

Staying Healthy WITH DIABETES

Your Guide to Diabetes Self-Care



Take Control OF YOUR DIABETES



Finding out you have diabetes can come as a shock and often brings on a range of emotions. In time, most people accept the diagnosis and slowly begin to change their lifestyles.

Actions such as checking blood sugar levels, sticking with a diabetes meal plan, taking medicine, and checking your feet are needed for good diabetes control. These actions can delay or prevent other health problems.

Today, people with diabetes live longer and more healthy lives. This guide offers you valuable information and tools for your self-care. If you take good care of yourself, diabetes won't stand in the way of an active, healthy life.

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Chapter 1

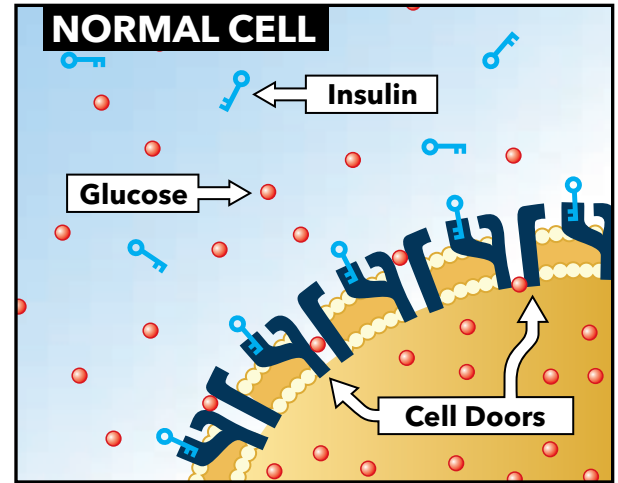
What Is Diabetes?

When we eat, our bodies turn food into **glucose** – a form of sugar. This sugar goes into the bloodstream and is the body’s main fuel. As the levels of sugar in the blood rise, the **pancreas** (an organ behind the stomach) makes a hormone called **insulin**.

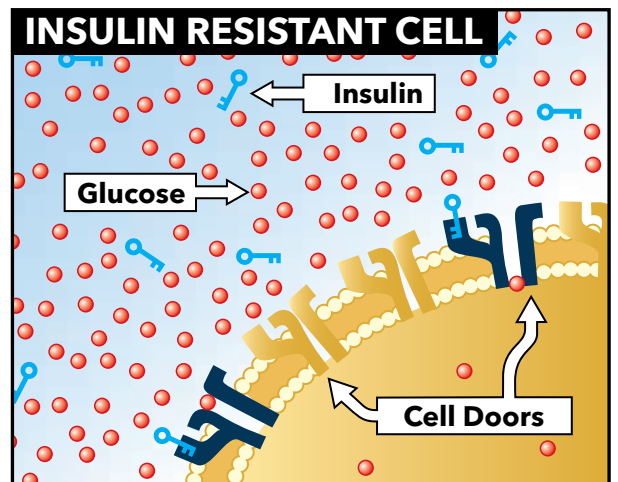
Insulin helps move the sugar into the body’s cells. Once inside the cells, the sugar can be used as energy.

If you have type 1 diabetes, your body does not make insulin. Without insulin, cells can’t get sugar from the blood. This leads to higher sugar levels. Type 1 diabetes is mostly diagnosed in children and young adults, but it can happen at any age.

If you have type 2 diabetes, your body has trouble getting sugar from your blood into your cells. Either your body doesn’t make enough insulin to move sugar into your cells, or your cells resist the insulin and don’t let the sugar in (insulin resistance).



Insulin acts like a key, unlocking cell doors to let sugar (glucose) enter.



The insulin keys you have can't unlock your cell doors. Some sugar (glucose) may get through, but most of the sugar stays in your blood.

Insulin and Your Cells

Without the right amount of insulin working with your cells the right way:

- ♥ **Your cells get no fuel.** Even though your blood contains large amounts of sugar, your cells are starving. You may feel tired, hungry, or moody.
- ♥ **With no place to go, the amount of sugar in your blood builds up.** Over time, this can damage your blood vessels, nerves and organs, causing many serious health problems.

For people with type 1 diabetes, doctors will prescribe insulin. People with type 2 can often control their blood sugar with healthy eating and exercise. Doctors may also prescribe diabetes pills or insulin for better control.

You Have Diabetes - What Can You Do?

Although diabetes is a lifelong disease, it can be controlled. If you take good care of yourself and manage your diabetes, you can live a healthy life.

Managing your diabetes means:

- ♥ Keeping your blood sugar levels in a healthy range.
- ♥ Keeping your blood pressure, cholesterol, and weight in healthy ranges.
- ♥ Getting a yearly urine test to check kidney health.
- ♥ Having yearly dilated eye exams to protect your vision.
- ♥ Checking your feet each day to make sure you have no cuts or sores.

Sound like a lot? Don't worry...with your doctor's help, you can set up a Diabetes Self-Care Plan. Then you'll know just what to do and when.

Keeping Your Blood Sugar Levels in a Healthy Range

Blood sugar testing is a crucial part of managing your diabetes. It allows you to see how well you are meeting your blood sugar goals. If left untreated, diabetes can cause too much or too little sugar in your blood. This can cause long-term health problems such as kidney failure or impaired vision.



There are two sets of numbers you and your doctor will look at to make sure your diabetes is under control:

- 1 Numbers from when you check your blood sugar at home.** Checking your blood sugar at home tells you how your activities and food are affecting your blood sugar “at the moment.” It lets you know if you’re on track with your care, if you need to make changes, or if you need to call your doctor for help.
- 2 Numbers from the Hemoglobin A1C lab test.** The Hemoglobin A1C lab test results show your “average” blood sugar control over a two to three month period. Your doctor will schedule this test for you every three to six months, depending on how well you are able to control your blood sugar on a daily basis, and the type of diabetes you have.

Checking Your Blood Sugar at Home

Every person with diabetes should have a blood sugar machine (glucometer) to test blood sugar at home. It tells you what your blood sugar level is by using a small sample of blood from your finger. Not all glucometers work the same way. Make sure to read the user guide or talk to your doctor about how to use your glucometer.

The number of times a day you check your blood sugar depends on the type of diabetes you have and your treatment plan. You should also check your blood sugar more often on days when you are ill, stressed, or if you have a change in routine. Talk to your doctor about how often you should check your blood sugar.

- ♥ **Type 1 diabetes:** Your doctor may suggest that you check your blood sugar 4-8 times a day. Checking blood sugar is often done before meals and snacks, before and after exercise, before bedtime, and in the middle of the night.
- ♥ **Type 2 diabetes:** Your doctor may have you check your blood sugar before meals, and sometimes before bedtime. If you take insulin to control your diabetes, your doctor will suggest checking two or more times a day, depending on the type of medications you need.

Keeping Track of Your Blood Sugar Levels

Keeping a log of your blood sugar levels is a simple and easy way to see the link between your blood sugar and your actions. For instance, you may have higher blood sugar levels after eating certain foods, or lower levels if you exercised more than normal. Seeing this will help you stay within your target blood sugar range more often – for better diabetes control.



Chapter 2

How to Record in Your Log

Make copies of the Blood Sugar Log you'll find on page 63 of this Guide. Each time you check your blood sugar, write down your numbers. Note any actions that may have affected your levels, such as what you ate, if you skipped a meal, if you took medicine, or if you were sick.

Always write down your blood sugar numbers right away – they may be hard to remember later.

And ALWAYS bring your log to your doctor visits. The more your doctor knows about your blood sugar levels, the better care he or she can provide.

Here's an example of how to record in your log:

Blood Sugar Log

Day of the Week	Date	Hour	Blood Sugar Level	Time of Day*	Notes
Monday	12/10	9 AM	100	Before breakfast	Took medicine.
		2 PM	135	2 hours after lunch	
Tuesday	12/11	9 AM	95	Before breakfast	Took medicine. Had lunch at a restaurant and ate more carbs than I should.
		2 PM	190	2 hours after lunch	

Your Hemoglobin A1C Lab Test

The Hemoglobin A1C lab test shows your average blood sugar level over the past two to three months. It is reported as a percentage (%). Often referred to as A1C, this test is a vital part of managing your diabetes.

It is important that both your A1C results and your daily blood sugar numbers fall within the range that you and your doctor have set. If your A1C is in a good range but your day-to-day testing shows wide swings from high to low, your doctor may want to adjust your treatment and Self-Care Plan. That is why it is important to record your numbers in your Blood Sugar Log and bring your log with you to doctor visits.

What does the A1C measure?

Hemoglobin is the part of your red blood cells that carries oxygen from your lungs to every cell in your body. Sugar in the blood tends to bond with hemoglobin. The A1C test measures how much sugar is bonded to your hemoglobin. The more sugar bonded to your hemoglobin, the higher your A1C number will be.

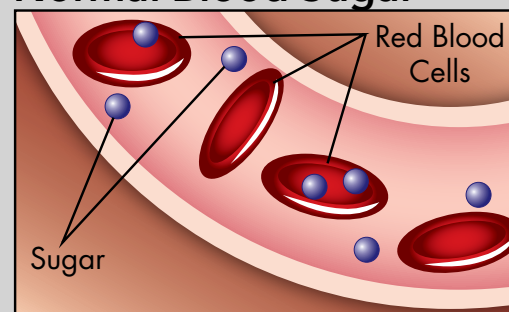
Why is getting an A1C test so important?

Knowing your A1C number can help protect you from the long-term health problems caused by high blood sugar.

When high levels of sugar are bonded to hemoglobin, there is a decrease in the supply of oxygen to your organs. This means that damage is being done to your heart, kidneys, eyes, and nerves. This can lead to heart attack, stroke, kidney disease, blindness, or amputation.

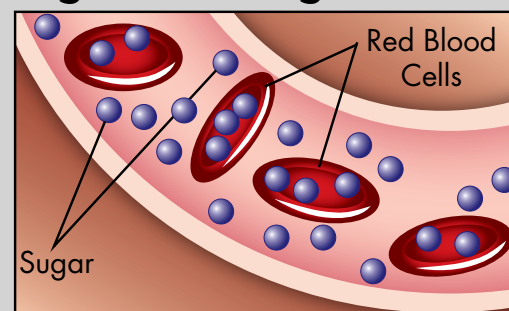
Lowering your A1C – by any amount – can help decrease your risk for health problems in the future.

Normal Blood Sugar



When your blood sugar levels are normal, only a small amount of hemoglobin gets bonded with sugar. The A1C level is low.

High Blood Sugar



If you have diabetes—and tend to have a lot of sugar in your blood—more of your hemoglobin will be bonded with sugar. The A1C level is higher.

What should my A1C number be?

You and your doctor will set a goal that's right for you.

If your A1C is higher than it should be, talk to your doctor about steps you can take to bring it down. Your doctor may ask you to make changes to your diet, or to exercise more. Your doctor may also change your diabetes medicine, or add new medicine.

How often should I get an A1C test?

Your doctor may order an A1C test when you first get diabetes to know your baseline number. Future test results will be compared to your baseline number to check if your blood sugar control is getting better or worse.

How often you need the A1C test will depend on how well you control your blood sugar. Doctors suggest at least two times per year.

You may need it more often if:

- ♥ Your A1C number is too high.
- ♥ You plan to become pregnant.
- ♥ You begin taking a new diabetes medicine.
- ♥ Your doctor changes your diabetes treatment plan.

Match of A1C to Average Blood Sugar

A1C	Blood Sugar Levels (daily average over 3 months)
6%	126
7%	154
8%	183
9%	212
10%	240
11%	269
12%	298

If you don't know your A1C number, or are not sure if you have had an A1C test, talk to your doctor about when your next A1C test should be.

Dealing With Low and High Blood Sugar

Not everyone has the same symptoms when blood sugar gets too high or too low. Some people may not feel symptoms at all; but they most likely won't feel like their normal selves.

It's important that you know the signs of low and high blood sugar. If you start having any of the symptoms below or on page 14, check your blood sugar right away. Knowing if your sugar level is too high or too low will help you decide what actions to take to bring your blood sugar level back to a healthy range.

What Is "Low Blood Sugar"?

For most people, blood sugar levels are considered low (hypoglycemia) if they score under 70 mg/dl on a glucometer. When blood sugar is too low, the body does not have enough energy to function well. Low blood sugar levels may differ from person to person. Talk to your doctor about what is too low for you.

Common symptoms of low blood sugar include:

- ♥ Shaking or feeling shaky
- ♥ Sweating for no reason
- ♥ Fainting
- ♥ Blurry vision
- ♥ Rapid heartbeat
- ♥ Sudden mood changes

What causes low blood sugar?

- ♥ Taking too much diabetes medicine
- ♥ Skipping meals
- ♥ Eating smaller portions than you normally eat
- ♥ Exercising more than usual
- Being ill



Chapter 3

How do I treat low blood sugar?

If your sugar level is low, there are steps you must take to get it back to a normal range. If you find yourself having symptoms of low blood sugar but don't have a glucometer at hand, treat the symptoms anyway to keep them from getting worse. Follow the 15-15 rule: have 15 grams of carbs and check your blood sugar after 15 minutes. To get your blood sugar back to normal range, follow these steps:

- 1 Eat or drink 15 grams of carbs that digest quickly, such as one of the following:**
 - ♥ 1 tablespoon of honey
 - ♥ ½ cup of juice or regular soda
 - ♥ 3 or 4 pieces of hard candy (not sugar free)
 - ♥ Glucose tablets (see instructions)
 - ♥ 1 tablespoon of sugar
- 2 Wait 15 minutes and re-test your blood sugar. If it is still low, eat another 15 grams of carbs.**
- 3 Wait another 15 minutes and re-test your blood sugar again. If your levels are still too low, call your doctor right away.**

On the Go?

It is a good idea to have carb snacks that digest quickly with you at all times, just in case your blood sugar drops when you are out. Pack a to-go bag with snacks such as juice, hard candy, and a small apple.



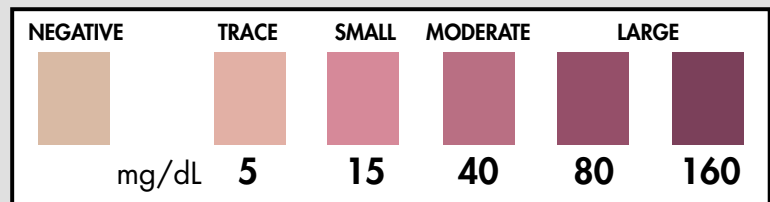
What Is “High Blood Sugar”?

For most people with diabetes, blood sugar levels are considered high when they score over 130 mg/dl on a glucometer before a meal, or 180 mg/dl on a glucometer 1-2 hours after a meal. When blood sugar is too high for long periods of time, it can damage your nerves, blood vessels, and organs. High levels can also lead to **diabetic ketoacidosis**. High blood sugar levels may differ from person to person. Talk to your doctor about what is too high for you.

Diabetic Ketoacidosis

When you have diabetes, your body has trouble using sugar in your blood for energy. If your diabetes is left untreated, your body begins to use fat and muscle for energy leaving behind fatty acids (*ketones*) in your blood (*diabetic ketoacidosis*). These ketones make blood and urine more acidic than it should be. This may cause health problems over time.

You can test for ketones by dipping a urine test strip into a sample of urine. This strip will show the amount of ketones in your urine by turning a certain color after dipping. Talk to your doctor about testing for ketones and ask about the risk of diabetic ketoacidosis.



Symptoms of high blood sugar include:

- ♥ Being very thirsty
- ♥ Headaches
- ♥ Trouble concentrating
- ♥ Blurry vision
- ♥ Feeling weak or tired
- ♥ Urinating more than normal

Chapter 3

What causes high blood sugar levels?

- ♥ Forgetting to take your medicine
- ♥ Eating more carbs than usual
- ♥ Being ill
- ♥ Having more stress than usual
- ♥ Getting less exercise than usual

How do I treat high blood sugar?

If you have a high blood sugar level, there are changes you need to make to get back to a normal range. If you have symptoms of high blood sugar but don't have a glucometer at hand, treat the symptoms anyway to keep them from getting worse.

- 1 Cut out carbs until your blood sugar comes down.**
- 2 Drink plenty of water to prevent dehydration and to keep your kidneys healthy.**
- 3 Get more exercise. Before exercising, check your urine for ketones. If ketones are present, do not exercise because it may cause your blood sugar to rise even more.**

If your blood sugar stays over 180 mg/dl for three days in a row, or if you test your urine and find ketones, call your doctor. He or she may want to adjust your treatment plan.

Sick Day Rules

When we are sick, our bodies release hormones that help us fight infection. These hormones can cause blood sugar levels to go up, and can block the effects of insulin on the body. To protect yourself from this, talk to your doctor about what to do if you get sick.

Below are common sick-day rules:

- ♥ Check your blood sugar levels every two to three hours.
 - If you have type 1 diabetes, your doctor may advise you to take extra insulin to bring down your blood sugar levels.
 - If you have type 2 diabetes, your doctor may advise you to take your medicine more often.
- ♥ Rest as much as you can and get enough sleep.
- ♥ Drink a lot of water and don't have caffeine.
- ♥ Take your medicine on schedule even if you are throwing up.



Effects of medicines on blood sugar

Medicines that you take when you are sick may affect blood sugar levels even if they don't contain sugar. The chart below shows common medicines and the effects they have on blood sugar. Ask your doctor or pharmacist which medicines are safe for you to use when you are sick.

Medication	Effect on Blood Sugar
Aspirin Antibiotics	Lowers blood sugar
Cough Syrup Decongestants	Raises blood sugar

Call your doctor right away if you:

- ♥ Are throwing up and can't keep anything in your stomach
- ♥ Have a fever (over 101° F) for more than two days
- ♥ Have nonstop diarrhea
- ♥ Are sick for a couple of days and not getting better

Emergencies and diabetes

A medical ID necklace or bracelet alerts others that you have diabetes and need special treatment in case you are not able to speak.



Understanding Your Medicine

Most people with diabetes need to take medicine to control their blood sugar. These medicines include diabetes pills and insulin shots.

Diabetes Pills

When people are diagnosed with type 2 diabetes, doctors will first suggest a diabetic diet along with exercise to help them manage their diabetes. After a certain point, these healthy lifestyle changes may not be enough to bring blood sugar levels down to a normal range. When this happens, doctors will often prescribe diabetes pills. There are many different types of pills. The most common are listed in the chart below.

Medicine Name	Effect on Your Body
Metformin	Lowers blood sugar by decreasing the amount of sugar the liver makes.
Glyburide	Lowers blood sugar by increasing the amount of insulin the body makes.
Pioglitazone (Actos)	Lowers blood sugar by increasing the body's response to insulin.
Sitagliptin (Januvia)	Lowers blood sugar by increasing insulin release during meals.

Note: According to the American Diabetes Association (ADA)

Chapter 4

And if you need insulin...

People with type 1 diabetes need insulin to control their blood sugar. People with type 2 diabetes may need insulin if eating right and exercise over time is not enough to keep their blood sugar in a healthy range.

Because insulin is a protein, it can't be taken by mouth. Like any other protein, insulin would be digested and broken down in your stomach before it reached your bloodstream. This is why insulin can only be given as a shot.

There are many types of insulin that your doctor can prescribe. The type of insulin will depend on how your body responds to insulin, your lifestyle (diet and exercise), and blood sugar goals.

It is important to know what type of insulin you are taking, how much you are taking (units), and when you need to take it. The chart below shows common types of insulin.

Insulin Name	Type of Insulin
Apidra, Humalog, NovoLog	Rapid-Acting Insulin reaches the bloodstream 15 minutes after injection, peaks at one hour, and continues to work for 2-4 hours.
Humulin R, Novolin R	Regular- or Short-Acting Insulin reaches the bloodstream 30 minutes after injection, peaks at 2-3 hours, and continues to work for 3-6 hours.
Humulin N, Novolin N	Intermediate-Acting Insulin reaches the bloodstream about 2-4 hours after injection, peaks at 4-12 hours and is effective for about 12-18 hours.
Levemir, Lantus	Long-Acting Insulin reaches the bloodstream several hours after injection, and tends to lower sugar levels over a 24-hour period.

Tips for managing insulin

- ♥ Keep insulin in the fridge when you are not using it. If you keep your insulin at room temperature (61°-79° F), make sure to get a new bottle every 30 days.
- ♥ Before you inject insulin, take it out of the fridge and wait 15-20 minutes before use.
- ♥ Never leave your insulin in a car or in the freezer. If this happens, throw it away and get a new bottle.
- ♥ Always make sure to carry an extra bottle of insulin in case you break or lose your bottle.
- ♥ Keep your medicine in one bag along with all your diabetes supplies (alcohol wipes, needles, glucometer, and cotton balls).
- ♥ Don't forget to check the expiration date.
- ♥ Refill your insulin prescription on time.



Chapter 4

Where to inject insulin

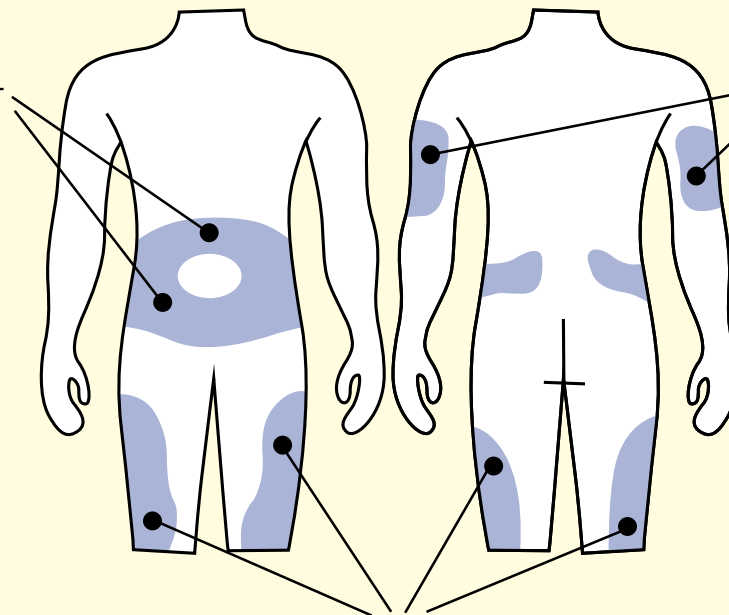
For best results, insulin needs to be injected in the fatty layer of your skin, and never in a muscle or vein.

The following areas are common injection sites:

1

Stomach area -

Use your lower abdomen or hip area where there tends to be more fat. Avoid your belly button by at least two inches.



2

Upper arm -

Use the back area of the upper arm where there tends to be more fat. Avoid the top part of your outer arm near your shoulder.

3

Upper thigh - Use the outer thigh area where there tends to be more fat. Avoid the inner thigh and the bony area around your knee.

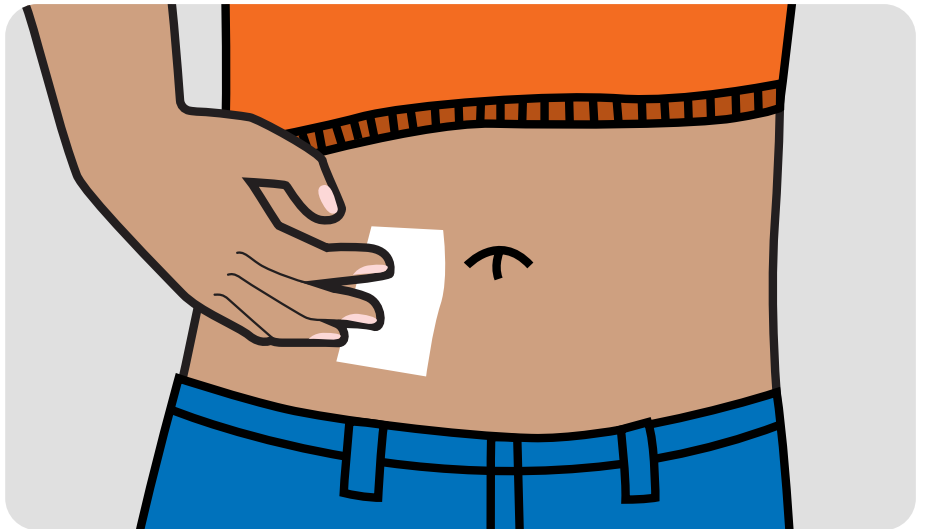
- ♥ Talk to your doctor about which sites may work best for you. Make sure to choose a site that you can see and reach comfortably.
- ♥ Once you choose a site, stay within that site for some time. Try to space your shots about an inch apart.

How to inject insulin

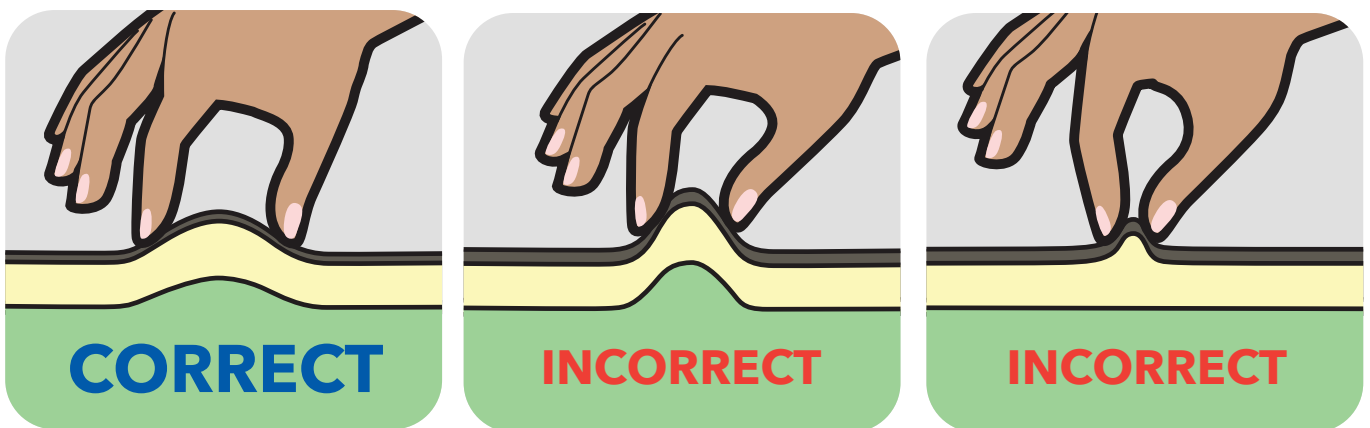
You can inject with an insulin syringe or insulin pen. An insulin syringe allows you to draw insulin from a bottle and can only be used once. Insulin pens come in two types, disposable and reusable. Disposable pens come pre-filled with insulin. Reusable pens have a cartridge of insulin that can be replaced when empty.

When you are getting ready to give yourself an insulin shot, make sure that you find a clean, dry area with a place to wash your hands. Gather all your supplies and follow these steps.

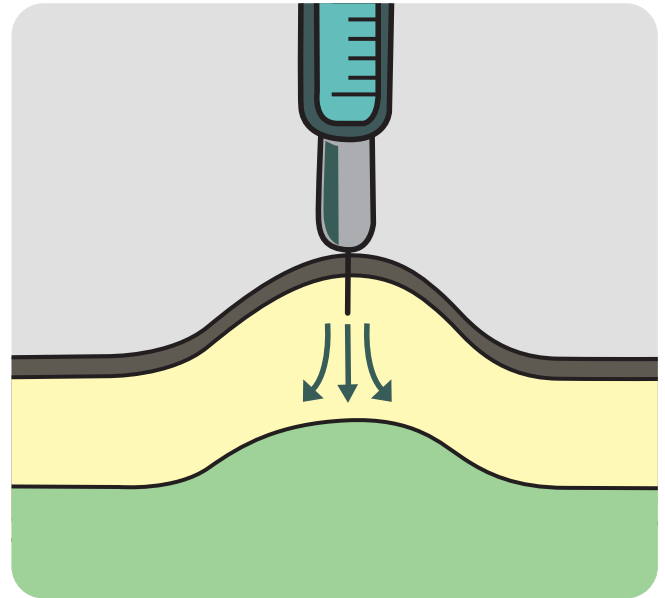
- 1** Choose a site to inject, such as the stomach area. Make sure to clean the area first with an alcohol swab.



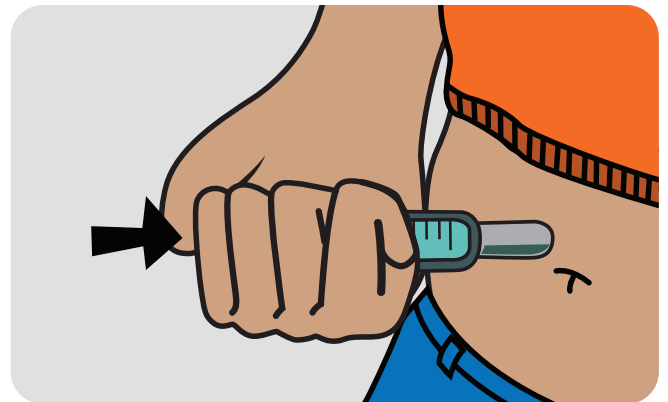
- 2** Use your fingers to pinch 1-2 inches of skin and fat.



- 3 While pinching your skin, use your other hand to hold your insulin pen or syringe and push the needle all the way in at a 90 degree angle.



- 4 Let go of the skin you are pinching and inject the insulin slowly until you are done with the entire dose. Leave the syringe or pen in place for five seconds. Doing this prevents insulin from leaking out if the needle is removed too quickly.



- 5 Take the needle out at the same 90 degree angle. Never use it more than once; reuse can cause bleeding, bruising, or scarring. It can also cause the needle to break off in the skin.

Talk to your doctor about how to safely dispose of your used needles. Your city or county may have disposal options for you.



Staying Healthy With Diabetes

Knowing how diabetes affects your body can help you take care of yourself to prevent health problems in the future.

If not well controlled, diabetes can severely damage your body over time. The good news is that the risk of most of these diabetes-related conditions can be reduced by keeping your blood sugar, blood pressure, and cholesterol at healthy levels.

In this section you'll learn what these conditions are and ways to prevent or delay their onset. Make sure to talk with your doctor about what your risks may be and the best way to protect your health.

Control Your Blood Pressure and Cholesterol

The risk of cardiovascular disease (heart attack, stroke, and blood vessel disease) is greater for people with diabetes who have high blood pressure and high cholesterol levels.

High Blood Pressure

Two out of three people with diabetes have high blood pressure. High blood pressure is when the blood moves through the blood vessels with too much force, causing your heart to work harder. Over time, this can cause heart disease and increase your risk for other diabetes problems.

♥ Screening for High Blood Pressure

High blood pressure has been called the “silent killer” because there are no obvious symptoms and people are not always aware that they have it. So have your blood pressure checked at every doctor visit – and, if you have high blood pressure, check it daily at home.

♥ Here's what your numbers mean:

- Healthy blood pressure: below 120/80
- Early high blood pressure: upper value of 120-129 with lower value less than 80
- High blood pressure: 130/80 or higher

Keeping your blood pressure within a healthy range can help you delay or prevent a heart attack or stroke. Talk with your doctor about what your target blood pressure range should be.

Chapter 5

High Cholesterol

Cholesterol is a soft, waxy, fat-like substance that is found in your body's cells. Your body needs some cholesterol for good health, but too much can lead to problems. When you have high levels of cholesterol, it can join with other fats in your blood and form plaque. Over time, plaque can harden and clog your blood vessels, restricting blood flow to the heart. Like high blood pressure, high cholesterol can cause heart attack or stroke.

Talk to your doctor about keeping your cholesterol in a healthy range, and get a cholesterol test at least once a year.

What to do about high blood pressure and high cholesterol

High blood pressure and high cholesterol will not go away without treatment. Some people are able to control these conditions with lifestyle changes. Others may also need medicines. Work with your doctor and diabetes care team to create a treatment plan that works for you.



Guard Your Heart

The heart pumps blood to the entire body using blood vessels. The blood it delivers is full of oxygen and nutrients to keep you going day after day.

Having diabetes increases the risk for heart disease. Talk to your doctor about your risk. Watch for any warning signs and never delay calling 911 if you think you may be having a heart attack.

Warning signs of a heart attack can include:

- ♥ Chest pain or discomfort
- ♥ Pain in your arms, back, jaw, neck, or stomach
- ♥ Shortness of breath
- ♥ Sweating
- ♥ Heartburn or nausea
- ♥ Feeling light-headed
- ♥ Feeling tired

Warning signs of heart failure can include:

- ♥ Shortness of breath
- ♥ Weakness
- ♥ Nausea
- ♥ Feeling tired
- ♥ Swelling of the feet and ankles

Nerve damage caused by diabetes can make a heart attack painless. If you have any other warning signs, call 911.

Chapter 5

Keep Your Brain Safe

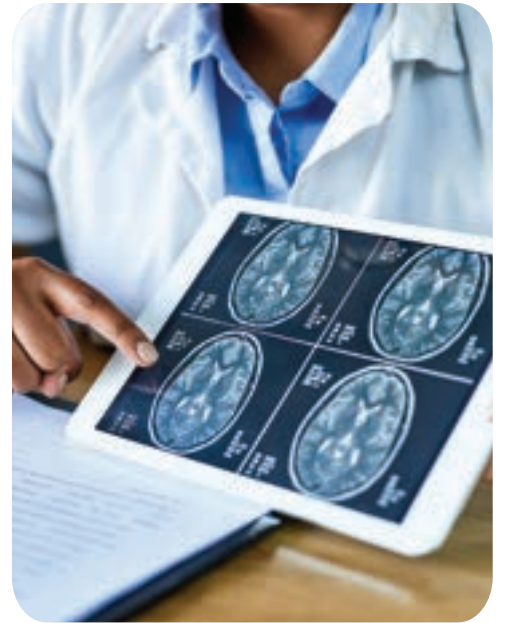
A stroke is a sudden stop of blood flow to your brain. Strokes are mostly caused by a blood clot blocking a blood vessel in the brain or neck. After having a stroke, people may have problems moving, may have pain, trouble speaking, or remembering things. Diabetes puts you at higher risk for stroke.

Risk factors for stroke include:

- ♥ Heart disease or high blood pressure
- ♥ Unhealthy cholesterol levels
- ♥ Smoking
- ♥ Being overweight
- ♥ Not being physically active
- ♥ Being over age 55
- ♥ Being African American
- ♥ Family history of stroke

Warning signs of a stroke include:

- ♥ Weakness or numbness on one side of the body
- ♥ Sudden confusion
- ♥ Trouble speaking
- ♥ Dizziness, loss of balance, or trouble walking
- ♥ Double vision or trouble seeing
- ♥ Headache



Call 911 right away if you have any warning signs of a stroke. Being treated quickly can help prevent permanent damage to your brain.

Preserve Your Blood Vessels

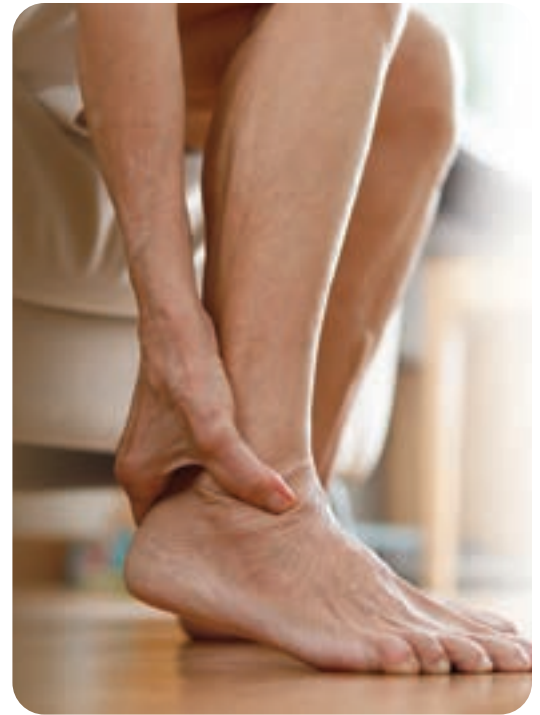
Peripheral Arterial Disease (PAD) is where blood vessels in the legs are narrowed or blocked by fatty deposits. This makes it harder for the heart to get blood to the legs and feet. Having diabetes puts you at risk for PAD.

Other risk factors include:

- ♥ High blood pressure
- ♥ Unhealthy cholesterol levels
- ♥ Smoking
- ♥ Being overweight
- ♥ Not being physically active
- ♥ Being over age 50
- ♥ Having a personal or family history of heart disease, heart attack, or stroke

Symptoms of PAD include:

- ♥ Leg pain that goes away after resting
- ♥ Numbness, tingling, or coldness in the lower legs or feet
- ♥ Sores on the feet or legs that heal slowly



**About 1 in 3 people with diabetes
over age 50 have PAD.**

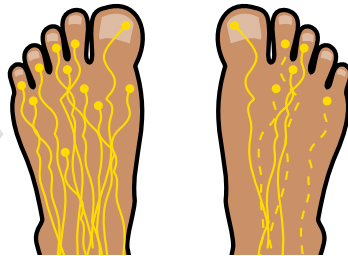
Chapter 5

Protect Your Nerves From Damage

Nerve damage (neuropathy) affects more than 50 percent of people with diabetes. Nerves throughout your body send signals to and from the brain so you can sense and react to pain and touch. High blood sugar levels can injure these nerves, but damage is more common in the hands and feet.

Healthy Foot

Our feet are full of nerve endings - with healthy pathways to the brain. Feet are very sensitive.



Unhealthy Foot

Nerves have lost coating and pathways don't work. Feet lose feeling.

Symptoms of nerve damage tend to get worse at night. Call your doctor if you are having any of these symptoms:

- ♥ Numbness or unable to feel pain
- ♥ Pain or increased sensitivity
- ♥ Tingling feeling with or without burning or warm sensation
- ♥ “Pins-and-needles” sensation
- ♥ Muscle weakness
- ♥ Slower reflexes
- ♥ Foot problems such as ulcers, infection, or joint pain

The biggest risk factors for nerve damage include:

- 1 Uncontrolled Diabetes** – Protect yourself from nerve damage by keeping your blood sugar levels within your target range.
- 2 Obesity** – Excess weight can lead to conditions that cause nerve damage.
- 3 Smoking** – Smoking hardens your arteries, making it hard for injuries to heal, and causes damage to your nerves.

Healthy eating, healthy lifestyle changes, and controlled blood sugar levels can help prevent or delay nerve damage. Although medicine will not prevent further damage, it can ease pain and discomfort.

 **Remember to visit your doctor**

Avoid Foot Problems

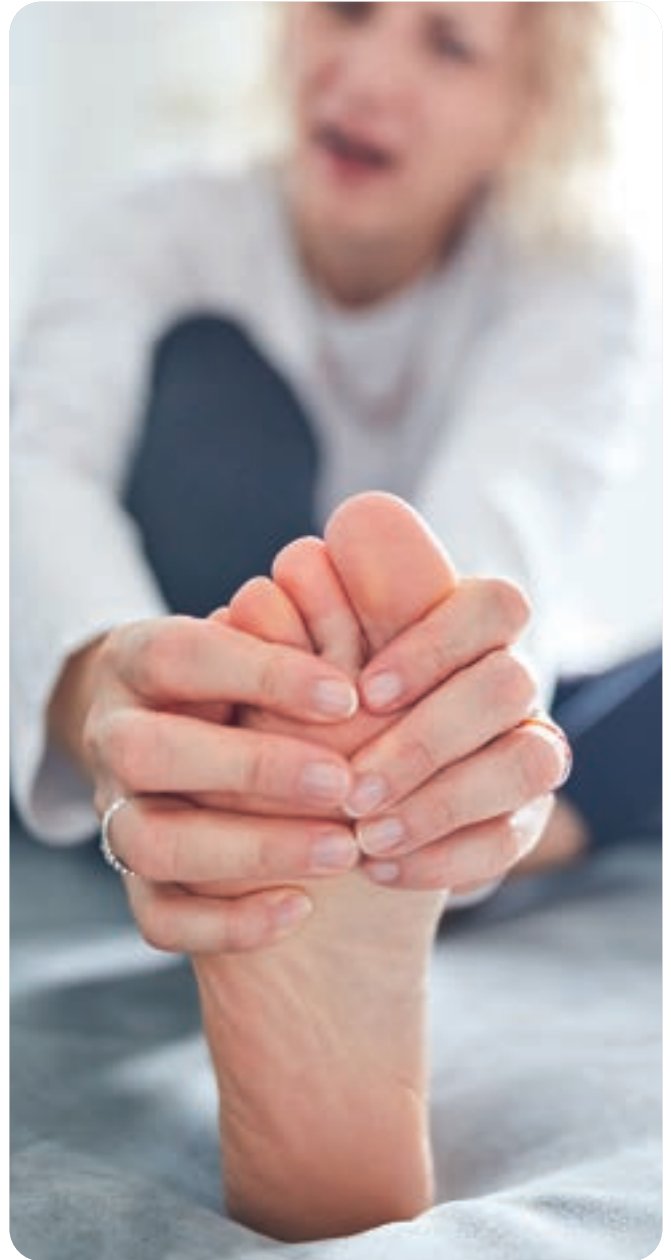
For the most part, people give little thought to their feet. But if you have diabetes, your feet need special care. Blood sugar levels that are high all the time will damage nerves, and lead to loss of feeling in the feet. High blood sugar levels will also cause poor blood flow and slow healing. In fact, one in four people with diabetes develop foot problems – and, in extreme cases, get to the point of losing a toe, foot, or leg (amputation).

Common foot problems include:

Skin changes. The skin on your foot can get very dry and may peel and crack. This is because the nerves that control the moisture in your foot no longer work.

Calluses. Calluses build up faster and more often in people who have diabetes. These are layers of thick skin caused from a lot of rubbing usually on the ball of the foot. If not trimmed, they can turn into ulcers. They can also form on toes or heels.

Cuts, sores, cracks, and blisters. Diabetes causes arteries to harden which can lead to poor blood flow. When blood flow to the feet is reduced, these cuts can't heal and may lead to ulcers.



Chapter 5

Having good blood sugar control and a daily foot care routine can lower your risk for complications.

Here's what you can do:

Inspect your feet every day. You may not be able to feel pain caused by a small rock, an ingrown toenail, or a blister. Look closely for cuts, sores, cracks, blisters, or swelling. If you have trouble reaching your feet, use a mirror to help you see your foot better. You can also ask your support person for help. See your doctor right away if you have foot injuries that are not healing. Don't treat them yourself—you may injure your feet.

Wash your feet every day. Use warm water, not hot. Dry them with care, mainly between the toes. To avoid dry skin, rub a thin coat of lotion on the tops and bottoms of your feet—but not between your toes.

Practice general foot care.

- ♥ Trim your toenails with care straight across and file the edges with a nail file. If you can't reach, have your support person help you.
- ♥ Wear shoes and socks or slippers with a hard sole at all times. Never walk barefoot—not even at home. You can step on something and get a cut or a scratch without knowing it. Check inside your shoes for any debris or objects before you put them on.

At each doctor visit,

take your shoes off as soon as you arrive in the exam room and ask your doctor to check your feet for damage. If you have calluses, corns, or warts have your doctor check them too.



Remember to visit your doctor

Protect Your Kidneys

Your kidneys contain millions of tiny blood vessels that act as filters. Their job is to remove waste and excess fluids from your blood. This waste and fluid are then moved out of your body through urine.

The kidneys also perform other vital functions:

- ♥ Help control your blood pressure
- ♥ Keep your bones strong and healthy
- ♥ Trigger bone marrow to make new red blood cells

Having diabetes puts you at high risk for chronic kidney disease (CKD). When diabetes is not well controlled, the high blood sugar levels can damage kidneys over time and lead to a decline in kidney function.

CKD cannot be cured, but it can be treated and managed. It's vital that you work closely with your doctor to prevent or detect CKD in the early stages.

CKD has different stages. Most people with mild to moderate CKD can protect their kidneys from getting worse by living a healthy lifestyle and taking medicines. Advanced stages may require treatments such as dialysis (using a machine to perform the kidney's job) or a kidney transplant.

What are the symptoms of CKD?

Most people who have CKD don't notice symptoms until they have less than 30 percent of kidney function left.

Symptoms may include:

- ♥ Feeling tired
- ♥ Lack of appetite
- ♥ Swelling in lower legs, hands, or face
- ♥ Trouble sleeping due to itching, muscle cramps, or restless legs
- ♥ Urinating more or less than usual

Chapter 5

Because symptoms don't usually show up until there has been quite a lot of kidney damage, make sure you keep all your scheduled doctor appointments. Your doctor will want to screen you for CKD at least once a year.



 **Remember to visit your doctor**

Guard Your Vision

Having diabetes puts you at high risk for eye problems that can lead to vision loss or blindness. Diabetic eye disease has no early warning signs. By the time you notice changes in your vision, your eyes could already be badly damaged.

That's why you should get a diabetic eye exam at least once a year, even if your diabetes is well controlled. This simple, painless exam can help find problems early – and early treatment can help protect your vision. Your diabetic eye exam is not the same as a routine eye exam.

What can I expect when I get a diabetic eye exam?

Your eye doctor will put drops in your eyes to enlarge (dilate) your pupils. Then your eye doctor will use a special lens and a ray of light to look all the way to the back wall of your eyes. The exam is not painful, but your vision may be blurred for a few hours. You'll also be sensitive to light so bring dark sunglasses to wear after your exam.



Chapter 5



What will my eye doctor be looking for?

Your eye doctor will be looking for early signs of eye disease. The most common eye disease for people with diabetes is diabetic retinopathy. You are also at risk for glaucoma and cataracts.



• *Diabetic Retinopathy*

The inside of your eye is lined with a layer of nerves called the retina. The retina responds to light and sends images to your brain. Diabetes can damage the small blood vessels in the retina, causing retinopathy.

Retinopathy can blur or distort the images that the retina sends to the brain. If it is not caught and treated during the early stages, retinopathy can lead to severe vision loss or blindness.



• *Glaucoma*

This condition occurs when pressure builds up in the eye. If not treated, the pressure damages blood vessels of the retina and optic nerve, causing vision loss. Although glaucoma cannot be cured, it can be treated to prevent further damage or blindness. Ways to control glaucoma may include eye drops, laser treatment, medicine, or surgery.



• *Cataracts*

A cataract is a clouding of the clear lens in your eye. The lens lets you focus on an image, just like a camera lens does. As cataracts progress, images get out of focus. During early stages, vision may be improved with glasses. Later, cataracts may call for surgery which often restores complete vision.

What can I do to protect my vision?

Don't wait for a vision change to occur before you see your eye doctor. Schedule your yearly diabetic eye exam to check for diabetic retinopathy, glaucoma, and cataracts. Although vision problems are common for people with diabetes, blindness can be prevented with early treatment and proper care.

To prevent eye disease:

- ♥ Keep your blood sugar levels and blood pressure under control.
- ♥ If you smoke, quit.

And let your doctor know right away if:

- ♥ You have blurry or double vision.
- ♥ You feel eye pain or pressure.
- ♥ You see spots or lines floating in your vision.
- ♥ You can't see well out the corner of your eye.
- ♥ You see flashing lights or have blank spots.



Helpful Tip!

Call to schedule your diabetic eye exam around the same time as a yearly event like your birthday or the New Year. This will help remind you when it's time to call again next year.



You don't need a referral to get your diabetic eye exam.

Call your IEHP eye doctor today to schedule this FREE exam!
To find an eye doctor near you, call IEHP Member Services at 800-440-IEHP (4347) or 800-718-IEHP (4347) or 711 for TTY users.

 Remember to visit your doctor

Chapter 5



Take Care of Your Mouth

Did you know diabetes can also affect your mouth, teeth, and gums?

Keeping your diabetes under control, seeing your dentist on a routine basis, and taking care of your mouth daily can help prevent oral complications. Some of these include:

Gum (periodontal) Disease – It's the most common oral problem in people with diabetes and can lead to tooth and bone loss. An early sign of gum disease is bleeding when you brush or floss your teeth.

Dry Mouth – High blood sugar levels and some medicines cause a decrease in saliva. Saliva helps keep your mouth healthy by washing away bacteria. A decrease of saliva puts you at risk for tooth decay and infections.

Thrush – This is a type of yeast that can grow on your tongue and the inside of your cheeks. It looks like white or red patches and causes a painful burning feeling. High levels of sugar in saliva make it easy for yeast to grow. Thrush is more common in people who wear dentures.

Prevent Oral Problems with Daily Dental Care:

Brush and Floss – Brushing twice a day with toothpaste that contains fluoride and flossing at least once a day helps remove plaque. Plaque that is not removed will harden, causing gums to swell and bleed easily, especially when brushing or flossing. This can lead to gum disease.

Denture Care – If you have dentures, remove and clean them daily. Make sure you take them out before going to bed.

Smoking – If you smoke, stop. Smoking raises your risk of oral problems like gum disease and thrush.



See Your Dentist Every Six Months!

Your dentist will check your mouth for cavities, plaque, and gum health. He or she will also clean your teeth during this visit. Make sure you tell your dentist you have diabetes and if you take any medicines.



Remember to visit your doctor

Protect Your Skin

People with diabetes are at high risk for skin problems. With proper care, skin problems can be treated or prevented. Talk to your doctor about your skin at your next visit.

Skin conditions may include:

- ♥ *Bacterial Infections* - Examples include styes and boils.
- ♥ *Fungal Infections* – Itchy rash causing skin to look red and moist, often surrounded by tiny blisters and scales. Examples include ringworm, athlete’s foot, and yeast infections.
- ♥ *Itchy Skin* – Constant itching anywhere on the body but most often on the lower legs.
- ♥ *Diabetic Dermopathy (Shin Spots)* – Light brown, oval scaly patches often on the legs.
- ♥ *Diabetic Blisters* – Painless fluid-filled blisters that appear on the fingers, hands, and toes.

Tips for Healthy Skin

- ♥ Keep your blood sugar levels under control.
- ♥ Keep skin dry and clean.
- ♥ Avoid very hot water.
- ♥ Use body lotion daily but avoid skin folds, fingers, and toes.
- ♥ Check your feet for cuts, cracks, or injuries every day.
- ♥ See your doctor or a dermatologist about any skin problems.

Depression and Diabetes

What is Depression?

Everyone feels sad sometimes. It's a normal part of facing life's problems and dealing with feelings of hurt and loss.

But when people feel a sadness so intense they can't seem to perform their normal routines, they may have depression. This is not a sign of weakness. While depression is a serious medical problem, it can be treated, and people can regain control of their lives again.

Depression and Diabetes

People with diabetes are two times more likely to have depression than those without diabetes. It may be that the stress of living with diabetes leads to depression or makes depression worse. At the same time, when people are depressed, they may not feel like taking care of their diabetes. They may stop taking medicines or eating healthy foods. Such actions can make diabetes symptoms worse. This, in turn, may lead them to feel more stressed or depressed. Without proper treatment, this cycle will go on.

Symptoms of Depression

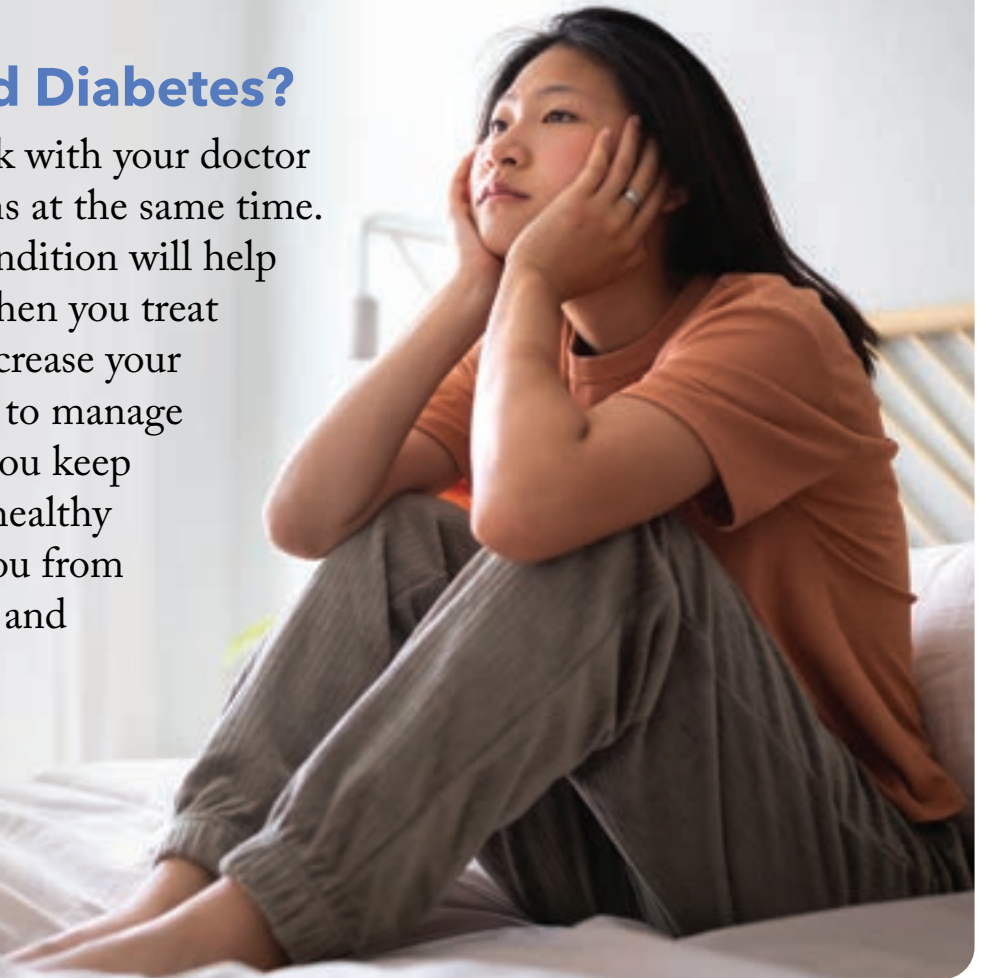
If you are in a depressed mood most of the day, or find little or no pleasure in things you used to enjoy, you may have depression. These feelings of sadness and loss of interest can lead to a wide range of other symptoms such as:

- ♥ Not being able to get to sleep or stay asleep, or having a major change in sleep patterns
- ♥ Not being able to concentrate, think clearly, remember details, or make decisions
- ♥ Overeating or having no appetite
- ♥ Feeling tired all the time
- ♥ Feeling restless or irritable
- ♥ Feeling guilty, hopeless, or worthless

If you think you may have depression, see page 41 for a tool doctors use with their patients to screen for depression. You can answer the questions and discuss the results with your doctor.

What If I Have Depression and Diabetes?

It is vital that you work with your doctor to treat both conditions at the same time. Often, treating one condition will help you with the other. When you treat depression, this can increase your mood level and ability to manage your diabetes. When you keep your blood sugar in a healthy range, it will protect you from other health problems and improve your sense of well-being.



Dealing with both depression and diabetes is not easy. But you don't have to do this alone.

- ♥ Reach out to a family member or trusted friend.
- ♥ Join a local support group for people who have depression, diabetes, or both. Talking to others can help you cope.
- ♥ Join a club or take classes to connect with other people.
- ♥ Be active each day! Even a 10-minute walk can help improve your mood and control your blood sugar.
- ♥ If your doctor treats your depression with medicines, be sure to take all the medicines the way your doctor tells you and give them time to work.
- ♥ Talk to your doctor about other ways to treat depression.

Could It Be Depression?

If low moods are making it hard for you to get through your days, you may be struggling with depression. Most people with depression need treatment to get better.

Below are two questions that healthcare providers use as a tool to check if patients may be having problems with depression. Select ONE answer per question. Each answer has a point value. After you answer the questions, add your points together.

Over the past two weeks, how often have you been bothered by any of the following problems?

1 Little interest or pleasure in doing things _____ points

- a. Not at all (0 points)
- b. Several days (1 point)
- c. More than half the days (2 points)
- d. Nearly every day (3 points)

2 Feeling down, depressed, or hopeless _____ points

- a. Not at all (0 points)
- b. Several days (1 point)
- c. More than half the days (2 points)
- d. Nearly every day (3 points)

Total Points

If your point total is 3 or higher, you are showing signs of depression.

Please follow up with your doctor to discuss this screening and to get the help you may need.

If your point total is 2 or less, you are not showing signs of depression

at this time. But if you still have concerns, please talk to your doctor about your feelings. This screening does not take the place of a clinical evaluation.

Chapter 7



Getting the Most From Your Doctor Visits!

Asking questions and letting your doctor know what concerns you have can often improve the care you get. But it's easy to forget what you wanted to ask once you get to your doctor's office. How many times have you arrived home and thought "Oh I can't believe I forgot to ask about that... again!"

Make the most of your next visit –

- ♥ Prepare a **list** of questions you want to ask your doctor. This will help you focus on your concerns during your visit.
- ♥ Use a **notebook** to jot down your questions and to record what your doctor tells you. If you can't take complete notes when you're with your doctor, it's a good idea to sit in the waiting room and finish up before leaving.
- ♥ You may also think of asking a family member or trusted friend to go with you.

This person can listen, take notes, and offer support.

This section lists questions that are important to people with diabetes. Since time is often limited during doctor visits, it's best to focus on three or four of your most important concerns so that there's enough time to get the answers you need. Your questions may change from visit to visit depending on how you are doing.

Checking Your Glucose (Blood Sugar)

Everything you do – eat, exercise, take medicines – affects your blood sugar. Checking your blood sugar on a scheduled basis lets you know if you're making good choices to keep your diabetes in control.

Also, checking your blood sugar helps you treat high or low blood sugar before it becomes an emergency.

Questions to Ask

- 1.) How often should I check my blood sugar?
- 2.) When are the best times to check my blood sugar?
- 3.) What are the signs that my blood sugar is getting too high/low?
- 4.) What is too high and what should I do if my blood sugar is too high?
- 5.) What is too low and what should I do if my blood sugar is too low?

Always bring your Blood Sugar Log with you to review with your doctor.

About Diabetes Medicines

Your doctor may prescribe medicines to keep your blood sugar under control.

Make a list of all the medicines you are taking for your doctor to review. Include name, dosage, how many times and when you take it. Don't forget about over-the-counter medicines, vitamins, and other supplements.

Questions to Ask

- 1.) When is the best time to take my medicine?
- 2.) What side effects should I look out for and tell you about?
- 3.) Do I need to take my diabetes medicine even on days when I feel fine?
- 4.) What should I do if I forget to take my medicine?

If you prefer, you can put all your medicines in a bag and bring them with you. Some doctors like seeing the actual bottles with the labels on them.

Chapter 7

Lab Tests and Exams

Routine lab tests and exams will help your health care team find and treat problems early.

Always ask your doctor what you need to do to prepare for a lab test or exam.

For some tests, you may be asked not to eat or drink (except for water) 8-10 hours before the test. To make sure your test results are correct, always prepare as your doctor tells you.

Managing Diabetes on Sick Days

Being sick with a cold or the flu can cause your blood sugar to rise very quickly, even if you are not eating much.

People with diabetes should take extra care of themselves when they are sick. Talk to your doctor about a sick-day plan.

Questions to Ask

- 1.) How often should I have my A1C test?
- 2.) What should my A1C results be?
- 3.) What other lab tests do I need? How often?
- 4.) What other routine exams do I need? How often?
 - With my IEHP eye doctor?
 - With my dentist?
 - With other specialists?

Questions to Ask

- 1.) How often and when should I check my blood sugar?
- 2.) What should I eat and drink?
- 3.) What flu or cold medicines are safe to take?
- 4.) Should I change how I take my diabetes medicines?
- 5.) When should I call your office, go to urgent care, or go to the ER?

Protect yourself - get a flu shot yearly. Your flu shot is covered by IEHP.

Exercise

When you exercise, your muscles use blood sugar as fuel. Routine exercise can help you control your blood sugar, strengthen your heart, and give you more energy.

Questions to Ask

- 1.) What kind of exercise is safe for me to do? What should I avoid?
- 2.) How much should I exercise each day?
- 3.) Do I need to check my blood sugar before exercise?
- 4.) What should my blood sugar be before exercise?
- 5.) What should I bring with me when I exercise?

Always keep a small carb snack, like fruit or a fruit drink, on hand - or carry a glucose gel tube or glucose tablets in your pocket in case your blood sugar gets low. And stay hydrated with water before, during, and after exercise.



Your Healthy Weight

Being at a healthy weight can help you control your diabetes and reduce your risk for other health problems.

Your doctor can tell you what a healthy weight range is for you.

Questions to Ask

- 1.) What is a good weight for me?
- 2.) How does weight affect my diabetes?

If your doctor tells you to lose weight, IEHP can help. Call IEHP Member Services to enroll in a weight management program.

Chapter 8

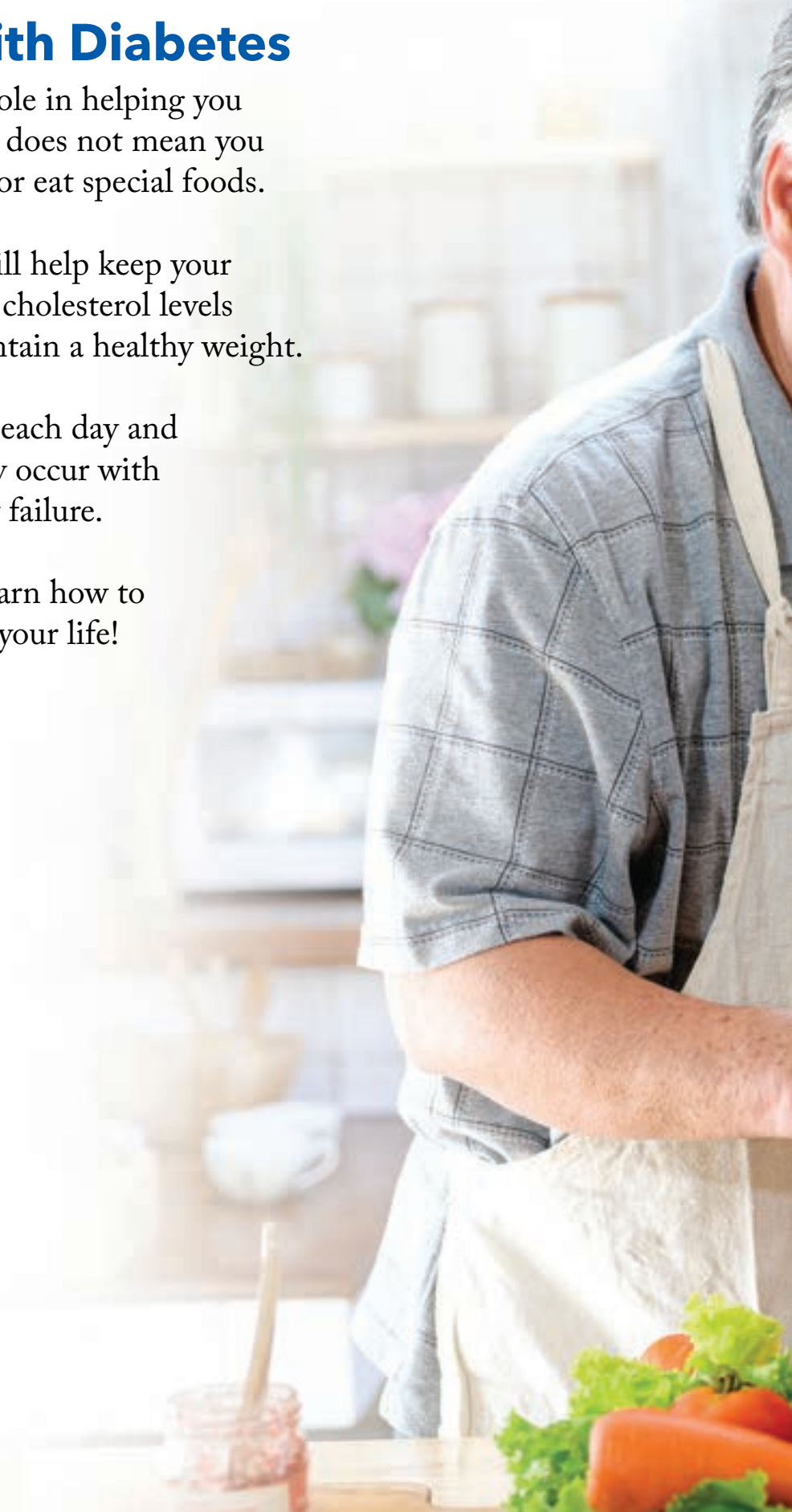
Healthy Eating With Diabetes

The foods you eat play a major role in helping you manage your diabetes – but that does not mean you need to change your whole diet or eat special foods.

You'll find that small changes will help keep your blood sugar, blood pressure, and cholesterol levels under control and help you maintain a healthy weight.

This will help you feel your best each day and prevent other problems that may occur with diabetes, such as heart or kidney failure.

With a little practice, you can learn how to make the right food choices for your life!





Chapter 8

Planning Your Meals

In this section you'll learn to create healthy meals that include the foods you enjoy! Creating healthy meals basically comes down to **3 easy steps!**

STEP 1

Know Your Food Groups

There are six food groups from which you should eat daily. These food groups will give you all the energy and nutrients you need to stay healthy. For people with diabetes, the food groups are split into two main types:

Food Groups With Higher Amounts of Carbs:



The Grains and Starchy Vegetables Group

Foods from this group digest quickly and give you the most energy. To feel full longer, aim to eat more whole grains like brown rice, whole wheat bread, and pasta.

The Fruit Group

Foods from this group give you vitamins, minerals, and fiber that will help you stay healthy. Choose fresh, frozen, canned, or dried fruit. Limit fruit juices.



The Dairy Group

Foods from this group give you calcium that is needed for strong bones and teeth. Choose more low-fat or fat-free dairy products.

1 Food groups higher in carbohydrates (carbs):

foods that give you the most energy and cause your blood sugar to rise quickly after you eat.

2 Food groups with little or no carbs:

foods that are broken down at a slower rate and have little effect on your blood sugar.

Because each food group affects your blood sugar in different ways, you should eat the right amounts of carbs, protein, and good fats at each meal. This will help keep your blood sugar from rising and falling too quickly and give you enough energy until your next meal.

Food Groups With Little or No Carbs:

The Non-Starchy Vegetables Group

Foods from this group are low in calories and give you vitamins, minerals, and fiber. Fiber is harder to digest than most foods so it helps you feel full longer. Fill half your plate with colorful veggies!



The Protein Group (Eggs, Meat, and Meat Substitutes)

Foods from this group do not raise your blood sugar very much. They help build and repair skin, muscles, and organs.

The Fats and Oils Group

Foods from this group are only needed in small amounts. Fats help slow the rise in blood sugar when eaten with carbs. Choose more healthy fats like avocado, olive oil, and nuts.



Chapter 8

STEP 2

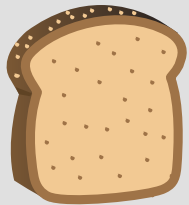
Know Your Carbohydrates

Carbs are your body's major source of energy, so they are needed in a healthy diet. But when you have diabetes, eating too many carbs at a time can raise your blood sugar to high levels, causing problems over time with your eyes, heart, nerves, or kidneys. You can prevent this by spreading your carbs throughout your daily meals.

Servings and Carb Choice

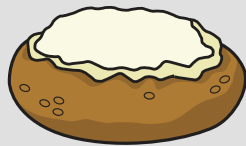
Each serving of carbs is referred to as 1 carb choice. When reading food labels, 1 carb choice is equal to 15 grams of carbs.

Sample of one serving of carbs:



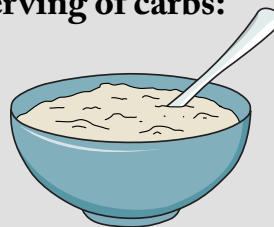
1 slice of bread

or



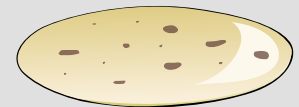
1 small potato

or



½ cup cooked cereal or
¾ cup dry cereal flakes
(unsweetened)

or



1 6-inch tortilla

1 carb choice = 15 grams of carbs

A Registered Dietitian (RD) or Certified Diabetes Care and Education Specialist (CDCES) can help create a healthy meal plan that is right for you and tell you your carb goal for each meal.

To help get you started, you can use this chart as a general guideline.

	If your Doctor says you should lose weight	If your Doctor says you are at a good weight	Snacks (if desired)
Women	2 to 3 carb choices per meal (30 to 45 grams of carb)	3 to 4 carb choices per meal (45 to 60 grams of carb)	1 carb choice per snack (15 grams of carb)
Men	3 to 4 carb choices per meal (45 to 60 grams of carb)	4 to 5 carb choices per meal (60 to 75 grams of carb)	1 carb choice per snack (15 grams of carb)

Servings Sizes of Foods with Higher Amounts of Carbs

Grains and Starchy Vegetables

1 Carb Choice (15 grams of carb per serving)

Grains	Serving Size
Bagel	Half (1 oz)
Bread	1 slice (1 oz)
Bulgar, cooked	½ cup
Cereals, dry (bran)	½ cup
Cereals, dry (sugar-frosted)	½ cup
Cereals, dry (unsweetened)	¾ cup
English muffin	Half
Grits, cooked	½ cup
Hamburger bun	Half (1 oz)
Oats, oatmeal, cooked	½ cup
Plain roll, small	1 (1 oz)
Pasta, cooked	½ cup
Pita bread (6-inches across)	Half
Rice, cooked	⅓ cup
Tortilla (6-inches across)	1
Starchy Vegetables	Serving Size
Beans, cooked	½ cup
Corn	½ cup
Corn on the cob	1 (6-inch)
Lentils, cooked	½ cup
Lima beans	⅔ cup
Peas, cooked	½ cup
Potato, baked or boiled	1 small (3 oz)
Potato, mashed	½ cup
Winter squash	1 cup
Carbohydrate Snacks	Serving
Cookie	2 small cookies
Graham crackers (2½ inches)	3 crackers
Popcorn, popped, no fat added	3 cups
Saltine crackers	6 crackers

Fruit

1 Carb Choice (15 grams of carb per serving)

Raw or Canned Fruits	Serving Size
Apple, raw, 2 inches across	1
Applesauce (unsweetened)	½ cup
Apricots, raw	4 medium
Banana	1 small
Berries (black, blue)	¾ cup
Canned fruit	½ cup
Cherries, raw	12 large
Grapefruit	½ large
Grapes	17 grapes
Honeydew, cubes	1 cup
Orange	1 small
Peach	1 medium
Strawberries, raw, whole	1¼ cup
Watermelon, cubes	1¼ cup
Dried Fruit	Serving Size
Apricots	8 halves
Dates	3 medium
Prunes	3 medium
Raisins	2 Tbsp
Fruit Juices	Serving Size
Apple juice/cider	½ cup
Cranberry juice cocktail	⅓ cup
Orange juice	½ cup
Fruit juice blends	⅓ cup

Dairy

1 Carb Choice (12 grams of carb per serving)

Milk	Serving Size
Skim, Whole, 2% or 1% fat	1 cup (8 fl oz)
Evaporated milk	½ cup (4 fl oz)
Fortified unflavored almond milk or soy milk*	1 cup (8 fl oz)
Yogurt/Ice Cream	Serving Size
Nonfat or lowfat fruit-flavored yogurt with artificial sweetener	1 cup
Ice cream, regular or light	½ cup
Plain lowfat or nonfat yogurt	¾ cup

*Note: Serving size varies by brand.

Chapter 8

Servings Sizes of Foods With Little or No Carbs

Non-Starchy Vegetables *(about 5 grams of carb per serving)*

Adding fresh, frozen, or canned non-starchy vegetables and vegetable juices to your diet are great ways to satisfy your appetite. One serving is ½ cup for cooked vegetables or vegetable juice and 1 cup for raw vegetables. Aim to eat at least 3-5 servings each day!

Non-Starchy Vegetables

Artichoke hearts	Celery	Eggplant	Onions
Asparagus	Cabbage	Green beans	Peppers (all varieties)
Bean sprouts	Carrots	Greens (collard, kale, turnip)	Radishes
Broccoli	Cauliflower	Mixed veggies, with no corn	Salad greens or spinach
Brussel Sprouts	Cucumbers	Okra	Zucchini

Protein *(0 grams of carb per serving)*

Many people with diabetes need between 6 to 8 ounces (oz) of protein each day. Think of a good portion as the size of a deck of cards, which is about three ounces of meat. Aim to eat two portions of lean protein per day or break them into smaller portions throughout your meals each day.

Lean Protein

Lean cuts of meat such as beef round or tenderloin
Skinless poultry
Fish
Deli meats (with 3g or less fat per oz)
Egg
Egg substitute, plain
Tofu
Fat-free or low-fat cheese
Cottage cheese
Cooked beans, peas, and lentils
Nut spreads (1 tablespoon)

Common Portions

3 oz = 1 steak the size of a deck of cards, 1 medium pork chop, or 1 small hamburger patty
2 oz = half of a whole chicken breast
3 oz = 1 can of tuna, drained or 1 fish filet
2 oz = 1 to 3 slices (read food label)
2 oz = 3 egg whites
1 oz = ¼ cup
4 oz = 2½ in. x 2¾ in. x 1 in. steak or ½ cup
1 oz of cheese
1 oz = ¼ cup cottage cheese
1 oz = ½ cup*
1 oz = 1 Tbsp peanut butter**

*Count as one very lean protein and one starch serving **Also counted as fat



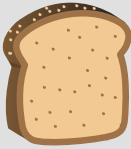



















Fat *(0 grams of carb per serving)*

All fats are high in calories and can lead to weight gain, but some are better than others. Choose fats that are good for your heart, like avocados, nuts, olives, peanut butter, fish oil, flax seeds, and olive or canola oil.

Saturated fats like butter, lard, meat and dairy fat, poultry fat/skin, and creamy salad dressings are linked to reduced blood sugar control.

A Guide to Healthy Portions

Although eating the right portions of food is important to manage your weight and blood sugar, you won't always have measuring cups or a kitchen scale with you. So here's a quick and easy way to measure your food no matter where you are.

Picture this as a healthy portion		...for these foods.		
 hand	or  DVD disk	 bread	 pancake	
 palm of hand	or  deck of cards	 chicken breast	 lean beef	 lean pork
 clenched fist	or  baseball	 medium apple	 small orange	 medium peach
 8 fluid ounce glass	or  8 fluid ounce carton	 Milk	 Almond Milk	 Soy Milk
		Milk or milk substitute (skim, 1%, 2%, whole, almond, soymilk)		
 6 ounce yogurt cup	or  baseball	 Nonfat or low-fat yogurt with artificial sweetener		

Chapter 8

Picture this as a healthy portion	...for these foods.
 <p>2 cupped hands</p> <p>or</p>  <p>baseball</p>	 <p>carrots</p>  <p>cucumbers</p>  <p>salad greens</p>
 <p>cupped hand</p> <p>or</p>  <p>half baseball</p>	 <p>green beans</p>  <p>mixed vegetables</p>  <p>cooked spinach</p>  <p>applesauce</p>  <p>canned fruit</p>  <p>half cup fruit juice</p>  <p>beans</p>  <p>lentils</p>  <p>tofu</p>  <p>bran cereal</p>  <p>mashed potatoes</p>  <p>pasta</p>
 <p>thumb</p> <p>or</p>  <p>shot glass</p>	 <p>nut spreads</p>
 <p>thumb tip</p> <p>or</p>  <p>quarter</p>	 <p>canola or olive oil</p>

Note: Hand sizes vary. These portions are based on an average woman's hand size.



Chapter 8

Nutrition for Life: Diabetes Plate Method

The Diabetes Plate Method is a helpful tool for anyone who wants to eat better and learn about variety and portion sizes, including people with prediabetes. Each section of the plate (based on a nine-inch plate) is for the following three food groups: vegetables, grains, and protein. These five food groups are the foundation for healthy eating.

Fill 1/2 of the plate with non-starchy vegetables.

- Non starchy vegetables are low in carbohydrates. One serving amounts to one cup raw veggies, such as a salad greens or ½ cup cooked, such as broccoli. You can have as many non-starchy vegetables as you like, but make sure at least half of your plate is filled with things like green salad, broccoli, or asparagus.

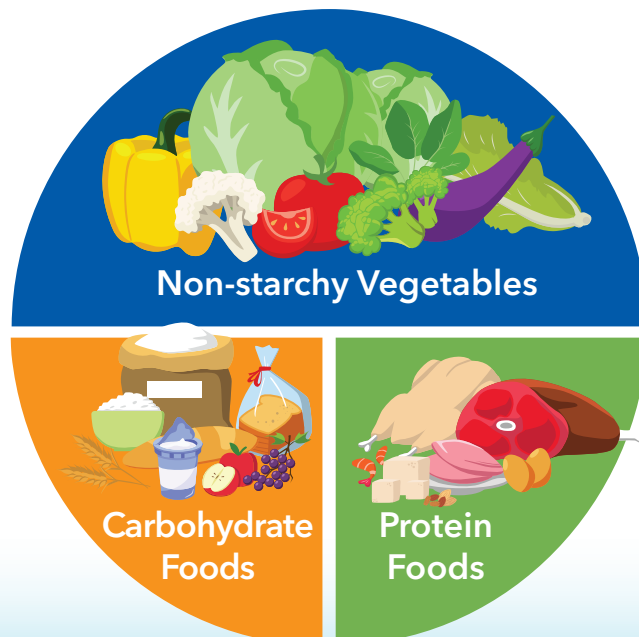
Fill 1/4 of the plate with grains, starchy vegetables, dairy and fruit, or beans and lentils.

- Choose whole grains such as brown rice or quinoa which are rich in vitamins, minerals, and fiber. Beans and lentils contain both starch and protein with good amounts of fiber.

Fill 1/4 of the plate with Protein

- This section includes meat and other protein sources, such as eggs and fish. Look for lean cuts of meat and low-fat cheeses. 1/4 of the plate is equivalent to a 3 oz cooked portion (about the size of a deck of cards or the palm of your hand).

Source: diabetes.org



Grains & pasta	Breads	Cereals	Starchy Vegetables	Dairy	Beans, Peas, & Lentils	Fruits
1/3 to 1/2 cup cooked	1 slice (1 oz)	1/2 cup cooked	1/2 cup cooked	2/3 to 1 cup	1/2 cup cooked	1/2 cup fresh

**These measurements are based on estimates and each has about 15 gm of carbohydrate. Please see the nutrition label or talk to your health care provider or a registered dietitian for questions relating to serving sizes.*

Protein

- Beef
 - Ground beef, 90% or higher lean/10% or lower fat
 - Choice grades such as chuck, round, rump
 - Loin cuts such as sirloin and tenderloin
- Cheese, preferably low-fat varieties
- Curd-style cheese, cottage, ricotta
- Eggs
- Pork, rib or loin chop or roast, tenderloin
- Seafood, such as fish, clams, crabs, and shrimp
- Tofu
- Turkey or chicken (without the skin)

Dairy

Choose low-fat (skim), nonfat, or reduced-fat varieties. One serving (which is one cup) of the milk products below contains 12 grams of carbohydrate.

- Fat-free (skim) milk, low-fat (1%) milk, buttermilk, soy milk
- Yogurt, plain or Greek. You can sweeten this with an artificial sweetener.

Fruit

Fruit is a power food packed with vitamins, minerals, and fiber.

Fats

In the Diabetes Plate Method, healthy fats are used for cooking and as condiments. It's best to choose unsaturated fats, which are usually liquid rather than solid. One serving of these healthy fats (which is about one teaspoon) contains 5 grams of fat and 45 calories each.

- Vegetable oil, olive oil, canola oil, sunflower oil, safflower oil, or corn oil
- Avocado
- Nut butters
- Nuts, such as almonds, peanuts, and pecans
- Olives
- Non-dairy spreads such as margarine which contains vegetable oil. Make sure your spreads are trans fat-free!

Beverages

To complete your meal, add water or another zero-calorie beverage such as diet soda, diet tea, plain tea, or coffee.

Chapter 9

Making Smart Food Choices

Whether you are shopping for food, making a meal at home, or eating out, planning ahead and making smart choices will help you manage your diabetes and stay healthy.

In this section, you will learn how to:

- ♥ Read a food label
- ♥ Stock your kitchen with healthy foods
- ♥ Curb your hunger with healthy snacks
- ♥ Make healthy choices when eating out

With a little practice, you can learn how to make the right food choices for your life!



How To Read the Food Label

Knowing how to read these labels can be very helpful when trying to stick to a healthy eating plan. Food labels are found on most packaged or canned foods.

Focus on these areas!

Whole Wheat Bread

Look at the serving size. All the information you see on the food label is based on the standard serving size for the food in the package. The serving size on this food label is one slice of bread.

Look at the total carbohydrate (carbs). Check the amount of total carbs instead of just the amount of sugar. This food has 15 grams of carbs which equals one carb choice.

Nutrition Facts		
Serving Size 1 slice (31g)		
Servings Per Container 23		
Amount Per Serving		
Calories 70	Calories from Fat 10	
% Daily Value*		
Total Fat 1g	2%	
Saturated Fat 0g	0%	
Trans Fat 0g		
Cholesterol 0mg	0%	
Sodium 140mg	6%	
Total Carbohydrate 15g	5%	
Dietary Fiber 2g	8%	
Sugars 1g		
Protein 3g		
Vitamin A 0%	Vitamin C 2%	
Calcium 2%	Iron 4%	
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:		
	Calories: 2,000	2,500
Total Fat	Less than 65g	80g
Saturated Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g
Calories per gram:		
Fat 9 • Carbohydrate 4 • Protein 4		

Look at the servings per container. This number tells you how many servings are in the package. There are 23 servings in this package, which means there are 23 slices of bread.

In this section look for foods that have *lower* **Percent Daily Values (%DV)**. Best to aim for 5% or less.

In these sections look for foods that have *higher* **Percent Daily Values (%DV)**. Best to aim for 20% or more.

Chapter 9

Stock Your Kitchen With Healthy Foods

It is easier to stick with a healthy eating plan when you have the right foods in your pantry and fridge. Start by looking at the foods you have. Slowly replace any unhealthy foods with healthy food options. This is a good time to practice reading food labels!

Here are food items that you may have in your kitchen, and what you can replace them with:

Food Items	Replace With...
Butter, margarine, lard	Canola and olive oils, cooking sprays, light buttery spreads or vegetable oil spreads
Canned fruit in heavy syrup	Canned fruit in its own juice, fresh fruit, dried fruit
Canned vegetables, frozen vegetables with added sauce	Fresh vegetables, frozen vegetables, low-sodium canned non-starchy vegetables (diced tomatoes, green beans)
Canned refried beans	Dry beans, legumes, low-fat and low-sodium canned beans, vegetarian refried beans (cooked without lard)
Candy bars, chocolate, cookies, chips, pastries	Cereal or granola bars, sugar-free chocolate or candy, sugar-free cookies and pastries
Cheese	Reduced-fat, low-fat, or fat-free cheeses
Chips	Baked chips, dried fruits, low-fat popcorn, whole grain crackers and pretzels
Cream-based chowders and soups	Low-sodium, fat-free, and broth-based soups
High sugar cereals	Whole-grain, high protein, high fiber cereals (bran flakes, unsweetened granola), oatmeal
High fat meats and processed meats (beef, pork, bacon, hot dogs, spam)	Lean meats (lean beef, pork, chicken, turkey, fish, shrimp), tofu, egg substitutes
Ice cream	Frozen yogurt, reduced-fat, low-fat, or non-fat ice cream, sugar-free ice cream or popsicles
Mayonnaise, sour cream, creamy salad dressings	Light or fat-free mayonnaise and salad dressings, vinaigrette salad dressings, mustard, low-fat or non-fat plain yogurt
Oil-packed canned fish	Light, packed in water, no added salt canned fish
Pudding	Low-fat or non-fat yogurt, gelatin
Salt and salty seasonings	Salt-free seasonings, spices, fresh or dried herbs
Salted nuts and sunflower seeds	Unsalted nuts and seeds (almonds or pumpkin seeds)
White bread, white buns, croissants	Whole wheat bread and buns, wraps, or flatbreads
White flour	Whole wheat flour
White pasta, white rice, pasta/rice mixes	Brown rice, whole wheat pasta, wild rice, quinoa
Whole milk	Reduced fat, low-fat, or non-fat milk, almond or soymilk

Curb Your Hunger With Healthy Snacks

Have you ever had such a busy day that grabbing something “real quick” to eat meant grabbing a bag of chips, donuts, or a candy bar? You may notice that most snack aisles in stores offer unhealthy food choices that may be high in calories, sugar, fat, and carbs. If you are always on the go, plan your snacks ahead of time so you’ll have the right foods on hand and the right portions to choose from. Having healthy snacks that you enjoy will help curb your hunger and keep your blood sugar steady between meals each day.

Here are healthy snack ideas you can choose (about one carb choice):

- ½ cup almonds or nuts
- 1 oz trail mix
- 3 cups lightly buttered popcorn
- 2 tablespoons dried fruit
- 1 small apple, orange, or pear
- ½ cup sugar-free pudding
- 3 graham crackers with 1 tablespoon peanut butter
- 8 animal crackers or 4 animal crackers with 4 oz milk
- 5 whole wheat crackers and 1 string cheese
- ¼ cup cottage cheese with ½ cup canned fruit or fresh fruit
- 6 oz low-fat or fat-free yogurt
- 1 cup raw veggies with ⅓ cup hummus
- ½ cup tuna salad
- ½ sandwich (made with 1 slice whole wheat bread, 2 oz lean turkey, and mustard)



Chapter 9

Make Healthy Choices When Eating Out

Here are tips on how you can eat out and stick with your healthy eating plan:

Eat at your usual times to keep your blood sugar steady. If you take diabetes medicine or use insulin, eat your meals at the same times each day. Try not to go more than 4 to 5 hours without food. If you are eating at a sit-down restaurant, make your reservations ahead of time.

Avoid all-you-can-eat buffets. These will tempt you to overeat.

Eat the right portions. Order smaller size meals such as lunch size entrees or junior size meals. If your restaurant does not offer these options, share your meal with a friend or ask for a to-go box.

Cut extra calories and carbs by going easy on the extras. Extra food items like croutons, bacon bits, wonton crisps, and creamy salad dressings can add more calories and carbs to your meal. Ask for dips, sauces, and extras on the side so you control the amount you eat.

Instead of These Foods	Choose These Foods
Drinks with lots of sugar (soda, lemonade)	Water or iced tea (no sugar added)
Creamy soups like cream of potato or cream of corn	Broth-based soups like minestrone or vegetable
Fried, breaded, or crispy meats	Baked, broiled, grilled or steamed meats
Red meat	Lean protein like skinless chicken, fish, turkey, or tofu
White breads, dinner rolls, rice, and pasta	Whole grain breads, rice, pasta
French fries or fried vegetables	Steamed vegetables or a side salad
Creamy salad dressings	Low-calorie salad dressings or vinaigrettes
Sour cream or cheeses	Fresh salsa
Cakes and ice cream	Fresh fruit, frozen yogurt, sorbets

Many chain restaurants have a copy of their menu with nutrition facts. Look for places that offer more low-fat options. Improve your orders by keeping these tips in mind!

Asian Food

Avoid greasy, breaded, and deep-fried dishes. Below are some healthy choices:

- Chicken or fish that is steamed, broiled, or grilled
- Steamed vegetarian pot stickers or dumplings
- Steamed vegetables
- Steamed white or brown rice
- Hot-and-sour soup or vegetable soup

Italian Food

Italian food can be very healthy if you avoid the creamy sauces and too much cheese or meat: Below are some healthy choices.

- Minestrone soup
- Garden salad with low-fat or fat-free Italian dressing
- Pasta with marinara or mushroom sauce
- Potato gnocchi with tomato sauce
- Vegetable pizza with half the cheese topping

Mexican Food

Avoid fried foods and go easy on the guacamole, sour cream, and cheese. Below are some healthy choices:

- Chicken enchiladas or fajitas
- Baked vegetarian or chicken cornmeal tamales
- Soft tacos
- Steamed corn or whole wheat tortillas
- Whole beans and rice

Fast Food

Limit fast food meals because they are high in calories, fat, and sodium. This can harm your weight, blood pressure, and blood sugar. Below are some healthy choices:

- Plain broiled, grilled, or baked chicken, fish, or turkey burgers
- Turkey or vegetarian sandwiches on whole wheat bread with mustard, lettuce, and tomato
- Grilled chicken wraps or burritos (no cheese)
- Salads (limit the eggs, cheese, bacon bits, croutons, and creamy dressings)

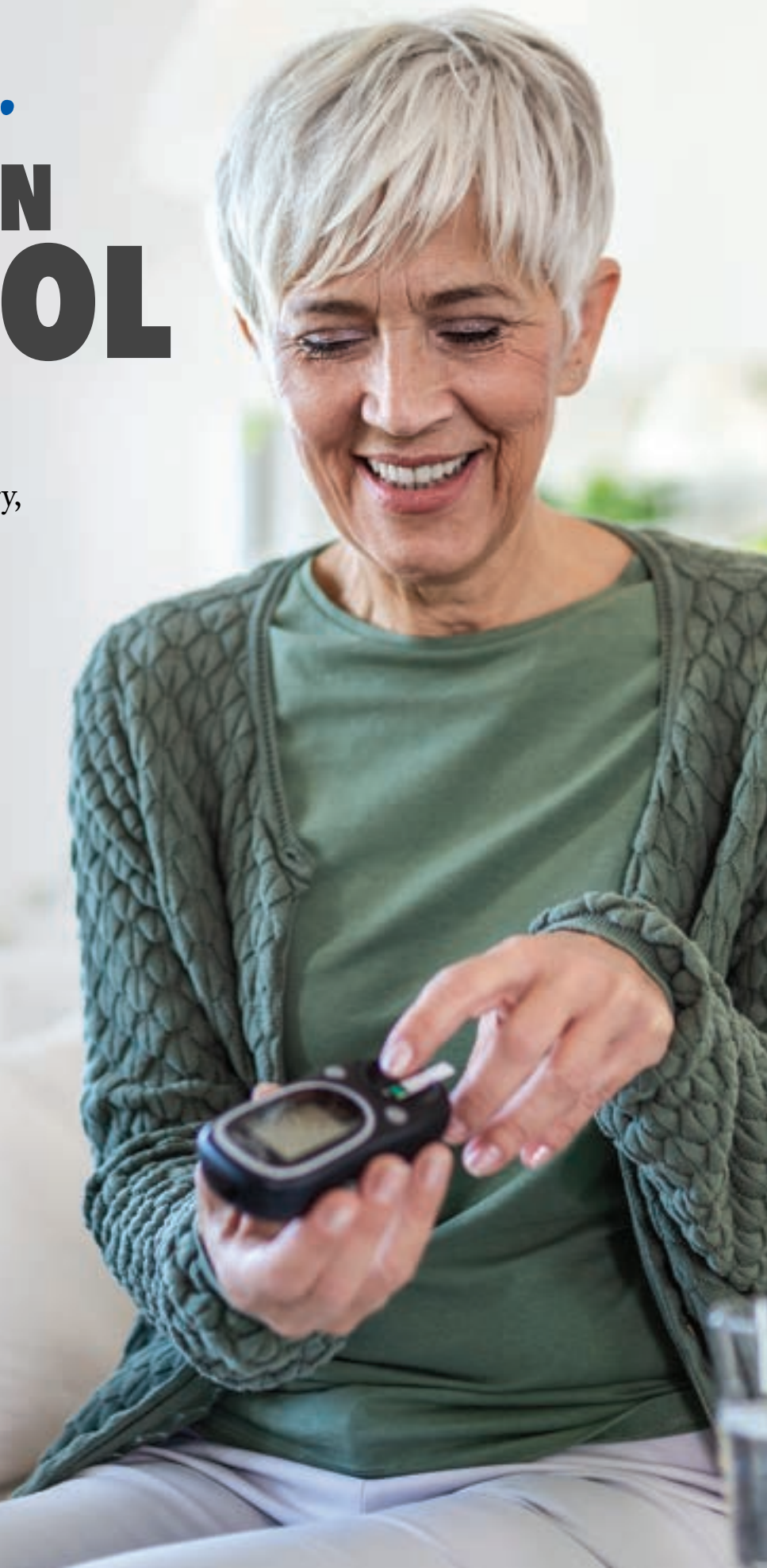
Congratulations! You have just learned the skills you need to stick to your healthy eating plan!

Diabetes...

YOU'RE IN CONTROL

Taking care of yourself helps you feel good. You'll have more energy, be less tired, and be able to heal better. Yes, diabetes has changed your life – but by staying on top of your care you are taking an active role in managing your diabetes, rather than letting diabetes manage you.

We hope the information in this guide will support and protect you on your journey to vibrant health!





Diabetes Care Checklist

to enjoy an active, healthy life



Know Your A1C

- Check this at least 2 times a year
- Aim to get your level below 7%

A1C	Blood Sugar Levels (daily average over 3 months)
6%	126
7%	154
8%	183
9%	212
10%	240
11%	269
12%	298



Check Your Blood Pressure

- Every time you visit the doctor
- Aim for less than 140/90



Check Your Feet

- Every day to make sure you don't have cuts or sores
- Get a foot exam at least once a year



Check Your Kidney Health

- Once a year
- A eGFR test will check how well your kidneys filter your blood
- A uACR will check for kidney damage



Get a Cholesterol Test

- At least once a year
- Ask your doctor what your cholesterol numbers should be



Schedule an Eye Exam

- Once a year
- The dilated retinal exam (DRE) is different from a routine eye exam. No referral is needed and it's a covered benefit. Schedule your visit today.

Date: _____ Time: _____

Eye Doctor: _____

Phone Number: _____

Additional Resources:

- **Diabetes Self-Management Class**
Sign up on the IEHP Member Portal or at iehp.org
- **American Diabetes Association**
www.diabetes.org

← TEAR HERE →



TO DISCOVER MORE ABOUT DIABETES CONTROL:

American Diabetes Association

www.diabetes.org

Learn more about diabetes, meal planning, and eating out.

Centers for Disease Control and Prevention

www.cdc.gov/diabetes

Stay informed of the latest news on diabetes and related health topics.

Foot Health Facts

www.foothealthfacts.org

Find out how to protect your feet and keep them healthy for an active life. Also search “diabetes feet” on www.mayoclinic.org.

Learning About Diabetes

www.learningaboutdiabetes.org

Download free diabetes self-care tip sheets and videos.

Mouth Healthy

www.mouthhealthy.org/en/

Tips and tools to keep your smile bright and healthy. Also search for “dental care diabetes” on www.mayoclinic.org.

National Diabetes Education Program

www.ndep.nih.gov

Learn how you can avoid problems related to diabetes. Select topics of interest or access other resources.

IMPORTANT PHONE NUMBERS:

Have these phone numbers ready when you have questions.

24-Hour Nurse Advice Line:

1-888-244-IEHP (4347)

711 TTY

Member Services:

1-800-440-IEHP (4347)

1-800-718-IEHP (4347) TTY

Monday-Friday, 7am-7pm

Saturday-Sunday, 8am-5pm