**What is prediabetes?**

Prediabetes is a condition that comes before diabetes. It means your blood glucose levels are higher than normal but aren’t high enough to be called diabetes. There are no clear symptoms of prediabetes. You can have it and not know it.

**If I have prediabetes, what does it mean?**

It means you might get type 2 diabetes soon or down the road. You are also more likely to get heart disease or have a stroke.

The good news is that you can take steps to delay or prevent type 2 diabetes.

**How can I delay or prevent type 2 diabetes?**

You may be able to delay or prevent type 2 diabetes with:

- physical activity, like walking
- weight loss if needed – losing even a few pounds will help
- taking medication, if your doctor prescribes it

If you have it, these steps may bring your blood glucose to a normal range. But you are still at a higher risk for type 2 diabetes.

**Regular physical activity can delay or prevent diabetes**

Being active is one of the best ways to delay or prevent type 2 diabetes. It can also lower your weight and blood pressure, and improve cholesterol levels. Ask your health care team about safe ways of being active for you.

One way to be more active is to try to walk for half an hour, five days a week. If you don’t have 30 minutes all at once, take shorter walks during the day.

**Weight loss can delay or prevent diabetes**

Reaching a healthy weight can help you a lot. If you’re overweight, any weight loss, even 7% of your weight (for example, losing about 15 pounds if you weigh 200) may prevent or delay your risk for diabetes.
Make healthy choices

Here are some steps you can take to change the way you eat. Small steps add up to big rewards.

- Cut back on regular soft drinks and juice. Have water or try calorie-free drinks.
- Choose lower-calorie snacks, such as popcorn instead of potato chips.
- Eat salad with low-fat dressing and at least one vegetable at dinner every night.
- Choose fruit instead of cake, pie, or cookies.

Cut calories by cutting serving sizes
- Eat smaller servings of your usual foods.
- Share your main course with a friend or family member when you eat out. Or take half home for later.

Cut down on bad fat
- Roast, broil, grill, steam, or bake instead of deep-frying or pan-frying.
- Use a small amount of oil for cooking instead of butter, lard or shortening.
- Try plant based proteins like beans instead of meat and chicken.
- Choose fish at least twice a week.
- Eat lean meats such as the round or loin cuts, or chicken without the skin.
- Cut back on high fat and processed meats like hot dogs, sausage, and bacon.
- Eat less high fat desserts such as ice cream, cake with frosting, and cookies.
- Avoid margarine and other foods with trans fat.

Track your progress

Write down what and how much you eat and drink for a week. Writing things down makes you more aware of what you're eating and helps with weight loss.

Summing it up

- Diabetes is a serious disease – if you delay or prevent it, you'll enjoy better health in the long run.
- Diabetes is common – but you can reduce your risk by losing a small amount of weight.
- Changing the way you eat and increasing your activity can delay or prevent type 2 diabetes.

Get checked

If you are at increased risk for diabetes, ask your doctor about getting tested at your next visit. Take our risk test at diabetes.org/risktest to find out if you are at risk.

Get started

- Be physically active.
- Make a plan to lose weight.
- Track your progress.

STOP DIABETES

American Diabetes Association.

For more information, visit us at www.diabetes.org or call 1-800-DIABETES
Diabetes is a problem with your body that causes blood glucose (sugar) levels to rise higher than normal. This is also called hyperglycemia.

When you eat, your body breaks food down into glucose and sends it into the blood. Insulin then helps move the glucose from the blood into your cells. When glucose enters your cells, it is either used as fuel for energy right away or stored for later use. In a person with diabetes, there is a problem with insulin. But, not everyone with diabetes has the same problem.

There are different types of diabetes – type 1, type 2, and a condition called gestational diabetes. If you have diabetes, your body either doesn’t make enough insulin, can’t use insulin it does make well, or both.

Diabetes may be treated with insulin, oral medications, exercise, and meal planning. If left untreated, diabetes can lead to several complications, such as nerve damage, kidney or eye problems, heart disease, and stroke. But, if managed well, you can live a long, healthy life with diabetes.

**Type 1**

In type 1 diabetes, your immune system mistakenly destroys the beta-cells, which are the cells in your pancreas that make insulin. Your body treats these beta-cells as foreign invaders and destroys them. The destruction can happen over a few weeks, months, or years.

When enough beta cells are destroyed, your pancreas stops making insulin, or makes so little insulin that you need to take insulin to live.

**Type 2**

If you have type 2 diabetes your body does not use insulin properly. This is called insulin-resistance. At first, the beta-cells make extra insulin to make up for it. But, over time your pancreas isn’t able to keep up and can’t make enough insulin to keep your blood glucose at normal levels.

Some people with type 2 diabetes can manage their diabetes with healthy eating and exercise. However, your doctor may need to also prescribe oral medications (pills) and/or insulin to help you meet your target blood glucose levels. Diabetes is a progressive disease – even if you don’t need to treat your diabetes with medications at first, you may need to over time.

**Gestational Diabetes**

Gestational diabetes (GDM) is diabetes that develops during pregnancy. For most women, blood glucose levels will return to normal after giving birth. If you’ve had GDM you will need to be tested regularly since you are at much higher risk for developing type 2 diabetes later in life.

For more information, visit us at www.diabetes.org or call 1-800-DIABETES
Warning Signs
The following symptoms are typical. However, some people with type 2 diabetes have symptoms so mild that they go unnoticed. Common symptoms of diabetes:

- Urinating often
- Feeling very thirsty
- Feeling very hungry – even though you are eating
- Extreme fatigue
- Blurry vision
- Cuts/bruises that are slow to heal
- Weight loss - even though you are eating more (type 1)
- Tingling, pain, or numbness in the hands/feet (type 2)

25.8 million Americans have diabetes

Diabetes Management
To manage diabetes, you will work with your health care team to make a plan that helps you reach your goals. Together, you’ll keep track of the ABCs of diabetes:

A is for A1C: Your A1C check tells you your average blood glucose for the past 2 to 3 months. It’s the blood check “with a memory.”

B is for blood pressure: Your blood pressure numbers tell you the force of blood inside your blood vessels. When your blood pressure is high, your heart has to work harder.

C is for cholesterol: Your cholesterol numbers tell you about the amount of fat in your blood. Some kinds, like HDL cholesterol, help protect your heart. Others, like LDL cholesterol, can clog your blood vessels and lead to heart disease. Triglycerides are another kind of blood fat that raises your risk for a heart attack or stroke.

For more information, visit us at www.diabetes.org or call 1-800-DIABETES
Type 1 Diabetes

WHAT IS DIABETES?

Diabetes is a problem with your body that causes blood glucose (sugar) levels to rise higher than normal. This is also called hyperglycemia.

When you eat your body breaks food down into glucose and sends it into the blood. Insulin then helps move the glucose from the blood into your cells. When glucose enters your cells, it is either used as fuel for energy right away or stored for later use. In a person with diabetes, there is a problem with insulin. But, not everyone with diabetes has the same problem.

There are different types of diabetes – type 1, type 2, and a condition called gestational diabetes, which happens during pregnancy. If you have diabetes, your body either doesn’t make enough insulin, it can’t use the insulin it does make very well, or both.

WHAT IS TYPE 1 DIABETES?

In type 1 diabetes, your immune system mistakenly destroys the cells in your pancreas that make insulin. Your body treats these cells as invaders and destroys them. This can happen over a few weeks, months, or years.

When enough beta cells are destroyed, your pancreas stops making insulin, or makes too little insulin. Because the pancreas does not make insulin, insulin needs to be replaced. Insulin does not come in a pill. People with type 1 diabetes take insulin by injection with a syringe, an insulin pen, or an insulin pump. Without insulin, your blood glucose rises and is higher than normal, which is called hyperglycemia.

Type 1 diabetes affects about 5% of people in the United States with diabetes. In the past type 1 diabetes was called juvenile diabetes or insulin-dependent diabetes. It’s usually first diagnosed in young people but it can occur at any age. Type 1 diabetes is much less common than type 2 diabetes.

HOW IS TYPE 1 DIFFERENT FROM TYPE 2?

In type 2 diabetes, your body does not use insulin properly. This is called insulin resistance. At first, the beta-cells make extra insulin to make up for it. But, over time your pancreas isn’t able to keep up and can’t make enough insulin to keep your blood glucose levels normal. Type 2 diabetes can be treated with oral medications, and/or insulin. Type 1 diabetes is always treated with insulin.

WHAT CAUSES TYPE 1 DIABETES?

Scientists aren’t sure what causes type 1 diabetes. It is not contagious and it is not caused by eating sugar. Research is under way to find the exact causes of type 1 diabetes and how it might be prevented.
WHAT TREATMENTS ARE USED FOR TYPE 1 DIABETES?

The two goals of diabetes treatment are to make sure you feel well day-to-day and to prevent or delay long-term health problems. The best way to reach those goals is by:

- taking insulin
- planning your meals—choosing what, how much, and when to eat
- being physically active

HOW WILL I KNOW IF MY DIABETES TREATMENT IS WORKING?

Getting an A1C test at least twice a year helps you and your health care team keep track of how well you are controlling your blood glucose levels. A1C is part of your diabetes ABCs, which will tell you if your overall diabetes treatment is working. The ABCs of diabetes are:

A: A1C or estimated average glucose (eAG)

Your A1C check tells you your average blood glucose for the past 2 to 3 months. It’s the blood check “with a memory.” Your health care provider may call this your estimated average glucose or eAG. The eAG gives your A1C in the same units (mg/dl) as the glucose meter you use at home.

B: blood pressure

Your blood pressure numbers tell you the force of blood inside your blood vessels. When your blood pressure is high, your heart has to work harder.

C: cholesterol levels

Your cholesterol numbers tell you about the amount of fat in your blood. One type, LDL cholesterol, can clog your blood vessels and lead to heart disease.

HOW DOES DIABETES AFFECT YOU DAILY?

Diabetes can affect how you feel each day. If your blood glucose level is too high or too low (hypoglycemia), you may not feel well. Keeping your blood glucose in a target range will help you feel your best.

People with type 1 diabetes must take insulin several times a day to keep their blood glucose under control. You also need to check blood glucose regularly and use the information to adjust the amount of insulin you are taking. Talk with your health care team about how and when to check your blood glucose.

While most of the day-to-day care of diabetes is up to you, your health care team is there to help you.

More handouts about this and other topics can be found at http://professional.diabetes.org/PatientEd

For more information visit diabetes.org or call 1-800-DIABETES
Type 2 Diabetes

WHAT IS DIABETES?
Diabetes is a problem with your body that causes blood glucose (sugar) levels to rise higher than normal. This is also called hyperglycemia.

When you eat your body breaks food down into glucose and sends it into the blood. Insulin then helps move the glucose from the blood into your cells. When glucose enters your cells, it is either used as fuel for energy right away or stored for later use. In a person with diabetes, there is a problem with insulin. But, not all people with diabetes have the same problem.

The types of diabetes are type 1, type 2, and a condition called gestational diabetes, which happens when pregnant. If you have diabetes, your body either doesn’t make enough insulin, it can’t use the insulin it does make very well, or both.

WHAT IS TYPE 2 DIABETES?
In type 2 diabetes, your body does not use insulin properly. This is called insulin resistance. At first, the pancreas makes extra insulin to make up for it. Over time your pancreas isn’t able to keep up and can’t make enough insulin to keep your blood glucose levels normal. Type 2 is treated it with lifestyle changes, oral medications (pills), and insulin.

Some people with type 2 can control their blood glucose with healthy eating and being active. But, your doctor may need to also prescribe oral medications or insulin to help you meet your target blood glucose levels. Type 2 usually gets worse over time – even if you don’t need medications at first, you may need to later on.

HOW IS TYPE 2 DIFFERENT FROM TYPE 1?
In type 1, your body treats the cells that make insulin as invaders and destroys them. This can happen over a few weeks, months, or years. When enough of the cells are gone, your pancreas stops making insulin, or makes too little insulin.

Without insulin, your blood glucose rises higher than normal, so the insulin needs to be replaced.

WHAT CAUSES TYPE 2 DIABETES?

Scientists do not know the exact cause of type 2 diabetes. However, development of type 2 diabetes has been associated with several risk factors. These risk factors include:

- history of hyperglycemia, prediabetes, and/or gestational diabetes (GDM)
- overweight and obesity
- physical inactivity
- genetics
- family history
- race and ethnicity
- age
- high blood pressure
- abnormal cholesterol

Continued on page 2
WHAT TREATMENTS ARE USED FOR TYPE 2 DIABETES?

The two goals of diabetes treatment are to make sure you feel well day-to-day and to prevent or delay long-term health problems. The best way to reach those goals is by:

- taking medications, if your doctor prescribes them
- planning your meals—choosing what, how much, and when to eat
- being physically active

HOW WILL I KNOW IF MY DIABETES TREATMENT IS WORKING?

Getting an A1C test at least twice a year helps you and your health care team keep track of how well you are controlling your blood glucose levels. A1C is part of your diabetes ABCs, which will tell you if your overall diabetes treatment is working. The ABCs of diabetes are:

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Your blood pressure numbers tell you the force of blood inside your blood vessels. When your blood pressure is high, your heart has to work harder.

C: cholesterol levels

Your cholesterol numbers tell you about the amount of fat in your blood. One type, LDL cholesterol, can clog your blood vessels and lead to heart disease.

More handouts about this and other topics can be found at http://professional.diabetes.org/PatientEd

For more information visit diabetes.org or call 1-800-DIABETES
Diabetes Symptoms

**TYPE 1 DIABETES**

Symptoms of type 1 diabetes are serious and usually happen quickly. Most people with type 1 diabetes will feel very sick because of high blood glucose levels.

<table>
<thead>
<tr>
<th>Common Signs and Symptoms of Type 1 Diabetes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Urinating a lot (as the body tries to flush out excess glucose in the blood)</td>
</tr>
<tr>
<td>• Feeling very thirsty (due to dehydration)</td>
</tr>
<tr>
<td>• Feeling hungry all the time (because the cells of the body arestarved for energy)</td>
</tr>
<tr>
<td>• Feeling tired (because the glucose is not entering your cells and being converted to energy)</td>
</tr>
<tr>
<td>• Blurred vision (because of a buildup of fluid in the lens of your eyes caused by high blood glucose levels)</td>
</tr>
<tr>
<td>• Losing weight suddenly without trying, even with increased appetite (because the body is not able to use the food you eat)</td>
</tr>
<tr>
<td>• Nausea and vomiting (as a result of the buildup of ketones in the blood)</td>
</tr>
</tbody>
</table>

Some people with type 1 diabetes may experience diabetic ketoacidosis.

**TYPE 2 DIABETES**

Type 2 diabetes does not appear suddenly. Instead, you may have no noticeable symptoms or only mild symptoms for years before it is diagnosed.

<table>
<thead>
<tr>
<th>Common Signs and Symptoms of Type 2 Diabetes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Urinating a lot (as the body tries to flush out excess glucose in the blood)</td>
</tr>
<tr>
<td>• Feeling very thirsty (due to dehydration)</td>
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<td>• Feeling hungry all the time (because the cells of the body arestarved for energy)</td>
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<td>• Feeling tired (because the glucose is not entering your cells and being converted to energy)</td>
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<td>• Blurred vision (because of a buildup of fluid in the lens of your eyes caused by high blood glucose levels)</td>
</tr>
<tr>
<td>• Frequent infections or slow healing cuts and sores</td>
</tr>
<tr>
<td>• Tingling, pain, or numbness in the hands or feet</td>
</tr>
</tbody>
</table>

**WHAT CAN I DO?**

Early detection and treatment of diabetes can decrease the risk of developing the complications of diabetes. Talk to your doctor about being tested if you feel like you may have diabetes. Take our Risk Test (www.diabetes.org/risktest) to find out if you are at increased risk for having type 2 diabetes.

More handouts about this and other topics can be found at http://professional.diabetes.org/PatientEd

For more information visit [diabetes.org](http://diabetes.org) or call 1-800-DIABETES
Hypoglycemia

Hypoglycemia, also known as low blood glucose, is when your blood glucose levels have fallen too low. This is usually less than 70 mg/dl. However, talk to your doctor about your own blood glucose targets, and what level is too low for you.

WHEN CAN IT HAPPEN?

Low blood glucose can happen if you’ve skipped a meal or snack, eaten less than usual, or been more physically active than usual. If you don’t take steps to bring glucose levels back to normal, you could even pass out.

WHAT ARE THE SYMPTOMS?

Each person’s reaction to low blood glucose is different. It’s important that you learn your own signs and symptoms when your blood glucose is low.

Signs and symptoms of low blood glucose begin quickly and include:

- Feeling shaky
- Being nervous or anxious
- Sweating, chills, clamminess
- Mood swings, irritability, impatience
- Confusion
- Fast heartbeat
- Feeling light-headed or dizzy
- Hunger, nausea
- Color draining from skin (pallor)
- Tingling or numbness in lips, tongue, cheeks
- Feeling weak, having no energy
- Blurred/impaired vision
- Feeling sleepy
- Headaches
- Anger, sadness, stubbornness
- Coordination problems, clumsiness
- Nightmares or crying out in sleep
- Bizarre behavior
- Seizures
- Being unconscious

WHAT SHOULD YOU DO?

If you think you have hypoglycemia, check your blood glucose. If your reading is 70 mg/dl or below, have 15 grams of carbohydrate to raise your blood glucose.

This may be:

- glucose tablets (see instructions)
- gel tube (see instructions)
- 4 ounces (1/2 cup) of juice or regular soda (not diet)
- 1 tablespoon of sugar, honey, or corn syrup
- 8 ounces of nonfat or 1% milk
- hard candies, jellybeans, or gumdrops – see food label for how many to consume

After 15 minutes, check your blood glucose again. If it’s still below 70 mg/dl, have another serving. Repeat these steps until your blood glucose is at least 70 mg/dl. Make a note in your log book about any episodes of low blood glucose and talk with your health care team about why it happened. They can suggest ways to avoid low blood glucose in the future.

Continued on page 2
SEVERE HYPOGLYCEMIA

If left untreated, hypoglycemia may lead to a seizures, unconsciousness (passing out) or coma. In this case, someone else must take over. The people you are in frequent contact with (for example, friends, family members, and coworkers) should be instructed on how to administer glucagon to treat severe hypoglycemic events.

Treating Severe Hypoglycemia

Glucagon is a hormone produced in the pancreas that stimulates your liver to release stored glucose into your bloodstream when your blood glucose levels are too low. Injectable glucagon kits are used as a medication to treat someone with diabetes that has become unconscious from a severe insulin reaction. The only way to administer glucagon is by injection.

Glucagon kits are available by prescription. Speak with your health care provider about whether you should buy a glucagon kit, and how and when to use it.

**Steps for treating a person with severe hypoglycemia:**

1) The person should inject glucagon (the same way insulin is injected) into the buttock, arm, or thigh, following the manufacturer’s instructions.

2) When you regain consciousness (usually in 5-15 minutes), you may experience nausea and vomiting.

3) If you have needed glucagon, let your health care provider know, so they can discuss ways to prevent severe hypoglycemia in the future.

**Don't hesitate to call 911.** If someone is unconscious and glucagon is not available or someone does not know how to use it, call 911 immediately.

**Do NOT:**

- Inject insulin (will lower blood glucose even more)
- Provide food or fluids (individual can choke)
- Put hands in mouth (individual can choke)

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More handouts about this and other topics can be found at [http://professional.diabetes.org/PatientEd](http://professional.diabetes.org/PatientEd)

For more information visit [diabetes.org](http://diabetes.org) or call 1-800-DIABETES
Factors Affecting Blood Glucose

Before you had diabetes, no matter what you ate or how active you were, your blood glucose levels stayed within a normal range. But with diabetes, your blood glucose level can rise higher and some diabetes medications can make them go lower than normal. Many factors can change your blood glucose levels. Learning about these can help control your blood glucose levels.

You can use your blood glucose (sugar) levels to make decisions about food and activity. These decisions can help you delay or prevent diabetes complications such as heart attack, kidney disease, blindness, and amputation.

WHAT CAN MAKE MY BLOOD GLUCOSE RISE?

- Too much food, like a meal or snack with more carbohydrates than usual
- Not being active
- Not enough insulin or oral diabetes medications
- Side effects from other medications, such as steroids, anti-psychotic medications
- Illness – your body releases hormones to fight the illness, and those hormones raise blood glucose levels
- Stress, which can produce hormones that raise blood glucose levels
- Short- or long-term pain, like pain from a sunburn – your body releases hormones that raise blood glucose levels
- Menstrual periods, which cause changes in hormone levels
- Dehydration

WHAT CAN MAKE MY BLOOD GLUCOSE FALL?

- Not enough food, like a meal or snack with fewer carbohydrates than usual, missing a meal or snack
- Alcohol, especially on an empty stomach
- Too much insulin or oral diabetes medications
- Side effects from other medications
- More physical activity or exercise than usual – physical activity makes your body more sensitive to insulin and can lower blood glucose.

HOW CAN I TRACK MY BLOOD GLUCOSE?

There are two ways to keep track of your blood glucose levels:

- using a blood glucose meter to measure your blood glucose level at that moment
- getting an A1C at least twice a year to find out your average blood glucose for the past 2 to 3 months

For more information visit diabetes.org or call 1-800-DIABETES
Checking Blood Glucose

Checking your blood glucose (blood sugar) is important. You can use the results to make decisions about food, physical activity, and medication. These decisions can help you feel better day to day and delay or prevent diabetes complications such as heart attack, stroke, or blindness.

Before you were diagnosed with diabetes, no matter what you ate or how active you were, your blood glucose levels automatically stayed within a narrow range. But with diabetes, this is no longer true. Your blood glucose level can be higher or lower. These changes are common and can take place quickly.

HOW DO I CHECK MY BLOOD GLUCOSE?

Many people use a blood glucose meter to check their blood glucose several times a day. A meter is a small device that tests a tiny drop of blood and then displays your blood glucose level at that moment. A lancet is a device used to prick the skin to get the drop of blood. The results are used to make decisions about food, physical activity, and medications.

WHAT ARE THE BLOOD GLUCOSE TARGETS FOR PEOPLE WITH DIABETES?

The general targets recommended by the American Diabetes Association are listed below. Talk with your health care team about whether these targets are right for you.

<table>
<thead>
<tr>
<th>Association targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I wake up and before meals: 80 to 130 mg/dl</td>
</tr>
<tr>
<td>2 hours after starting a meal: below 180 mg/dl</td>
</tr>
</tbody>
</table>

WHEN ARE THE BEST TIMES OF DAY TO CHECK BLOOD GLUCOSE?

Many people check blood glucose first thing in the morning before they eat (called “fasting”) as well as before other meals. You also may want to check after a meal (called “postprandial”) when your blood glucose is likely to be higher.

<table>
<thead>
<tr>
<th>Other times to check include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>when you’re having symptoms of high or low blood glucose</td>
</tr>
<tr>
<td>when you’re ill, especially if you’re throwing up or dehydrated</td>
</tr>
<tr>
<td>before, during, and after physical activity</td>
</tr>
<tr>
<td>before you drive</td>
</tr>
<tr>
<td>before you go to sleep</td>
</tr>
</tbody>
</table>

HOW OFTEN DO I NEED TO CHECK?

If you’re using your blood glucose results to decide how much insulin to take, you’ll need to check several times a day. Otherwise, you may be able to check less often. When you make changes in your medication, activity, or meal plan, or when you are pregnant, you should probably check more often. Talk it over with your health care team.
ARE THERE WAYS TO GET A BLOOD SAMPLE WITHOUT STICKING MY FINGER?

Some glucose meters can check blood samples from areas other than the fingertips. This can be the fleshy parts of the hand, the forearm, the outer thigh, the calf, or the abdomen. Sometimes, to get the most accurate results, experts recommend that you use your fingertips instead of these sites.

These times include when:
- your blood glucose is low or likely to be low
- you have trouble realizing that your blood glucose is low
- it’s less than 2 hours after starting a meal
- you’ve been physically active

If you’re seeking ways to keep your fingertips from getting sore, or you can’t get blood from alternative sites, talk with your health care team about different types of lancets or other techniques that can help.

HOW CAN I MAKE SURE THAT MY METER PROVIDES ACCURATE RESULTS?

Follow your meter’s instructions for the most accurate results.

This includes:
- keeping your meter clean
- making sure your test strips haven’t passed their expiration date
- storing your strips as recommended
- coding (setting up) your meter for your strips if necessary and using the control solution as recommended
- making sure your blood sample is big enough

Review how you use your meter with your doctor or diabetes educator once a year. You can also compare the results of a meter check to results of a blood glucose check done at the lab. Your health care team can provide more information on how to do this type of comparison. If your meter isn’t working at all, it may need new batteries. Check the back of your meter for the meter manufacturer’s phone number in case questions arise.

More handouts about this and other topics can be found at http://professional.diabetes.org/PatientEd

For more information visit diabetes.org or call 1-800-DIABETES
Tracking Blood Glucose

HOW DO I MAKE THE BEST USE OF MY METER RESULTS?

Be sure to bring your blood glucose meter when seeing your doctor. This will allow them to review your readings and talk about any outside your targets. It's often helpful for your doctor to also have notes about unusual readings to understand what may have caused them. These notes can be taken using a paper logbook or a tracking program on your computer.

- Make notes about:
  - medications  
  - physical activity  
  - illness  
  - low blood glucose  
  - stress  
  - other factors that are affecting your blood glucose

Talk to your doctor about your readings and whether any changes are needed to reach your goals.

HOW CAN RESULTS HELP WITH MY DIABETES CARE?

Your results tell you how well your diabetes care plan is working. You'll be able to look at your readings and see patterns—similar results over and over. Looking at these patterns can help you and your health care team fine-tune your diabetes care plan.

Example: Almost every weekday, David's fasting blood glucose is between 90 and 110. But on weekends when he sleeps late, his fasting level is above his target. He decides to talk with his health care team about changing his insulin routine on weekends.

If most of your results are within your target range, your diabetes care plan is working well. But if your numbers are out of your target range at the same time of day for several days in a row, you may need a change in your meal plan, activity routine, or medication.

Your health care team can work with you in deciding how and when to make changes.

Look at your results and ask yourself these questions:

1. Has my blood glucose been too low several times this week? What are the possible reasons?
2. Has my blood glucose been too high several times this week? What are the possible reasons?
3. Has my blood glucose been out of my target range at the same time of day for 3 days in a row? What are the possible reasons?

Example: Miguel has been on vacation this week. His blood glucose has been between 210 and 230 almost every day before dinner. Usually, his blood glucose before dinner is about 150. He realizes that he hasn’t been as active as usual. To help keep his blood glucose on target, Miguel decides to take a walk each afternoon.

*Paper blood glucose log books can be found on ShopDiabetes.org as "Diabetes Checking Accounts"  
*Diabetes 24/7 is an online tracking tool that can be found at 247.diabetes.org

For more information visit diabetes.org or call 1-800-DIABETES
DIABETES ALERTS

SEVERE HYPOGLYCEMIA is very low blood glucose, sometimes called low blood sugar. It can be mistaken for drug or alcohol intoxication. It can lead to coma or death if untreated.

What are causes?
- Too much insulin
- Certain diabetes pills
- Too little food
- Physical activity
- Alcohol
- Drugs

What are signs/symptoms?
- Feeling shaky
- Being nervous or anxious
- Sweating, chills, clamminess
- Mood swings, irritability, impatience
- Confusion
- Fast heartbeat
- Feeling light-headed or dizzy
- Hunger, nausea
- Color draining from skin (pallor)
- Feeling sleepy
- Feeling weak, having no energy
- Blurred/impaired vision
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- Coordination problems, clumsiness
- Nightmares or crying out in sleep
- Bizarre behavior
- Seizures
- Being unconscious

How to help
Give a source of sugar if the person:
- Is known to have diabetes
- Is confused or combative
- Can swallow

Sources of sugar include
1/2 cup regular juice or sugary soda, 4 glucose tablets, or 1 tablespoon sugar or honey.

Warning: Do not give food or drink to a person who cannot swallow. Immediately seek medical care. Call 911.

SEVERE HYPERGLYCEMIA is very high blood glucose, sometimes called high blood sugar. It can be mistaken for drug or alcohol intoxication. It can lead to coma or death if untreated.

What are causes?
- Lack of insulin
- Not enough insulin
- Illness
- Dehydration
- Medical problems, emergencies

What are signs/symptoms?
The following signs and symptoms of very high blood sugar may require first aid. They can develop slowly:
- Feeling drowsy, sleepy
- Confusion
- Extreme thirst
- Frequent urination
- Flushed skin
- Fruity breath odor (may be mistaken for alcohol)
- Heavy breathing
- Nausea, vomiting
- Being unconscious

How to help
If the person is unresponsive, call 911. Otherwise, have him or her:
- Test blood glucose
- Take insulin, if used
- Drink water
- Tell you if medical care is needed

ABOUT DIABETES

KEEP THIS CARD with you or your vehicle, so that it is available in case of emergency.

What is Diabetes?
In diabetes, your body either doesn’t make enough insulin, can’t use insulin well, or both. This causes blood glucose (sugar) to rise. If diabetes isn’t treated, blood glucose can rise to dangerous levels (hyperglycemia). Delaying treatment can lead to coma and death within hours or days.

Diabetes emergencies may be hard to spot. This card helps first responders, family members, and others recognize these emergencies and help.

Medications used to treat diabetes can also cause blood glucose to drop too low (hypoglycemia). This is very dangerous and must be treated immediately.

Diabetes is serious and has no cure.

DIABETES EMERGENCIES REQUIRE IMMEDIATE CARE...

... YOU CAN HELP.

Signs of Diabetes
If a person is unable to communicate, look for:
- Medical alert tags at neck or wrist.
- Wallet medical alert cards
- Diabetes devices and supplies such as blood glucose meters and strips, finger-stick lancetting devices, insulin vials, syringes, medication pens, an insulin pump with or without tubing, and a continuous glucose monitor with a sensor under the skin.
I HAVE DIABETES. I may be having a very high or low blood glucose reaction. These can lead to coma or death if they are untreated. If I am not alert or I cannot swallow, do not try to give me anything to eat or drink. Call 911.

Very Low Blood Glucose (Hypoglycemia)
Signs (may look like drug or alcohol intoxication): I may be shaky, sweaty, staggering, combative, confused, or acting strangely. I may also slur speech, have a seizure, or become unconscious.

Treatment for Very Low Blood Glucose:
• If I’m awake and can swallow, give me a source of sugar, such as 4 glucose tablets, ½ cup regular juice or sugary soda, 1 cup nonfat or 1% milk, 1 Tbsp. sugar or honey, or hard candy or jellybeans.
• Stay with me as I rest and check my blood glucose every 15 minutes. I may need more sources of sugar to eat or drink.
• If I do not get better or my blood glucose does not rise above 70 mg/dl, call 911 or get me to a hospital.

See other side for emergency treatment of very high blood glucose.

Very High Blood Glucose (Hyperglycemia)
Signs (may look like drug or alcohol intoxication): I may be drowsy, confused, urinating often, vomiting, and/or have blurry vision. My skin may be flushed and my breath may have a fruity odor.

Treatment: Severe hyperglycemia can lead to coma or death if untreated. I have a medical need to test my blood glucose, take my insulin (if used), drink water, and have access to a bathroom.

My Name: ____________________________
Emergency Contacts
Name: ____________________________
Phone: ____________________________
Name: ____________________________
Phone: ____________________________