UNDERSTANDING BLOOD SUGAR
The best way to stay healthy with diabetes is to control the level of sugar in your blood. The medical word for sugar in the blood or blood sugar is glucose.

Your goal is to keep your blood sugar as close to normal as possible without having high or low blood sugar problems.

Your doctor will help you decide what your blood sugar goal should be.
Blood sugar and urine testing

Checking your blood sugar tells you how well you are controlling 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 another blood sugar test. This test shows your average blood sugar level over the last 2 to 3 months.

A urine test will show if there is sugar in 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 medicine you take
- ketones (if any)

A diary works best if you 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 blood sugar to be higher and exercise may cause blood sugar to be lower.
High blood sugar

Blood sugar can be high if you:

- eat too much food
- don’t take enough medicine
- are under stress
- are sick

Learn how medicine, food, exercise, and stress affect your blood sugars. Then you can do something about it.
If you have high blood sugar often or at certain times of the day, tell your doctor or diabetes educator.

You should also tell them if and when you have 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 how active you are.
Low blood sugar

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

* 3.8 millimoles of blood sugar per liter (mmol/liter).

Low blood sugar can also happen when medicine, food, and exercise don’t work well together. It can happen if you:

- exercise a lot
- don’t eat on time
- don’t eat enough food
- 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, check your blood sugar right away.
If you have low blood sugar, treat it right away with 15 grams of a fast-acting, high-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
- 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 well, 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.

Find out why you had a low blood sugar. 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 problems. If you know what causes your highs and lows, you can solve the problem by making changes in your food, medicine, or activity (exercise) program.

Call your doctor or health clinic if you have a high or low blood sugar problem and you don't know what to do. Don't wait!
Your family members and friends should also know the signs (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 diabetes 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 whenever you travel.

If you take pills or insulin, make sure you keep have them with you when you are away from home.

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 for ketones at least every 4 hours
- drink water and fluids 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 for more than a day
- have ketones
Controlling 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 good diabetes care. Call your doctor's office or health clinic if you have any questions. They are there to help!