



TAKE ACTION!  
**Living well  
with diabetes**



Read this guide then call your doctor, the American Diabetes Association or a local diabetes educator for more information.

## BY THE NUMBERS:

\$12.8 billion was spent on medical costs and lost productivity related to diabetes in New York State for 2007

23.6 million children and adults or 8% of the U.S. population, have diabetes

5.7 million people with diabetes have not been diagnosed and are unaware they have the condition

Adults with diabetes are two-to-four times more likely to die from heart disease

The rate of amputation for people with diabetes is 10 times higher

*Source: American Diabetes Association*

“I was diagnosed with diabetes and I didn’t know where to start. I was overwhelmed and scared. With the help of my doctor, a certified Diabetes Educator and through attending classes about managing my diabetes I’ve changed my lifestyle – and it’s working! After the first six months I lost forty pounds, my A1C went from 9.9% to 6.4%, the good cholesterol (HDL) went up and the bad (LDL) cholesterol went down. I feel great!”

~ Ronald A.

## YOU HAVE DIABETES, NOW WHAT?

This guide was designed by patients like you to address questions about what it’s like to live with diabetes. This guide will give you:

1. Places to go to get information about diabetes.
2. Information about the best ways to care for yourself.
3. Guidance on what you should expect from your health care team.
4. Questions to ask if you do not receive the care you expect.
5. Information to find out how well doctors in your area are following the diabetes treatment guidelines.
6. A resource to refer back to along the way.

## HAVING DIABETES CAN BE SCARY

You may not know anything about diabetes or where to look for answers. You may feel out of control and not know where to turn. There is information to help you understand and manage your diabetes. Managing your diabetes will affect how well you feel.

You can make a difference in the kind of health care you get. Most of us depend on our doctors for information and treatment. We may not think to ask if we are getting the right care. But the right care will help you live a full life with as few problems as possible. You should expect certain things from your health care team—at every visit.

If you are diagnosed with or think you have diabetes it is important to seek medical care to prevent damage to your body. Diabetes is a manageable condition, but if left untreated can result in the following conditions:

- Impotence
- Loss of sight
- Heart and circulatory problems
- Loss of kidney function
- Loss of feeling in your hands and feet
- Skin infections
- Respiratory infections
- Gum and tooth diseases

Your treatment is only one part of the picture. To be healthy and live well with diabetes, YOU must be involved.



## UNDERSTANDING AND RESPONDING TO YOUR DIAGNOSIS

“After being diagnosed with diabetes my doctor sent me to a certified Diabetes Educator. She helped me understand what I needed to do to live healthier, and with her help I’ve made changes to my diet and feel much better. So far I’ve lost 21 pounds, and my blood sugar levels have gotten better. I’ve also set a stop date to quit smoking and I’m actually looking forward to seeing my doctor at my next visit to celebrate my progress!”

~John K.

### **About Diabetes**

Most of the food you eat is broken down into a sugar called glucose. Your body uses this sugar for energy. Insulin is a hormone that carries this sugar into your body’s cells. With diabetes, your body cannot move the sugar into your cells to be used for energy, so sugar builds up in your bloodstream.

If this happens and you do not take steps to control your blood glucose levels you are putting yourself at risk for many challenging health conditions. But, by taking action, you can control your blood glucose levels, manage your diabetes and live a healthy, normal life.

### **Common types of diabetes:**

- Pre-diabetes – people with blood glucose levels that are higher than normal but not yet high enough to be diagnosed as diabetes are defined as having pre-diabetes. If a person with pre-diabetes does not make changes to their lifestyle and diet they will develop Type 2 Diabetes.
- People with type 1 diabetes don't make any insulin. They tend to be younger but it can occur in people of any age.
- People with type 2 diabetes either don't make enough insulin or it doesn't work well. Historically they tended to be older and often overweight. In recent years however, there has been a steep increase in the number of children and teens with type 2 diabetes because of the increase in obesity among these age groups. More than 90% of people with diabetes have type 2 diabetes.

### **Risk factors:**

- Age
- Member of a high risk ethnic group: Asian American, African American, Hispanic/Latino, Native American, Pacific Islander
- Being overweight
- Inactive lifestyle
- Family history
- Having had gestational diabetes or the birth of a child over nine pounds

### **Symptoms to watch for:**

- Blurry vision
- Urinating often
- Being more tired than usual
- Losing weight when you are not on a diet
- Being irritable
- Being very hungry
- Being very thirsty
- Slow healing wounds
- Dry skin and mouth
- Frequent respiratory infections
- Vaginal Infections
- Other infections

**Diagnosing diabetes:** If you think you or someone you know has diabetes, get tested. To do this, ask your doctor for a Fasting Blood Glucose test or an Oral Glucose Tolerance test.

The Fasting Blood Glucose is the preferred test for diagnosing diabetes. It is a blood test done at a lab and it measures your blood glucose level following a 10-12 hour fast. The results will tell you and your doctor more about your condition.

- Results of 99 mg/dl or less is Normal.
- Results of 100-125 mg/dl mean you may have Pre-diabetes.
- Results of 126 mg/dl or higher means that you probably have diabetes. If your test comes back with a number of 126 mg/dl or higher your doctor will give you another Fasting Blood Glucose test on a different day to be sure that the reading is right.

The Oral Glucose Tolerance test measures how your body responds to a set amount of glucose (sugar) in beverage form. This test is done after 10-12 hour fast, and includes a fasting blood glucose test and the drinking of a sweet

followed by blood tests at 1, 2 and possibly 3 hours later. A urine test may also be done with each blood test.

- Results of 140 mg/dl or less after 2 hours is Normal.
- Results of 140-199 mg/dl after 2 hours mean you may have Pre-diabetes.
- Results of 200 mg/dl or greater mean you probably have diabetes.

## UNDERSTANDING YOUR DIAGNOSIS

Over many years, high levels of blood sugar can damage your body. But, you can prevent this from happening by taking an active role in managing your diabetes.

### ***Where and who can you turn to for help***

Your health care team may include a primary care doctor, eye doctor, registered dietitian, nurse practitioner, pharmacist, certified diabetes educator, social worker, foot doctor, dentist and exercise specialist.

What You and Your Health Care Team Can Do Together

- Make an action plan (see the appendix for a sample plan)
- Talk about your diabetes and treatment options
- Ask questions if you do not get the care you expect
- Obtain an ID card or bracelet that indicates you have diabetes, that will notify medical personnel of your condition in the event that you are unable to speak for yourself; You may also want to carry a list of medications you are taking in your wallet or purse.

## TIPS FOR TALKING TO YOUR HEALTH CARE TEAM

### ***Bring someone with you:***

A friend or family member can help you remember what your health care team says. They can also remind you of things you wanted to talk about.

### ***Ask questions:***

Ask how medicines and other treatments may affect you. Ask for more information if your doctor uses medical language you don't understand. If your health care team doesn't do the things you expect, ask them why.

Your health care team should ask you for your ideas when you make a plan to manage your diabetes.

### ***Listen and share:***

It may be hard to remember everything your health care team tells you. Write down and repeat back instructions. That way you will be clear and remember what you heard.

Your health care team should ask you how you have been feeling since your last visit. Bring a list of symptoms and your blood sugar levels with you.

## DIABETES AND OTHER HEALTH RISKS

Diabetes can lead to many serious health conditions like heart disease, stroke, high blood pressure, blindness, kidney disease, complicated pregnancy, sexual dysfunction, nerve diseases, and amputation. Work with your doctor to decrease your risk for these complications.

## A HEALTHIER YOU: WHAT YOU CAN DO

“As a Certified Diabetes Educator, I’ve learned how important it is to first build trust with the patient and then work together on a plan to manage their diabetes. After all, they are the ones that are going to have to make the changes to improve their health. I remember one patient who was referred to me, and the first words out of her mouth were “I am not going to pinch my fingers ever and don’t even try to tell me to do it. You will be wasting your time.” Recognizing that she was scared and also not sure of how important it is to test your blood sugar on a regular basis I began by telling her that I would never force her to do anything that she didn’t want to do. Then, I began teaching her about diabetes and how important it is to know your blood sugar levels in order to achieve the best results and avoid complications. As the evening progressed, I could see I had gained her trust. And, when she left it was with the promise that she would test herself regularly and check back with me with any questions or further needs.

~Joanne S., Certified Diabetes  
Educator

The most important part of your health care team is you. Make a plan with your health care team to manage your diabetes and stick to it.

### ***Check your blood sugar and keep track of the results***

When your blood sugar rises too high, and stays too high you have high blood sugar (hyperglycemia). This means your diabetes is not being controlled. It can happen over a long period of time or very quickly.

Common causes of high blood sugar include:

- Overeating
- Inactivity
- Illness
- Stress
- Not taking diabetes medication

Work with your health care team to keep your blood glucose level in a healthy range. To do this it is important to regularly check your level and review the results. Below is a summary of what a normal level should look like:

- Before meal blood glucose: 70 – 130 mg/dl
- Two hours after meal: 180 mg/dl or less

### ***Call your doctor if:***

- Your level is below 70 mg/dl and you have been eating healthy meals regularly
- You experience symptoms of low blood glucose even though your level is above 70 mg/dl
- You have type 1 diabetes and have taken insulin and your level is still above 240 mg/dl
- You have type 2 diabetes and are taking diabetes pills and your level is above 240 mg/dl before meals and stays there for more than one day.



**Make healthy food choices.**

Avoid foods high in sugar – like soda, candy, pastries, etc. – that can raise your blood sugar level. Eat a balanced diet and try to keep portion sizes small.



**Stay active.**

Exercise lowers your blood sugar, blood pressure and cholesterol. People with diabetes should do something actively for about 30 minutes every day – with their doctor’s approval. Ideas for activities include taking a walk, cleaning your house or working in your garden.



**Find healthy ways to cope with stress.**

Stress may affect your blood pressure and cholesterol levels. And, for people with diabetes, this can directly impact your blood sugar levels causing them to spike or decrease rapidly. You can lower your stress level by talking to your friends, exercising or writing in a journal.



**Lose weight.**

Many people with diabetes are overweight and have high blood pressure and high cholesterol. To achieve better health, set a goal and make small changes in what and how much you eat and your activity level. Talk to members of your health care team for help.



**Stop smoking.**

When you smoke, you raise your blood pressure level. That makes it harder to control your diabetes. Smoking also makes your circulation worse, which can cause foot problems, stroke or heart attack.

Set a plan to quit, starting with a goal quit date. Get help from your doctor, family and others. If at first you don’t succeed, keep trying.



**Visit your dentist at least two times a year.**

Diabetes may make it harder for your mouth to fight germs. High blood sugar levels can cause gum disease or make it worse. To prevent this, brush your teeth twice a day, and floss your teeth every day. Look for early signs of gum disease, like puffy or bleeding gums, and if these are present tell your primary care doctor right away.



***Schedule regular visits with your health care team.***

Building a relationship with your doctor and others on your health care team is one way to help manage your diabetes. Make sure you schedule annual visits with your doctor, and regular visits with other health care team members to stay on top of your goals and your health.

***See an eye doctor at least once a year for a dilated eye exam.***

Diabetes that is not controlled can lead to blindness. Having your regular doctor look at your eyes is not enough. Schedule an appointment with an eye doctor for a dilated eye exam.



***See a diabetes educator.***

A diabetes educator is a person whose job it is to help people with diabetes manage their health and treatment goals. The diabetes educator is one of the most important people on your health care team and often people with diabetes will meet with this person on a regular basis.

To find a diabetes educator in your area, ask your doctor, or go online to [http://professional.diabetes.org/erp\\_list.aspx](http://professional.diabetes.org/erp_list.aspx) and use the search function.

***Take medication.***

Some people with diabetes don't take their medication as prescribed because they don't feel any different when they take it than when they don't take it. While a person with diabetes might not feel different at first, the long-term affects of not taking medication are severe and include impotence, loss of sight, heart and circulatory problems, loss of kidney function and loss of feeling in your feet.



If medication is part of your treatment plan, it is important to follow the prescription instructions. Do not skip doses or take a different amount than is prescribed. If you do miss a dose, wait until your next dose is scheduled and then take only the prescribed amount. Never double the dose to make up for a missed dose.



***Check your feet every day.***

People with diabetes can get many different foot problems. Look at your bare feet every day for red spots, cuts, swelling and blisters. If you spot a problem, call your doctor right away.

If you have trouble remembering when to take your medicine keep a journal or set an alarm on your watch. If you don't like the way your medicine makes you feel, talk to your doctor about other options.

## WHAT TO EXPECT FROM YOUR HEALTH CARE TEAM

“By working with my doctors and a Diabetes Educator I’ve lowered my A1C from 7% to 6.2%, cut my bad cholesterol in half and lowered my blood pressure. I’m the one that made the changes to get these results, but I couldn’t have done it without the encouragement and advice from my health care team.”

~ Ken G.

Your health care team is an important part of your diabetes management program. The people on your team will help you set and achieve goals, manage any problems that you have and keep you on track to achieving a healthier you.

But they can’t act alone. For the best care, you must take an active role in your treatment plan. Ask questions, conduct your own research and follow the advice and recommendations that your health care team give you. This will help you help your team and will allow you the best care possible.

The list on the following page will help you and your health care team make the most of each visit.

### **Your Health Care Team Should:**

#### AT EVERY VISIT:

- Check your weight and blood pressure. Your blood pressure should be less than 130/80.
- Look at your feet.
- Review your self management goals and action plan.

#### EVERY 3–6 MONTHS:

- Give you an A1C test, which shows your blood sugar levels for the last 3 months.
- Your A1C level should be less than 7%.

#### AT LEAST ONCE A YEAR:

- Check your blood fat levels: – Your LDL (bad) cholesterol should be less than 100; less than 70 for people at high risk for cardiovascular disease. – Your HDL (good) cholesterol should be more than 40 for men and more than 50 for women.
- Check your triglycerides, type of fat in the blood, which should be less than 150.
- Check your total cholesterol, which should be less than 200.
- Check your kidneys by measuring your albumin, a protein in the urine, which should be less than 30 mg/24 hours.
- Arrange for you to get a dilated eye exam (with an optometrist/ophthalmologist).
- Check your feet with a special tool to make sure they have feeling.
- Give you a flu shot.

#### ONCE–AFTER DIAGNOSIS:

- Give you a pneumonia shot.

Also, ask your doctor about a daily aspirin therapy to prevent heart disease.



## APPENDIX

A1 — Sample action plan

A2 — Sample health record

A3 — Things you should know (glossary)

### A1. MY ACTION PLAN:

#### WHAT WILL I DO

Choose a goal: \_\_\_\_\_  
(EXAMPLES INCLUDE: INCREASE MY PHYSICAL ACTIVITY; TAKE MY MEDICATIONS;  
MAKE HEALTHIER FOOD CHOICES, REDUCE MY STRESS; REDUCE MY TOBACCO USE)

Choose an action: \_\_\_\_\_  
(EXAMPLES: WALK MORE, EAT MORE FRUITS AND VEGETABLES)

How much: \_\_\_\_\_  
(EXAMPLE: 20 MINUTES)

How often: \_\_\_\_\_  
(EXAMPLE: THREE TIMES A WEEK ON MONDAY, WEDNESDAY, FRIDAY)

#### CONFIDENCE:

Circle a number to show how sure you are about doing the action.

1 2 3                      4 5 6                      7 8 9 10  
NOT SURE AT ALL      SOMEWHAT SURE      VERY SURE

\_\_\_\_\_  
My Signature

\_\_\_\_\_  
Health care provider signature

Write down questions for your doctor.

#### EXAMPLES:

1. What side effects should I expect when beginning my medication?
2. Should I take my medication with meals?
3. What type of physical activity should I do?
4. What happens if I get a cold, how will that affect my diabetes?
5. When I am having a a hard day, who should I turn to for help?



## A2. SAMPLE HEALTH RECORD:

Discuss these basic guidelines for diabetes care with your diabetes care provider and use this to record your results.

<b>Review Blood Sugar Records</b> (every visit) Target (pre-meals):	DATE				
<b>Blood Pressure</b> (every visit) Target:	DATE				
	VALUE				
<b>Weight</b> (every visit) Target:	DATE				
	VALUE				
<b>Foot Exam</b> (every visit)	DATE				
<b>A1C</b> Blood test to measure past 3 months blood sugar level (every 3 months) Target:	DATE				
	VALUE				
<b>Microalbuminuria</b> Urine kidney test (every year) Target:	DATE				
	VALUE				
<b>Dilated Eye Exam</b> (every year)	DATE				
<b>Dental Exam</b> (every 6 months)	DATE				
<b>Blood tests to measure "fats" important to heart disease</b>					
<b>Cholesterol</b> (every year) Target:	DATE				
	VALUE				
<b>Triglycerides</b> (every year) Target:	DATE				
	VALUE				
<b>HDL/LDL</b> (every year) Target:	DATE				
	VALUE				
<b>Flu Shot</b> (every year)	DATE				
<b>Pneumonia Vaccine</b> (at least once/ask doctor)					
<b>Other</b>					

## A3. GLOSSARY OF TERMS

Taken from the Centers for Disease Control  
<http://www.cdc.gov/diabetes/pubs/tcyd/appendix.htm>

**A1C**—A test that sums up how much glucose has been sticking to part of the hemoglobin during the past 3–4 months. Hemoglobin is a substance in the red blood cells that supplies oxygen to the cells of the body.

**ACE inhibitor**—A type of drug used to lower blood pressure. Studies indicate that it may also help prevent or slow the progression of kidney disease in people with diabetes. ACE is an acronym for angiotensin-converting enzyme.

**autoimmune process**—A process where the body's immune system attacks and destroys body tissue that it mistakes for foreign matter.

**beta cells**—Cells that make insulin. Beta cells are found in areas of the pancreas called the Islets of Langerhans.

**bladder**—A hollow organ that urine drains into from the kidneys. From the bladder, urine leaves the body.

**blood glucose**—The main sugar that the body makes from the food we eat. Glucose is carried through the bloodstream to provide energy to all of the body's living cells. The cells cannot use glucose without the help of insulin.

**blood pressure**—The force of the blood against the artery walls. Two levels of blood pressure are measured: the highest, or systolic, occurs when the heart pumps blood into the blood vessels, and the lowest, or diastolic, occurs when the heart rests.

**blood sugar**—See blood glucose.

**calluses**—Thick, hardened areas of the skin, generally on the foot, caused by friction or pressure. Calluses can lead to other problems, including serious infection and even gangrene.

**carbohydrate**—One of three main groups of foods in the diet that provide calories and

energy. (Protein and fat are the others.) Carbohydrates are mainly sugars (simple carbohydrates) and starches (complex carbohydrates, found in bread, pasta, beans) that the body breaks down into glucose.

**cholesterol**—A substance similar to fat that is found in the blood, muscles, liver, brain, and other body tissues. The body produces and needs some cholesterol. However, too much cholesterol can make fats stick to the walls of the arteries and cause a disease that decreases or stops circulation.

**corns**—A thickening of the skin of the feet or hands, usually caused by pressure against the skin.

**diabetes**—The short name for the disease called diabetes mellitus. Diabetes results when the body cannot use blood glucose as energy because of having too little insulin or being unable to use insulin. See also type 1 diabetes, type 2 diabetes, and gestational diabetes.

**diabetes pills**—Pills or capsules that are taken by mouth to help lower the blood glucose level. These pills may work for people whose bodies are still making insulin.

**diabetic eye disease**—A disease of the small blood vessels of the retina of the eye in people with diabetes. In this disease, the vessels swell and leak liquid into the retina, blurring the vision and sometimes leading to blindness.

**diabetic ketoacidosis**—High blood glucose with the presence of ketones in the urine and bloodstream, often caused by taking too little insulin or during illness.

**diabetic kidney disease**—Damage to the cells or blood vessels of the kidney.

**diabetic nerve damage**—Damage to the nerves of a person with diabetes. Nerve damage may affect the feet and hands, as well as major organs.

**dialysis**—A method for removing waste from the blood when the kidneys can no longer do the job.

**flu**—An infection caused by the “flu” (short for “influenza”) virus. The flu is a contagious viral illness that strikes quickly and severely. Signs include high fever, chills, body aches, runny nose, sore throat, and headache.

**food exchanges**—A way to help people stay on special food plans by letting them replace items from one food group with items from another group.

**gestational diabetes**—A type of diabetes that can occur in pregnant women who have not been known to have diabetes before. Although gestational diabetes usually subsides after pregnancy, many women who’ve had gestational diabetes develop type 2 diabetes later in life.

**gingivitis**—A swelling and soreness of the gums that, without treatment, can cause serious gum problems and disease.

**glucagon**—A hormone that raises the blood glucose level. When someone with diabetes has a very low blood glucose level, a glucagon injection can help raise the blood glucose quickly.

**glucose**—A sugar in our blood and a source of energy for our bodies.

**heart attack**—Damage to the heart muscle caused when the blood vessels supplying the muscle are blocked, such as when the blood vessels are clogged with fats (a condition sometimes called hardening of the arteries).

**HDL** (or high-density lipoprotein)—A combined protein and fatlike substance. Low in cholesterol, it usually passes freely through the arteries. Sometimes called “good cholesterol.”

**high blood glucose**—A condition that occurs in people with diabetes when their blood glucose levels are too high. Symptoms include having to urinate often, being very thirsty, and losing weight.

**high blood pressure**—A condition where the blood circulates

through the arteries with too much force. High blood pressure tires the heart, harms the arteries, and increases the risk of heart attack, stroke, and kidney problems.

**hormone**—A chemical that special cells in the body release to help other cells work. For example, insulin is a hormone made in the pancreas to help the body use glucose as energy.

**hyperglycemia**—See high blood glucose.

**hypertension**—See high blood pressure.

**hypoglycemia**—See low blood glucose.

**immunization**—Sometimes called vaccination; a shot or injection that protects a person from getting an illness by making the person “immune” to it.

**impotence**—A condition where the penis does not become or stay hard enough for sex. Some men who have had diabetes a long time become impotent if their nerves or blood vessels have become damaged.

**influenza**—See flu.

**inject**—To force a liquid into the body with a needle and syringe.

**insulin**—A hormone that helps the body use blood glucose for energy. The beta cells of the pancreas make insulin. When people with diabetes can’t make enough insulin, they may have to inject it from another source.

**insulin-dependent diabetes**—See type 1 diabetes.

**ketones**—Chemical substances that the body makes when it doesn’t have enough insulin in the blood. When ketones build up in the body for a long time, serious illness or coma can result.

**kidneys**—Twin organs found in the lower part of the back. The kidneys purify the blood of all waste and harmful material. They also control the level of some helpful chemical substances in the blood.

**laser surgery**—Surgery that uses a strong ray of special light, called a laser, to treat damaged parts of

the body. Laser surgery can help treat some diabetic eye diseases.

**low blood glucose**—A condition that occurs in people with diabetes when their blood glucose levels are too low. Symptoms include feeling anxious or confused, feeling numb in the arms and hands, and shaking or feeling dizzy.

**LDL** (or low-density lipoprotein)—A combined protein and fatlike substance. Rich in cholesterol, it tends to stick to the walls in the arteries. Sometimes called “bad cholesterol.”

**meal plan**—A guide to help people get the proper amount of calories, carbohydrates, proteins, and fats in their diet. See also food exchanges.

**microalbumin**—A protein found in blood plasma and urine. The presence of microalbumin in the urine can be a sign of kidney disease.

**nephropathy**—See diabetic kidney disease.

**neuropathy**—See diabetic nerve damage.

**non-insulin-dependent diabetes**—See type 2 diabetes.

**pancreas**—An organ in the body that makes insulin so that the body can use glucose for energy. The pancreas also makes enzymes that help the body digest food.

**periodontitis**—A gum disease in which the gums shrink away from the teeth. Without treatment, it can lead to tooth loss.

**plaque**— 1. A film of mucus that traps bacteria on the surface of the teeth. Plaque can be removed with daily brushing and flossing of teeth; 2. A coating of lipids that adheres to blood vessels and can result in a heart attack, stroke and other conditions.

**retinopathy**—See diabetic eye disease.

**risk factors**—Traits that make it more likely that a person will get an illness. For example, a risk factor for getting type 2 diabetes is having a family history of diabetes.

**self-monitoring blood glucose**—A way for people with diabetes to find out how much glucose is in their blood. A drop of blood from the fingertip is placed on a special coated strip of paper that “reads” (often through an electronic meter) the amount of glucose in the blood.

**stroke**—Damage to a part of the brain that happens when the blood vessels supplying that part are blocked, such as when the blood vessels are clogged with fats (a condition sometimes called hardening of the arteries).

**support group**—A group of people who share a similar problem or concern. The people in the group help one another by sharing experiences, knowledge, and information.

**type 1 diabetes**—A condition in which the pancreas makes so little insulin that the body can’t use blood glucose as energy. Type 1 diabetes most often occurs in people younger than age 30 and must be controlled with daily insulin injections.

**type 2 diabetes**—A condition in which the body either makes too little insulin or can’t use the insulin it makes to use blood glucose as energy. Type 2 diabetes most often occurs in people older than age 40 and can often be controlled through meal plans and physical activity plans. Some people with type 2 diabetes have to take diabetes pills or insulin.

**ulcer**—A break or deep sore in the skin. Germs can enter an ulcer and may be hard to heal.

**vaccination**—A shot given to protect against a disease.

**vitrectomy**—An operation to remove the blood that sometimes collects at the back of the eyes when a person has eye disease.

**yeast infection**—A vaginal infection that is usually caused by a fungus. Women who have this infection may feel itching, burning when urinating, and pain, and some women have a vaginal discharge. Yeast infections occur more frequently in women with diabetes.

716-835-0274 ● toll free 888-diabetes

Sponsored by:



**Aligning Forces for Quality** | Improving Health & Health Care in Communities Across Western New York

An initiative of the P<sup>2</sup> Collaborative of Western New York and the Robert Wood Johnson Foundation

Western New York  
Association of Diabetes Educators (WNYADE)