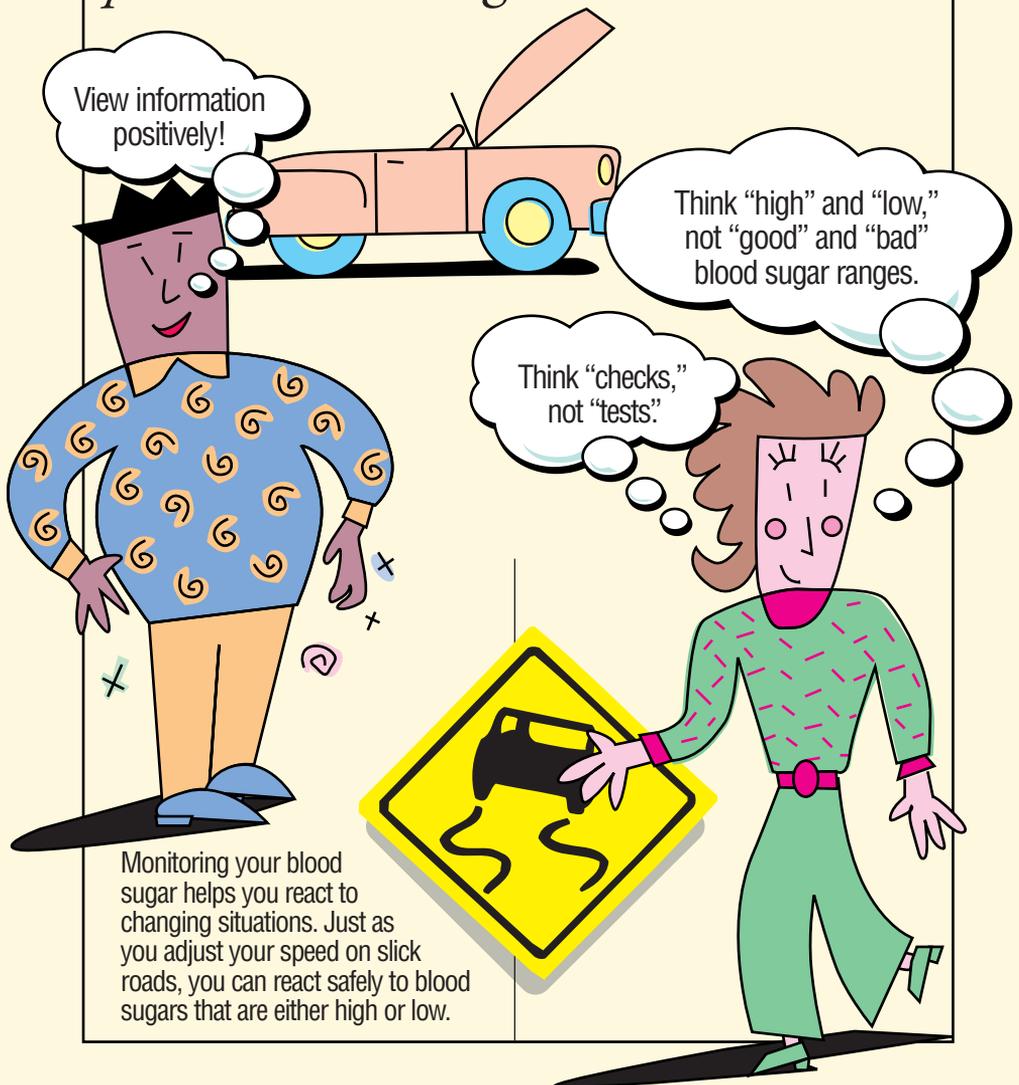
✓ When you and your health care team want to improve your overall blood sugar levels.

✓ After you eat if you are taking the new insulin, lispro, a very fast-acting insulin.



# Keeping things running smoothly under “your hood.”

Checking your blood sugar provides *positive* feedback, regardless of the number.



# Keys to blood sugar monitoring success.

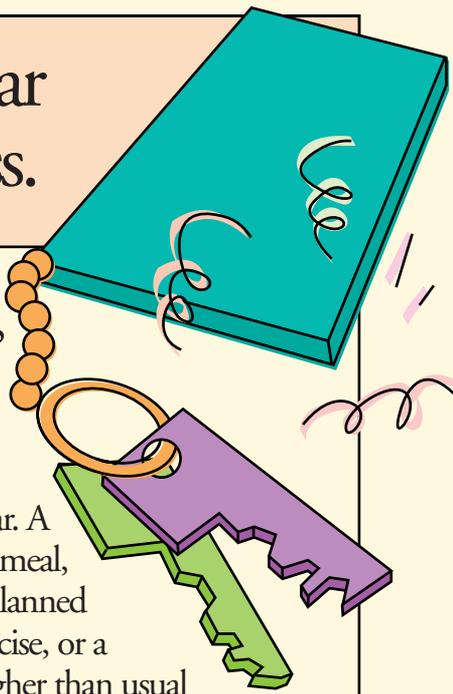
Think “high” and “low,” not “good” or “bad.”

**T**ry not to think about blood sugar levels as “good” or “bad”. “Good” and “bad” are judgments of success or failure. Managing your blood sugar isn’t about success or failure. It’s about using information to maintain your well-being.

Illness, stress or extra food may increase your blood

sugar. A late meal, unplanned exercise, or a higher than usual

insulin dose may decrease your blood sugar. Instead of blaming yourself or feeling ashamed, use the information from your blood sugar checks to react appropriately.



# Keys to blood sugar monitoring success.

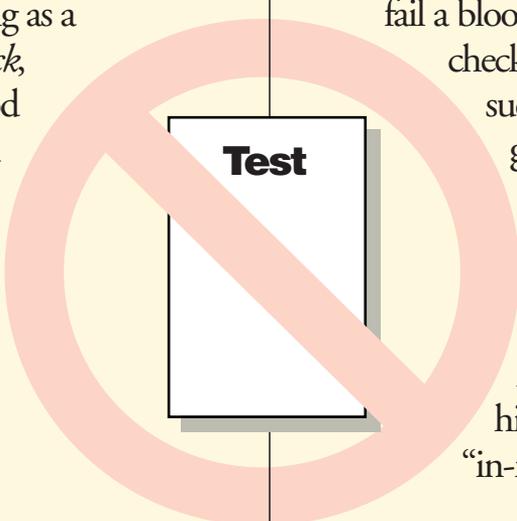
Think “blood check,”  
not “blood test.”

**I**t’s important for you, your health care team and your family and friends to think about blood sugar monitoring as a blood *check*, not a blood *test*. Blood sugar checks are not passed or failed, like tests. All results—

numbers like 60, 114, 245, or 367 mg/dL—give useful information.

Remember—you can’t fail a blood sugar check. You

succeed by getting the information, whether the number is high, low, or “in-range.”



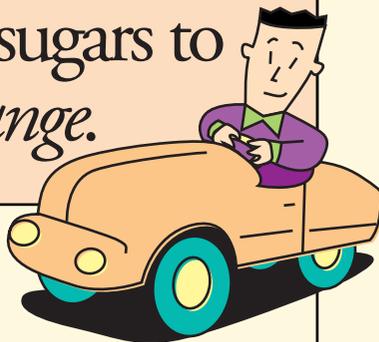
**Test**



INFORMATION AHEAD



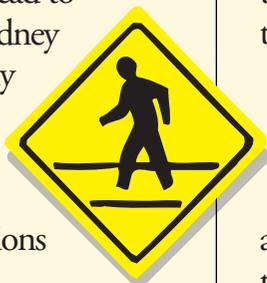
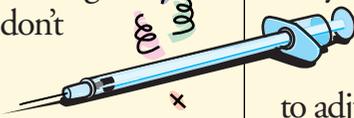
# Expect your blood sugars to vary, so aim for a *range*.



**T**ry to avoid disappointment.

Expect your blood sugars to vary over a broad range, not a narrow range like 70-110 mg/dL. Aim for success by avoiding negative feelings about out-of-range blood sugars.

A high blood sugar should not cause panic or fear. React to the high blood sugar, don't just hit the brakes! It is important to remember that high blood sugars over a brief period of time do not automatically lead to blindness or kidney failure. It is only after *years* of out-of-range blood sugars that complications may develop.



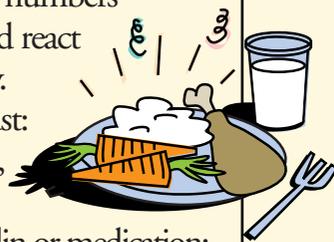
Checking blood sugars provides you with important information to help you manage your diabetes safely and keep you out of the breakdown lane.

Checking your blood sugar gives you options for a more flexible lifestyle. You and your health care team can use these numbers

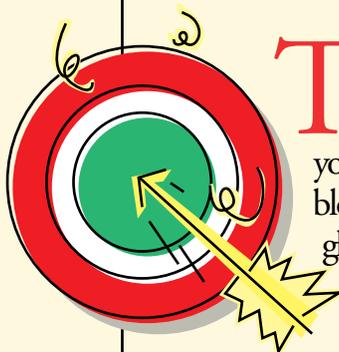
to adjust and react appropriately.

You can adjust:

- the amount, timing, and type of insulin or medication;
- the amount and timing of food (especially carbohydrates); and
- your exercise or physical activity so that you can react to schedule changes, stress, and illness.



# With your team, set realistic target ranges as your goal.



**T**ry to keep close to your target blood sugar and glycohemoglobin ranges so you will feel better physically and emotionally today and in the future. Use blood sugar monitoring to

keep track of when, how often, and by how much your blood sugars vary from this range. Try to see patterns of “out-of-range” blood sugars and then work with your health care team to develop ways to reduce the frequency of high and low blood sugars. Set these ranges with your health care team.

Glycohemoglobin is also called hemoglobin A<sub>1c</sub> or A<sub>1c</sub>, glycated hemoglobin, or glycosylated hemoglobin. It measures the average of your blood sugars over the past 2-3 months. It is like a “blood sugar with a memory.” It should be checked 2-4 times a year at your doctor’s office.

Blood sugar target ranges			
	Fasting and before meals	Before bedtime	Before exercise
<b>Your target ranges</b>			

Glycohemoglobin target ranges			
	A <sub>1c</sub>	A <sub>1c</sub>	Average blood sugar
<b>Your target ranges</b>			

**Note:** Our lab measures \_\_\_\_\_ A<sub>1c</sub> \_\_\_\_\_ A<sub>1c</sub>

Our lab reference values fall between \_\_\_\_\_ and \_\_\_\_\_

# Directions to help you find your way.

**W**hen you arrive in a new city, it is expected that you will need to ask for help and direction. You don't blame yourself because you don't know the roads.

One day, you will also feel lost with your blood sugar numbers. Then, you'll need to ask for directions and get help from your health care team. They know the territory. And they know you.

New medications and new technologies give you and your health care team many choices to help you get back on your way again. Continuing to check your blood sugar helps you

and your health care team decide the best route for you.

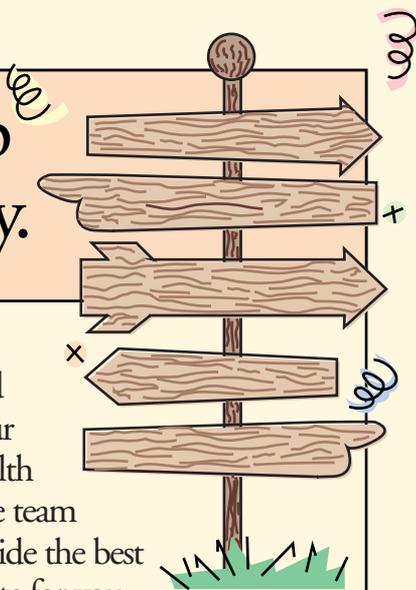
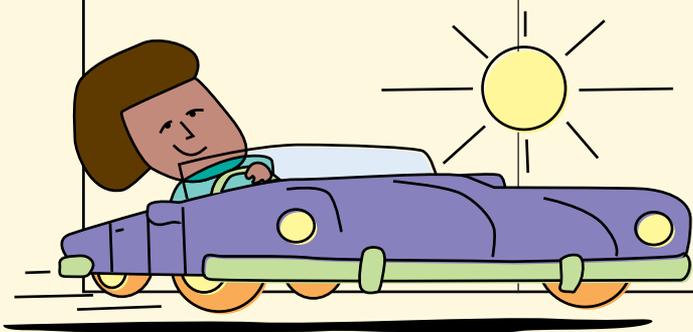
For example, you may need:

- a change in medication dose or timing;
- a change in when you eat;
- a change in the timing or amount of exercise; or
- to start a brand new medication.

Decide with your health care team how to best change your treatment plan according to your blood sugar results.



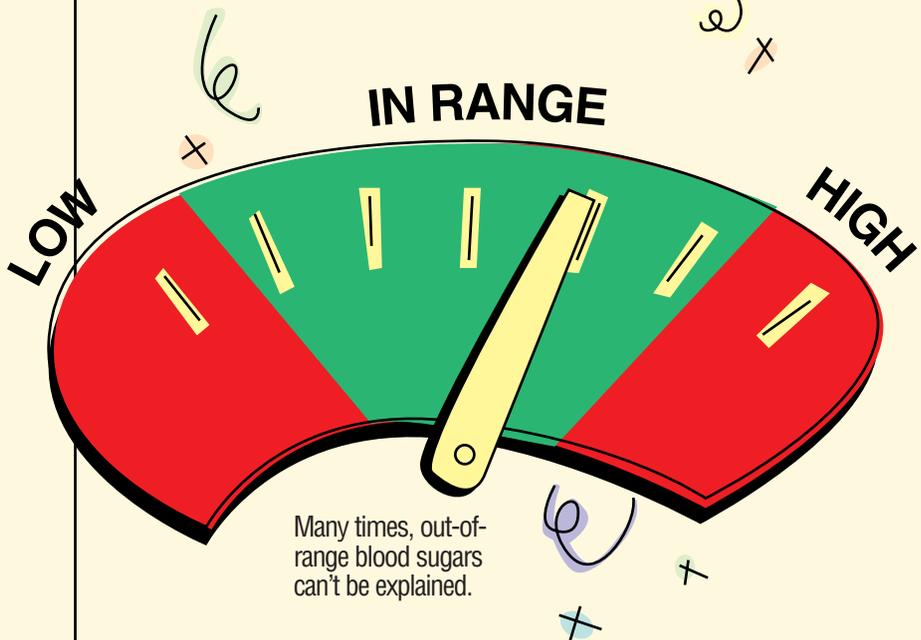
**Your personal  
rules of the road**



# Out-of-range blood sugars are common.

Most people with diabetes get out-of-range blood sugars at times.

- Out-of-range blood sugars may make you feel bad physically and out of control emotionally. Like so many others, you may feel upset, angry, frustrated or afraid.
- Don't be tough on yourself because of an out-of-range blood sugar reading.



# Use your energies to react appropriately.

## Don't waste energy getting mad or upset.

- Many times, out-of-range blood sugars can't be explained. Scolding yourself, feeling depressed, lying to yourself or venting anger at a loved one (or being yelled at or accused in return) won't help or solve any diabetes management problems.
- Redirect your energy.
- Plan ahead.

Consider carrying your blood sugar meter as well as your insulin or medication

with you the next time you leave home.

- Diabetes is not a do-it-yourself disease—ask your family, friends, and health care team for help and support.



Remember to carry your blood sugar meter and your insulin or medication when you leave home.

# Understanding potential roadblocks to monitoring.

## Blood sugar monitoring burnout.

Most of us tire of everyday tasks. Not wanting to check blood sugars day-in and day-out is understandable.

You should try to remember what this tool can do for diabetes care.

If you think you might suffer from “diabetes burnout,” ask your health care team for help.

Some people with diabetes burnout have said:

- “It doesn’t matter what I do, my sugars are still out-of-range.”
- “I feel shamed and blamed when I get out-of-range numbers.”
- “I don’t know what to do anyway.”
- “I’m tired of having diabetes.”

## Blood sugar monitoring overdrive.

There is no magic number of times each day to check your blood sugars. Overall

Can you check your blood sugars too few times a day? *Yes.* Can you check your blood sugars too many times a day? *Yes.* Work with your health care team to determine how often you should check your sugars.

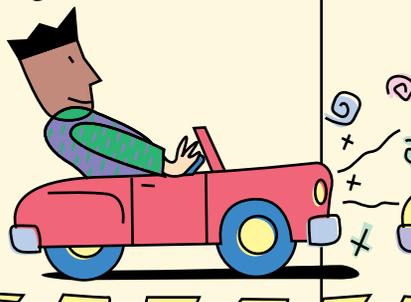


diabetes management improves when you check 2 or more times daily.

Most people with diabetes benefit from checking 2-6 blood sugars per day. But if you are checking your blood sugar more than 6 times a day, you may be in “blood sugar monitoring overdrive.”

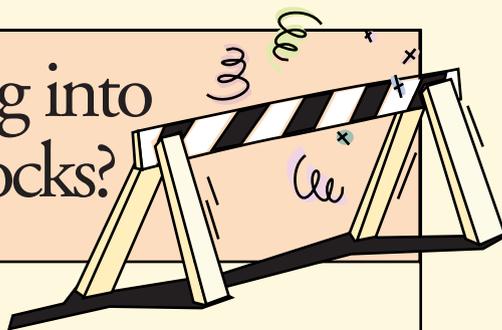
Some people in diabetes overdrive have said:

- “I’m afraid of low blood sugars.”
- “I’m terrified of complications from high blood sugars.”



If you believe you’re in diabetes overdrive, ask your health care team for help.

# Are you running into diabetes roadblocks?



Are you running into common blood sugar monitoring roadblocks? Take this simple test and see.

Roadblock	Yes	No
No time?		
Too expensive?		
Too painful?		
Too annoying?		
Too tiring?		
Don't know what to do with the information?		
"Diabetes Burnout"?		
Too afraid?		
Too hopeless?		
Checking blood sugars more than 6 times a day?		

**Score:** If you have answered "Yes" to any of the questions above, ask your health care team for help in overcoming your diabetes roadblocks. Just don't stop checking your blood sugars.

# What blood sugar monitoring can do for you.

**S**tudies have shown that monitoring your blood sugar and using the information provide more freedom and options in your diabetes management plan. If you run into roadblocks, suffer from burnout, and/or find yourself in overdrive, it may help to talk with a member of your health care team about:

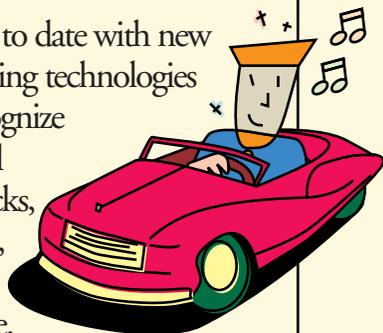
- Your roadblocks to blood sugar monitoring and ways to get past them.
- Ways to avoid blood sugar monitoring burnout.
- How to decrease blood sugar monitoring overdrive.

In your journey through life with diabetes, you will have to readjust at times and check in for a tune-up with your health care team. It is important to understand blood sugar monitoring,

keep up to date with new monitoring technologies and recognize potential roadblocks, burnout, and overdrive.

You and your health care team can develop ways to keep you on the road to wellness.

Today's blood sugar meters are remarkable tools; tools that can help you lead a healthy life today—and in the future.



# To learn more...



These materials can help you use blood sugar monitoring to manage diabetes and give you greater flexibility:

**The Joslin Guide to Diabetes**  
**A Program for Managing Your Diabetes**

by Richard S. Beaser, M.D.,  
with Joan V.C. Hill, R.D., C.D.E.

Available from:  
Joslin Diabetes Center  
One Joslin Place  
Boston, MA 02215  
(617) 732-2695

**Caring for Young Children Living with Diabetes, Parent Manual**

and

**Caring for Young Children Living with Diabetes, Professional Manual**

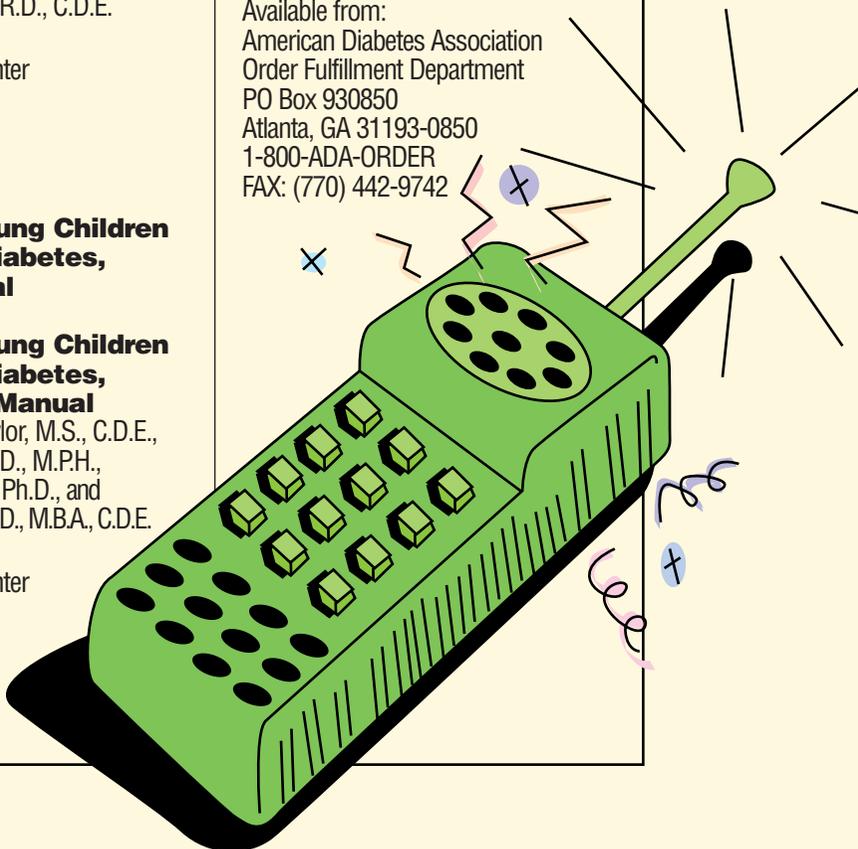
by Margaret T. Lawlor, M.S., C.D.E.,  
Lori M.B. Laffel, M.D., M.P.H.,  
Barbara Anderson, Ph.D., and  
Anna M. Bertorelli, R.D., M.B.A., C.D.E.

Available from:  
Joslin Diabetes Center  
One Joslin Place  
Boston, MA 02215  
(617) 732-2695

**Right From the Start Insulin-Dependent Diabetes**  
and

**Right From the Start Non-Insulin-Dependent Diabetes**

Available from:  
American Diabetes Association  
Order Fulfillment Department  
PO Box 930850  
Atlanta, GA 31193-0850  
1-800-ADA-ORDER  
FAX: (770) 442-9742



## My health care team is:

Doctor: \_\_\_\_\_

Phone: \_\_\_\_\_

Nurse/educator/nutritionist: \_\_\_\_\_

Phone: \_\_\_\_\_

Behavior specialist: \_\_\_\_\_

Phone: \_\_\_\_\_

My last doctor visit was: \_\_\_\_\_

My next doctor visit is: \_\_\_\_\_

My last Diabetes Educator visit was: \_\_\_\_\_

My next Diabetes Educator visit is: \_\_\_\_\_

Your health care team can guide your  
treatment. Together, you can find your way.

This booklet has been developed by:  
M. Lawlor, M.S., C.D.E., B. Anderson, Ph.D., and L. Laffel, M.D., M.P.H.



**Joslin  
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