

# Diabetes: Just the Basics

## Newly Diagnosed Type 1 Diabetes

If you have recently been diagnosed with diabetes, you may be experiencing a range of emotions. You should know that **you are not alone**. Your healthcare team is here to work with you to provide education and support. By working together we can control your diabetes.

## Type 1 Diabetes

Diabetes is a condition in which the level of sugar in your blood is too high. Your blood always has some sugar in it because your body needs sugar for energy. Too much sugar in the blood isn't good for your health.

Insulin helps your body lower your blood sugar. When you have type 1 diabetes your body does not make any insulin. The blood sugar builds up in the blood instead of going into the cells. The kidneys can't handle the extra sugar, and it spills into the urine. Over time, high blood sugar levels cause serious problems of the heart, eyes, kidneys, and feet.

People with type 1 diabetes must take insulin several times per day to control the amount of sugar in their blood. Type 1 diabetes is usually found in children and young adults but can develop at any age. It used to be called juvenile diabetes. Five percent (5%) of all people with diabetes have type 1.

### Cause of Type 1 diabetes

The body's defense (immune) system destroys the cells in the pancreas that make insulin.

### Symptoms of uncontrolled Type 1 diabetes

- Thirst
- Hunger
- Increased urination (*the amount of urine you pass and how often*)
- Feeling tired
- Sudden weight loss
- Blurry vision
- Nausea, stomach pain, and vomiting

## Treatment of Type 1 diabetes

Controlling your blood sugar should help improve your overall health and well-being and prevent long-term complications.

- Take insulin by injection or insulin pump (or sometimes by inhaler) as directed by your healthcare provider
- Eat healthy
- Check your blood sugar as directed by your healthcare provider
- Be physically active
- If you smoke, stop!
- Visit your health care provider for routine diabetes care
- Learn all that you can about diabetes

## Diabetes Medicines: Insulin

By using insulin, you are taking a very important step in controlling your diabetes. Insulin can help you control your blood sugar, feel better, and improve your long-term health.

Insulin is a hormone made by the pancreas. It is needed to move glucose from your blood to your cells to be used as energy. People who have type 1 diabetes have to take insulin. People who have type 2 diabetes may control their diabetes with pills, but may also need to take insulin. Insulin can be taken by injection or pump.

### Points to know about insulin

- Take your insulin consistently
- If your insulin needs to be mixed, such as NPH insulin or premixed insulins, roll it before use.
- Always check the appearance of your insulin before using it. Do not use it if it looks different than it usually does (if there are clumps in it, or if it looks cloudy when it should be clear)
- Keep your insulin in a cool, dry place (at room temperature, out of direct sunlight or in refrigerator, not freezer)
- Discard insulin vials one month after opening even if there is still insulin left in the vial.
- When traveling, keep your insulin with you in a carry-on container.
- Inject each insulin dose in a different spot (at least two inches from the site of the last dose)
- If you have any questions or concerns about your insulin, call your healthcare provider
- Never skip your insulin unless instructed by your healthcare provider

## Your insulin schedule

### Basal insulin

These insulins last 8 to 24 hours. They may not need to be taken with a meal

Name of Insulin	Number of units to take	When to take

### Bolus insulin

These insulins start to work very quickly and are short-acting. They are usually taken with a meal to prevent a large rise in blood sugar. Ask your healthcare provider when you should take your bolus insulin.

Name of Insulin	Number of units to take	When to take

### Checking the effect of insulin

You cannot control your blood sugar without checking to see how your insulin is working, and how your body is responding to your activities of the day.

## Self-Monitoring of Blood Sugar (glucose)

Keeping your blood sugar in control is an important part of keeping well when you have diabetes. Checking a drop of blood with a meter lets you know how much sugar is in your blood at the time that you check it. It will help you to see how your medicine, food and activity affect your blood sugar. For some people with diabetes, knowing the level of the blood sugar helps them make treatment decisions.

Things that make your blood sugar go up    Things that make your blood sugar go down

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Too much food</li> <li>• Not enough diabetes medicine</li> <li>• Not enough activity</li> <li>• Illness and stress</li> </ul> | <ul style="list-style-type: none"> <li>• Not enough food</li> <li>• Too much diabetes medicine</li> <li>• More activity than usual</li> </ul> |
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*Use caution when drinking alcohol because it may make your blood sugar go up or down.*

## Times to check your blood sugar

There is no one plan for everyone when it comes to checking blood sugars. People taking insulin will need to monitor their blood sugar once to many times a day to adjust their doses safely and effectively. Other people may not need to check as often. *You should check your blood sugar on different days of the week and at different times of the day. Talk with your healthcare provider to decide when you should check your blood sugar and fill in the chart below.*

Days and Times I will check my blood sugar			
How many days a week should I check my blood sugar? _____			
What times should I check my blood sugar? (circle times below)			
Before breakfast	Before lunch	Before supper	Before bed
2 hours after breakfast	2 hours after lunch	2 hours after supper	2 – 3 am

You should also check your blood sugar before driving or using hazardous equipment if you take medicine that could cause hypoglycemia (low blood sugar).

## Target blood sugar ranges

Your blood sugar is changing all through the day. It may be lower when you first get up and before you eat, but some people with type 2 diabetes have the highest blood sugar of the day early in the morning. It may be higher after you eat or when you are sick. *Talk with your healthcare provider about your target blood sugar ranges and write them in on the chart below.*

Time	Usual target for most people	My target (write yours here)
Before Meals	90-130	
2 hours after start of meal	Less than 180	
Bed time	110-150	

## Watch for patterns

Write down your blood sugar readings on a sheet of paper or in a logbook. This will help you to watch for patterns in your blood sugar. Bring your meter and your readings to your medical appointments and review them with your provider. Once you know the pattern of your blood sugar readings, your provider may recommend that you check less often.

## Tips for getting a good blood sample

- Wash your hands with warm water and dry with a clean towel  
Warm your fingers in warm water if they are cold.
- Hold your hands downward to increase blood flow to your fingers
- “Milk” your finger to increase blood flow to the tip
- Shake your hands quickly
- Prick on the side of your finger (not the end) as you won’t feel it as much.

**Possible reasons for errors on blood glucose meters**

- Too little blood on strip
- Storing strips outside of the original container or storing the container in a steamy place (like a bathroom)
- The meter is too hot or too cold
- Strips are out of date.

**Steps To Better Health**

## Type 1 Diabetes

- Learn all that you can about diabetes
- Take your insulin daily

## Insulin

- Call your healthcare provider if you are having trouble drawing up or injecting your insulin
- Call your healthcare provider if you see unusual ups or downs in your blood sugar levels

## Self-Monitoring of Blood Sugar

- Keep the test strips in their container and in a dry place