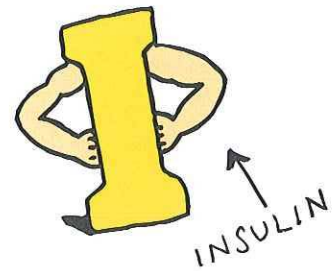
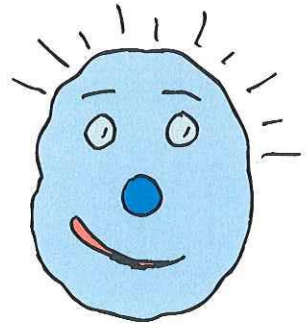


# WHAT IS DIABETES?

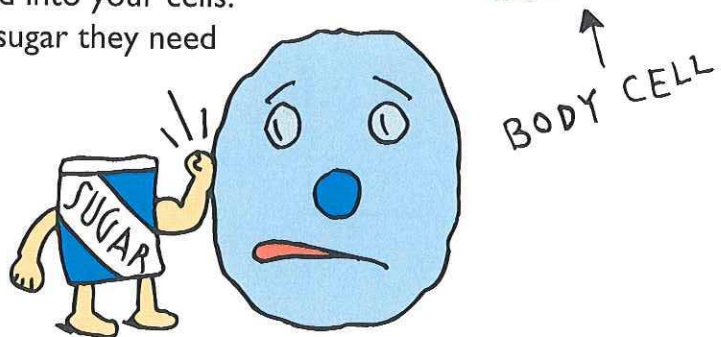
Diabetes means you have too much sugar in your blood. High blood sugar problems start when your body no longer makes enough of a chemical, or hormone, called insulin.



Your body changes much of the food you eat into a type of sugar. This sugar travels in your blood to all the cells in your body. Your body cells need the sugar to give you energy.



Insulin helps sugar move from your blood into your cells. Without insulin, your cells can't get the sugar they need to keep you healthy.

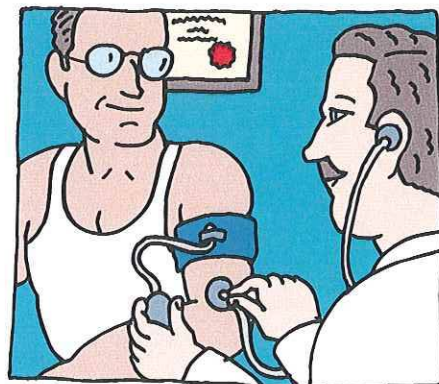


By moving sugar from your blood to your body's cells, insulin helps keep your blood sugar level normal (not too high; not too low). When you don't have enough insulin to lower high blood sugar levels, you have diabetes.

No one knows what causes diabetes. You can't catch diabetes and you can't give it to someone else.

Diabetes can, and must, be treated. High blood sugar levels can cause serious health problems.

A simple test can tell you if you have diabetes. Talk to your doctor or health clinic for more information.



# HIGH BLOOD SUGAR (HYPERGLYCEMIA)

Keeping your blood sugar under control is important. Too much sugar in your blood, for too long, can cause serious health problems.

**Common Causes:** Too much food, not taking enough insulin or diabetes pills, being less active than normal, stress or illness.

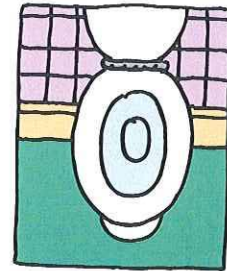
## Symptoms include:



Thirsty all the time



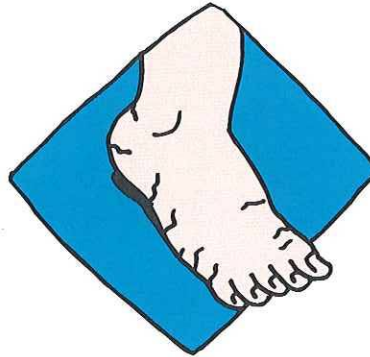
Blurry vision



Need to urinate often



Weak or tired

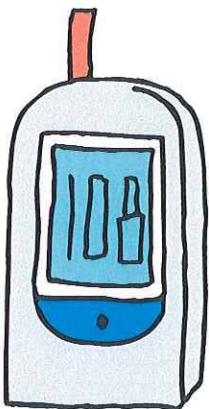


Dry skin



Often hungry

## What to do:



- Check your blood sugar often
- Continue to take your medicine
- Follow your meal plan
- Drink lots of water
- Exercise – if you can.

If your blood sugar is higher than your goal for 3 days and you don't know why, call your doctor or health clinic right away.



# LOW BLOOD SUGAR (HYPOGLYCEMIA)

A low blood sugar can happen quickly. If not treated right away, low blood sugar can cause a medical emergency. You can even pass out.

Common causes: Skip a meal or not eat enough food; too much insulin or diabetes pills; more active than usual.

## Symptoms include:



Shaky or dizzy



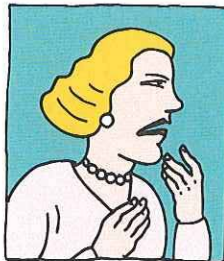
Blurry vision



Weak or tired



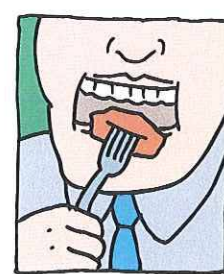
Sweaty



Upset or nervous



Headache

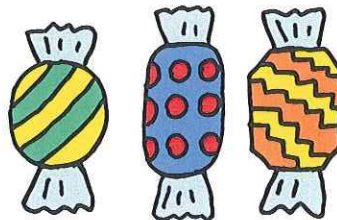


Hungry

## What to do?



Check your blood sugar right away. If it is below 70, treat for low blood sugar. If you can't check, treat anyway to be safe.

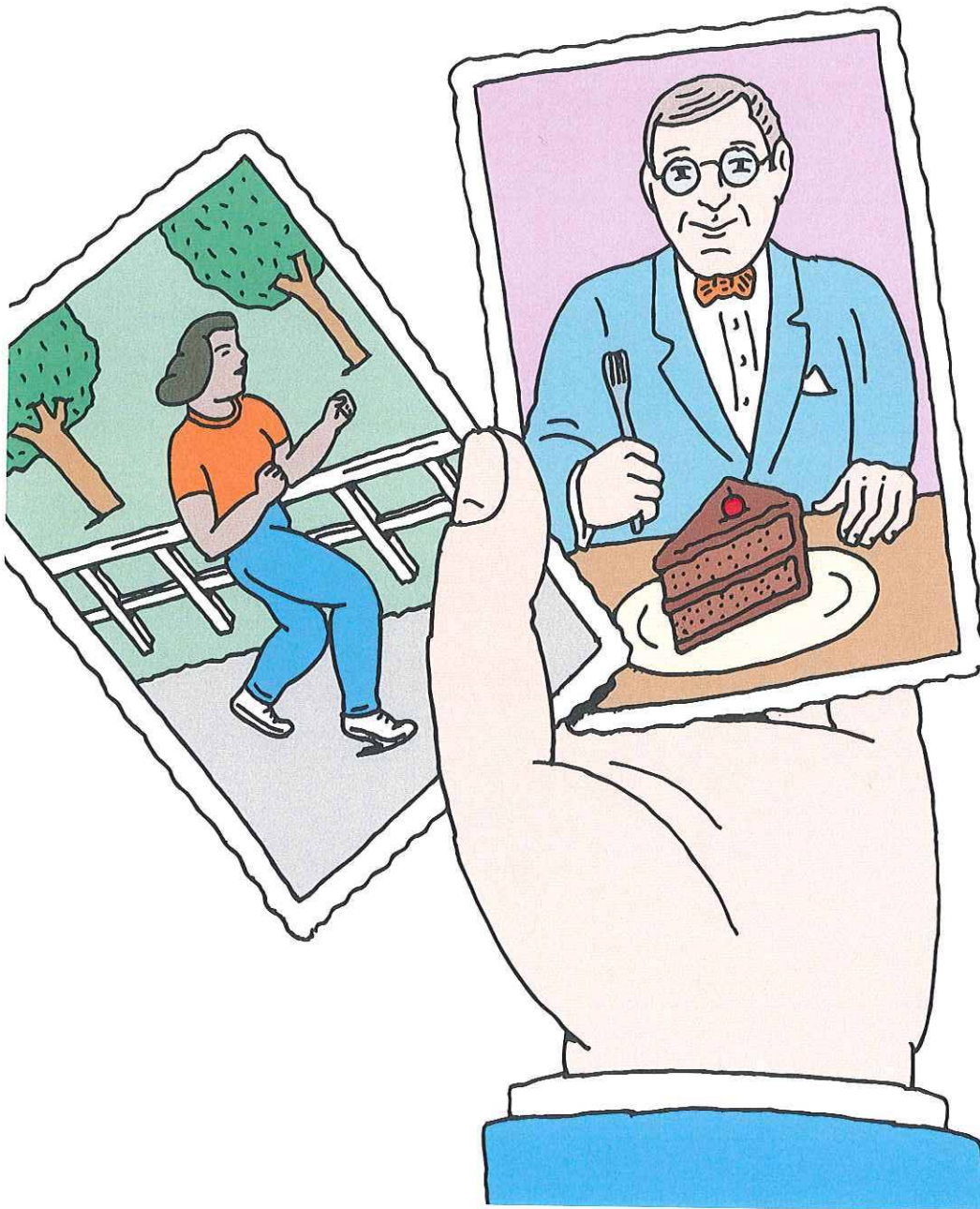


Treat by eating a fast-acting, high-sugar food with 15 grams of carbohydrate, such as: 1 tablespoon of sugar; 3 or 4 hard candies; 4-ounces of regular fruit juice or 1/2 can of regular (not diet!) soda.



Check your blood sugar in 15 minutes. If it is still below 70, treat for low blood sugar. If you keep having low blood sugar problems and you don't know why, call your doctor or health clinic.

MANAGING YOUR  
**BLOOD  
SUGAR**



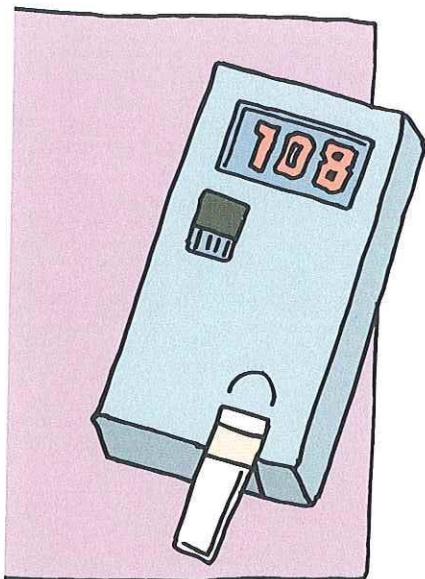
**T**he best way to stay healthy is to control your blood sugar levels. Your goal is to keep your blood glucose as close to normal as possible without having low or high blood sugar problems.

In someone who does not have diabetes, 70 to 110 mg/dL\* is a normal blood sugar before eating. Your doctor will help you to decide what your blood sugar goal should be.



\* Also measured as 3.8 to 6.1 millimoles of glucose per liter (mmol/liter).

## Blood Sugar and Urine Testing

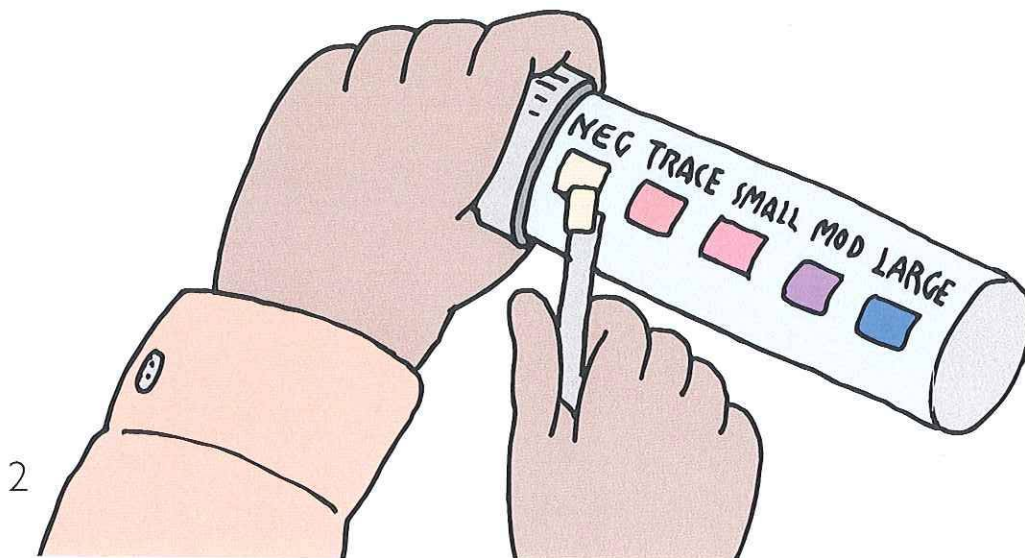


Testing your blood sugar tells you how well you are managing your diabetes.

Blood sugar is usually tested by putting a drop of blood on a special strip that is read by a meter.

An A1C test is an important blood sugar test. This test shows your average blood sugar level over the last 2 to 3 months.

Urine testing will show if there is sugar in the urine, but its main job is to show if your urine has ketones. Ketones in urine mean your blood sugar is out of control. Call your doctor right away.



## Your Blood Sugar Diary

Keep daily records in a diary or on a record sheet of:

- your blood sugar levels
- the food you eat
- the exercise you get
- the medication you take
- ketones (if any)

INSULIN OR PILLS					TEST RESULTS: BLOOD AND URINE								
	AM	NOON	EVE	PM	BREAKFAST		LUNCH		DINNER		BEDTIME		
					BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	BEFORE	AFTER	
WEDNESDAY	1 TAB	✓				127	144	130	240	125	175	137	
		8:15		✓					NEG				
THURSDAY	1 TAB	✓				110	160	180	205	125	165	13	
		8:00		✓									

A diary works best if you can write each thing down as you do it. That way you won't forget.

Write down any special things you did that may affect your blood sugar numbers. For example, some foods can cause numbers to be higher, and exercise may cause numbers to be lower.

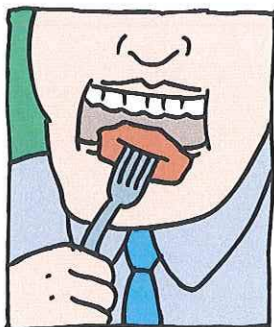
## High Blood Sugar

Find out why you have a high or low blood sugar.  
Then you can do something about it.

Learn how medicine, food, exercise, and stress  
affect your blood sugar numbers.

Blood sugar can be high if you:

eat too much food



are under a lot of stress



don't take  
enough medicine



are sick



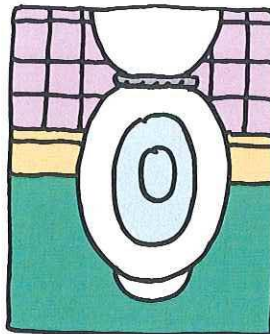
If you have high blood sugar numbers often, or high numbers at certain times of the day, tell your doctor or diabetes educator.

You should also tell them if you are having symptoms (signs) of high blood sugar such as:

feeling tired



urinating a lot

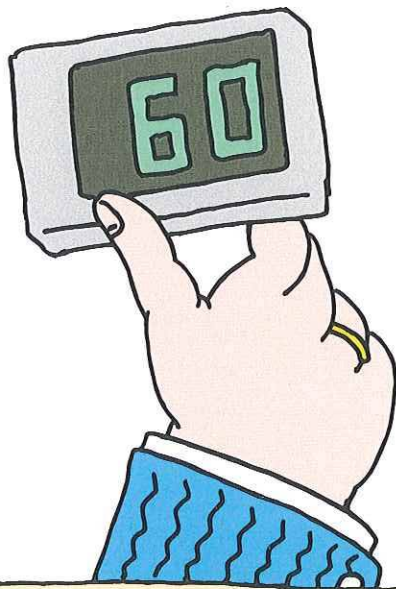


feeling thirsty



blurry vision

You may need to change your medicine, meal plan, or activities (such as work or exercise).



## Low Blood Sugar

If your blood sugar drops lower than 70 mg/dL\*, it is too low. This occurs more often in people who take diabetes pills or insulin.

\* 3.8 millimoles of glucose per liter (mmol/liter).

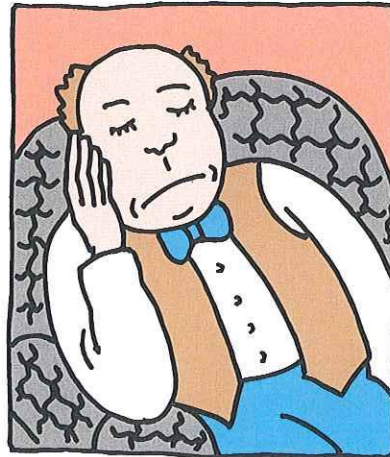
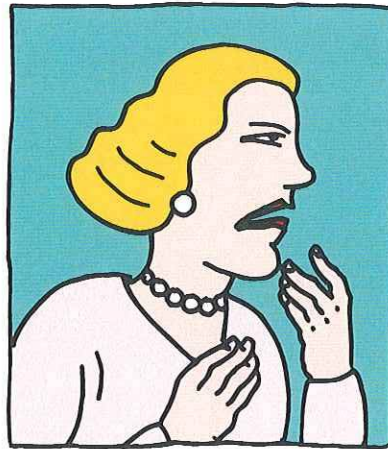
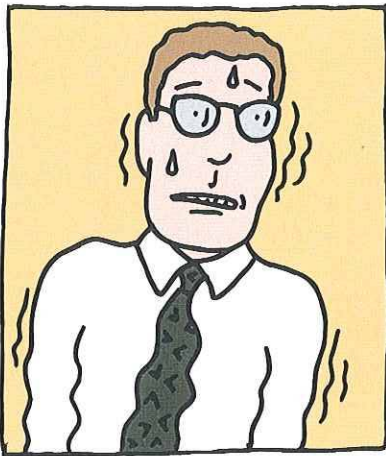


Low blood sugar may also happen when medicine, food, and exercise don't balance. It may happen if you:

- exercise a lot
- don't eat enough food
- don't eat on time
- take too much medicine

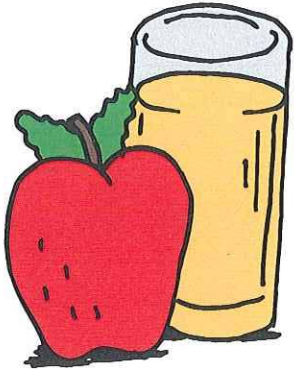
Low blood sugar can make you feel:

- shaky
- sleepy or tired
- sweaty or clammy
- upset or confused
- hungry
- dizzy
- restless during night time sleep



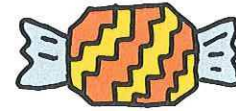
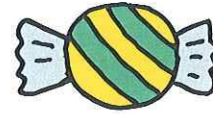
If you feel symptoms (signs) of low blood sugar, test your blood right away if you can.

If you have low blood sugar, treat it right away with 15 grams of a fast-acting sugar food, such as:



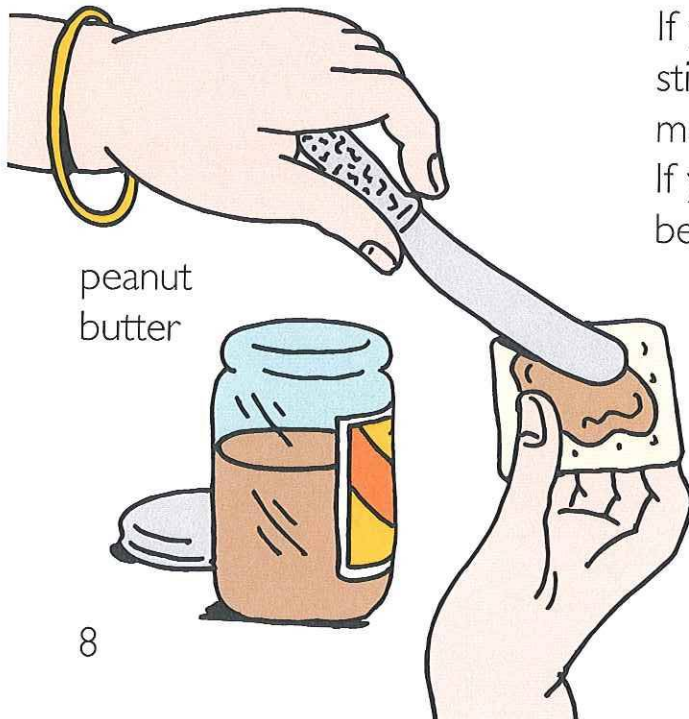
4 ounces (1/2 cup) of fruit juice or 1/2 can of regular (not diet!) soda

3 glucose tablets or 15 grams of gel



3 pieces of hard candy you can eat quickly

Check your blood sugar again in 15 minutes. If your blood sugar is still low, eat or drink one more fast-acting food. If you still don't feel better, call your doctor.



Write down your blood sugar number(s) in your diary.

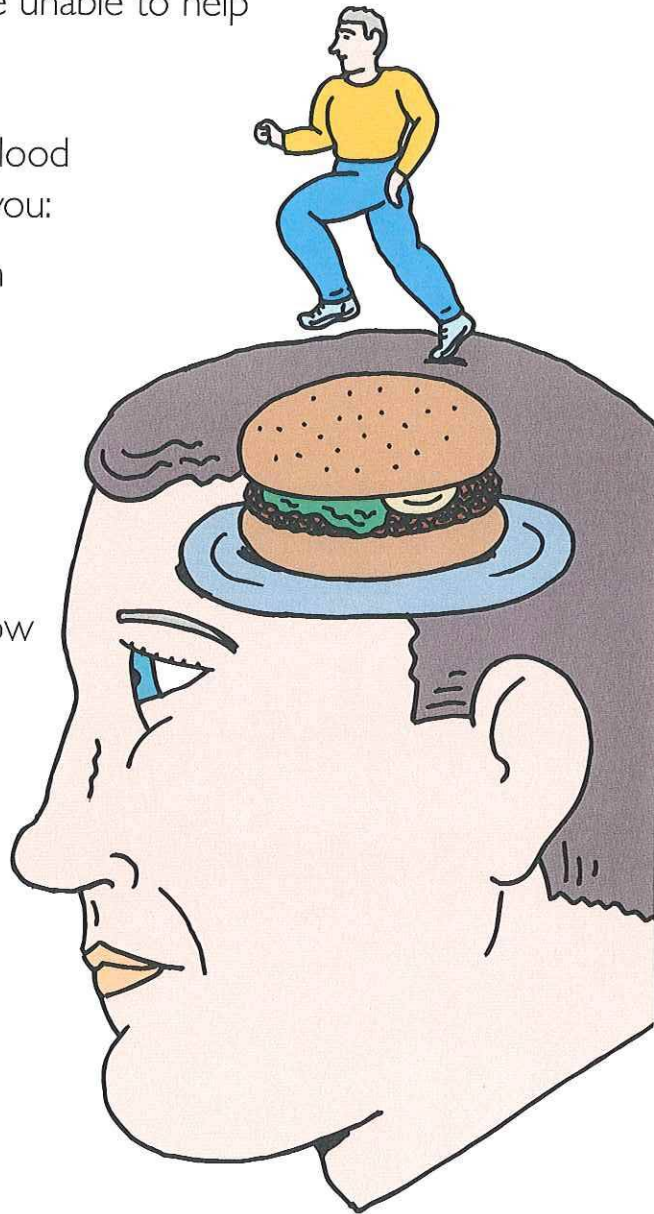
If you have a low blood sugar problem but can't test your blood right away, eat or drink a fast-acting sugar food anyway. Don't wait. You could pass out or be unable to help yourself.

Try to think why a low blood sugar happened. Maybe you:

- exercised too much
- didn't eat enough
- didn't eat the right kinds of foods

Your goal is to prevent high or low blood sugar the next time. If you know what causes your highs and lows, you can solve the problem by making changes in your food, activities, medicine or exercise program.

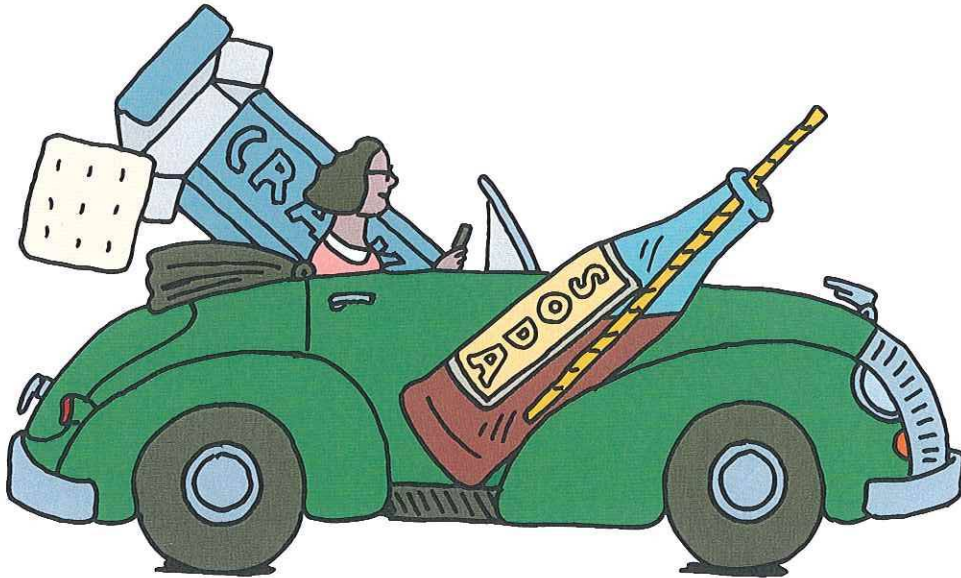
Call your doctor if you continue to have high or low blood sugars.



Your family members and friends should also know the symptoms of low blood sugar and how to help you treat it.

Show them:

- what symptoms to look for
- how you treat low blood sugar
- where you keep your supplies
- where emergency phone numbers are kept



Never drive if you have symptoms of low blood sugar. Test your blood sugar before you drive and often during long drives.

If you take pills or insulin, make sure you keep supplies in the car to treat low blood sugar.

Pack a can of regular soda, crackers, hard candy you can chew, glucose tablets or gel for travel.

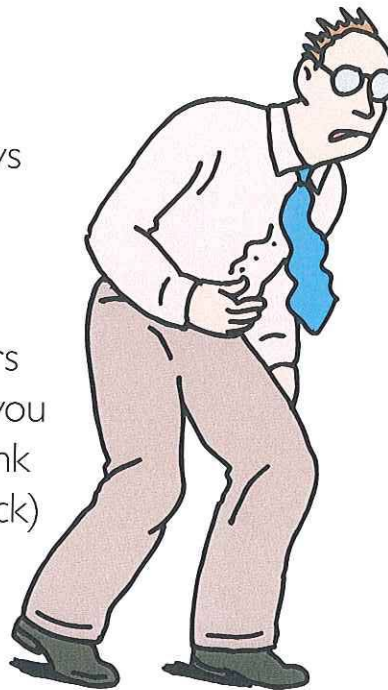
## When you are sick...

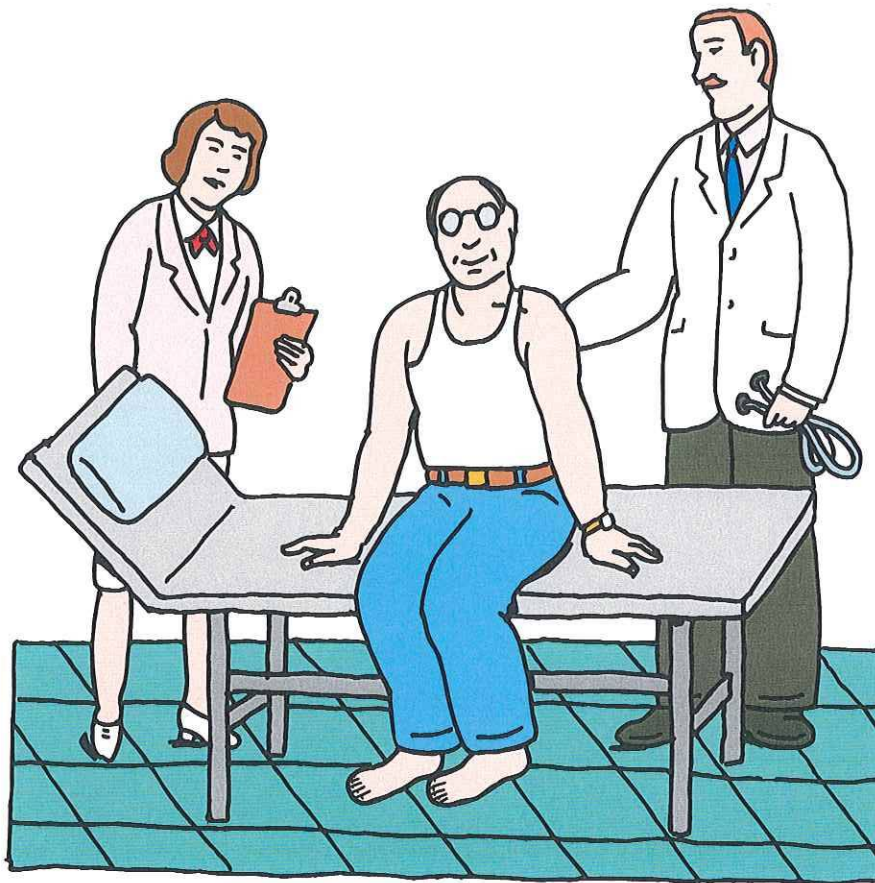
You will need a special plan for days you are sick. On sick days:

- always take your medicine
- test your blood sugar and ketones at least every 4 hours
- drink beverages with sugar if you can't eat (it's important to drink a lot of fluids when you are sick)

Call your doctor if you:

- can't eat
- are vomiting
- have severe diarrhea
- have blood sugar numbers outside of your goal range
- have ketones





Managing diabetes every day can be hard at times. But keeping your blood sugar as close to normal as possible will help prevent problems.

Learn as much as you can about how to manage your diabetes. Call your doctor's office if you have any questions. They are there to help!

Always talk to your doctor before making any changes in your diabetes treatment plan.

Visit [www.learningaboutdiabetes.com](http://www.learningaboutdiabetes.com) for more free diabetes patient education programs.