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The Faces of Diabetes

Diabetes, Your Family, and You

Produced in collaboration with

Introduction from the American Diabetes Association



Chances are, you – or someone you love – have been affected by diabetes in some way. While diabetes affects all Americans, we have seen an increased prevalence among minorities including Latino and African American populations. If present trends continue, one in three Americans, and one in two minorities, born in 2000 will develop diabetes in their lifetime. Each day, nearly 4,400 Americans are diagnosed with diabetes.

Diabetes affects the Hispanic/Latino and African American communities at a higher rate. There are many things you can do to stay healthy if you have diabetes and to reduce the chance of developing the disease if you are at risk. Simple lifestyle changes such as eating healthy and exercising can decrease the likelihood of this disease.

The American Diabetes Association, in collaboration with Amylin Pharmaceuticals, Inc. and Lilly USA, LLC, has produced this special publication to educate people regarding diabetes and the prevalence of the disease, which continues to disproportionately affect Latinos, African Americans and other minority populations. It is our goal to raise awareness about the seriousness of diabetes and the importance of proper diabetes control.

I encourage you to read this publication and share it with your family and loved ones. It is a great resource guide full of information about diabetes and management. We need to raise awareness about diabetes and its serious complications such as heart disease, stroke, kidney disease, blindness, and amputations. Learn the risk factors and warning signs for diabetes. If you think you or a family member may be at risk for diabetes, see a healthcare professional. Early detection is the best way to ensure a long and healthy life. If you have been diagnosed with diabetes, it is essential that you talk with your healthcare professional about proper management, and design a care plan that fits your lifestyle.

Sincerely,

A handwritten signature in black ink that reads "Robin Nwankwo".

Robin Nwankwo, RD, MPH, CDE
Community Initiatives
Committee Chairperson
American Diabetes Association



What is Diabetes?

DIABETES is a disease in which the body does not produce or properly use insulin. Insulin is a hormone needed to help the body use or store the blood glucose (blood sugar) it gets from food. The cause of diabetes continues to be a mystery, although both genetics and environmental factors such as obesity and lack of exercise appear to play roles.

SYMPTOMS are often frequent urination, excessive thirst, extreme hunger, unusual weight loss, increased fatigue, and blurry vision.

DIAGNOSIS can only be made by your healthcare professional.

TREATMENT is given to keep blood glucose levels as close to normal as possible, and both type 1 and type 2 diabetes may require daily treatment. Lifestyle changes such as diet and physical activity are also components of treatment. Self-management can help people with diabetes take charge of the disease.

PREVENTION is possible. According to a major study by the National Institutes of Health and the American Diabetes Association, a majority of people at high risk for type 2 diabetes can prevent or delay the onset of the disease by losing 5% to 7% of their body weight. A person can do so by incorporating mild exercise and/or physical activity into their daily lives and eating healthy balanced meals.

TYPES OF DIABETES

PRE-DIABETES is a condition in which blood glucose levels are higher than normal but not yet high enough to be diagnosed as diabetes. This condition almost always occurs before developing type 2 diabetes.

TYPE 1 DIABETES results from the body's failure to produce insulin, the hormone that "unlocks" the cells of the body, allowing glucose to enter and fuel them. It is estimated that 5% to 10% of Americans who are diagnosed with diabetes have type 1 diabetes.

TYPE 2 DIABETES results from insulin resistance (a condition in which the body fails to properly use insulin), combined with relative insulin deficiency. Most Americans who are diagnosed with diabetes have type 2 diabetes.

GESTATIONAL DIABETES occurs in pregnant women who have never had diabetes before but have higher than normal blood glucose levels during pregnancy.



Resources:

American Diabetes Association. All About Diabetes.
Available at: <http://www.diabetes.org/about-diabetes.jsp>

National Institutes of Health. Am I at Risk for Type 2 Diabetes?
Available at: <http://diabetes.niddk.nih.gov/dm/pubs/riskfortype2/index.htm>

Are You at Risk?

Calculate Your Chances for Pre-Diabetes or Type 2 Diabetes

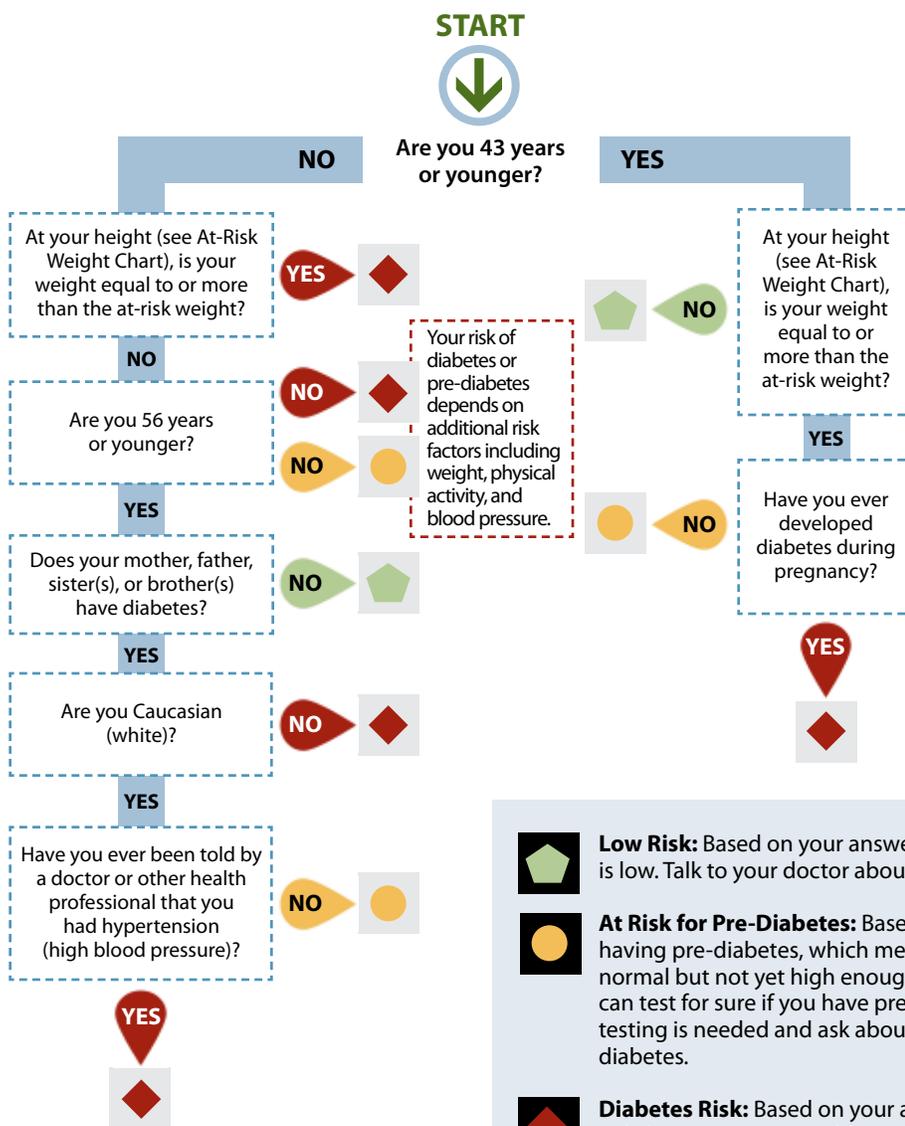
If someone you know has diabetes – particularly a family member – you’re probably wondering whether you could develop it, too. The American Diabetes Association has revised its Diabetes Risk Test according to a new, more accurate statistical model. The updated test includes some new risk factors and projects risk for pre-diabetes as well as diabetes. You can take the test below or at diabetes.org/risk-test.jsp. Then talk to your doctor if the results suggest you have or may develop diabetes.

DIABETES RISK TEST

This simple tool can help you determine your risk for pre-diabetes or diabetes.

First, using the flow chart below, answer the questions until you reach a colored shape.

Second, match the colored shape with a risk message shown in the box below.



Height	Weight
4'10" (147 cm)	148 lbs (67.3 kg)
4'11" (150 cm)	153 lbs (69.5 kg)
5'0" (152 cm)	158 lbs (71.8 kg)
5'1" (155 cm)	164 lbs (74.5 kg)
5'2" (157 cm)	169 lbs (76.8 kg)
5'3" (160 cm)	175 lbs (79.6 kg)
5'4" (162 cm)	180 lbs (81.8 kg)
5'5" (165 cm)	186 lbs (84.5 kg)
5'6" (168 cm)	192 lbs (87.3 kg)
5'7" (170 cm)	198 lbs (90.0 kg)
5'8" (173 cm)	203 lbs (92.3 kg)
5'9" (175 cm)	209 lbs (95.0 kg)
5'10" (178 cm)	216 lbs (98.2 kg)
5'11" (180 cm)	222 lbs (100.9 kg)
6'0" (183 cm)	228 lbs (103.6 kg)
6'1" (185 cm)	235 lbs (106.8 kg)
6'2" (188 cm)	241 lbs (109.5 kg)
6'3" (190 cm)	248 lbs (112.7 kg)
6'4" (193 cm)	254 lbs (115.5 kg)

- Low Risk:** Based on your answers, your risk of having pre-diabetes or diabetes is low. Talk to your doctor about ways to keep your risks low.
- At Risk for Pre-Diabetes:** Based on your answers, you are at increased risk for having pre-diabetes, which means your blood glucose levels are higher than normal but not yet high enough to be diagnosed as diabetes. Only your doctor can test for sure if you have pre-diabetes. Talk to your doctor to see if additional testing is needed and ask about ways to reduce your risk of developing type 2 diabetes.
- Diabetes Risk:** Based on your answers, you are at increased risk for having type 2 diabetes. However, only your doctor can tell for sure if you do have type 2 diabetes. Talk to your doctor to see if additional testing is needed.

Resource:

American Diabetes Association. Are You at Risk? Online version available at: www.diabetes.org/risk-test.jsp

Helping your healthcare professional help you

Open communication is key to success

Talking regularly with healthcare professionals gives people with diabetes the best chance to control their disease and reduce their risk of complications. But physicians are busy people, and patients are not always prepared for the conversation.

Effective communication between physicians and patients is a two-way challenge, and complaints from both sides are not uncommon.

Dr. Sofía Vasquez-Solomon is an endocrinologist in Miami, Florida. She sees about 20 patients a day, most of them Latinos. Her complaint: Patients miss appointments and don't comply with their treatment.

Tony Cancel is a 59-year-old diabetes patient in Brooklyn, New York, who says he has seen at least 11 different doctors since he was diagnosed in 1990. His complaint: Doctors give you only 10 minutes and don't tell you much.

It is not like it used to be, when patients walked in the doctor's office expecting all the answers without knowing all the questions. Today the responsibility is shifting to the patient to be an active participant in the process, and most doctors treat their patients as knowledgeable adults who have educated themselves about their disease and treatment options.

Yet the health information necessary for patients to be well prepared is not always readily available – at least not for many Latinos and Spanish-speaking people, Tony Cancel said. And certainly not 19 years ago when he was first diagnosed with diabetes.

"I didn't know much about diabetes at the time. Nobody warned me about complications, or losing limbs. I only learned about the complications as they happened,"

he said. Tony lost a toe and had damage in his eyes and kidneys. "Oh, that's from the diabetes, they would tell me."

Maybe Tony didn't ask the right questions because he didn't know, and doctors didn't give him any answers because he didn't ask.

Dr. Vasquez-Solomon believes education is a strong component of treatment, and she refers her patients to a diabetes center where educators and other providers help them learn about their disease and how to manage it. "Diabetes is not like blood pressure or other conditions, and we need to work together with the patient."

Cultural challenges, she said, make her job a bit tougher. "In general, they don't feel at ease talking about how noncompliant they are. There are high rates of noncompliance in our community," she said. "Latinos seem to have their own beliefs about medications and concerns about side effects from stories they hear from others." Probably the biggest challenge, she said, is that most patients don't tell her the truth about whether or not they are taking their medications. "You can lie to me," she tells them. "But you can't lie to your body."

Jorge León is one of the patients with whom Dr. Vasquez-Solomon had to do some work at first. "But now he's doing pretty well," she said about the 65-year-old Miami resident. Today he takes his meds and never misses an appointment.

"It's rewarding when they comply and see the difference," she said. "There are success stories too."

"Diabetes is not like other conditions, and we need to work together with the patient."

**Sofía Vasquez-Solomon, MD
Miami, Florida**



Eating Healthy

Knowing what to eat can be confusing. Everywhere you turn, there is news about what is or isn't good for you. Some basic principles have weathered the fad diets and have stood the test of time. Here are a few tips on making healthful food choices for you and your entire family.

- **Think colorful.** Eat lots of vegetables and fruits. Eat non-starchy vegetables such as spinach, carrots, broccoli, or green beans with meals.
- **Choose whole grain foods over processed grain products.** Try brown rice with your stir-fry or whole wheat noodles with your favorite pasta sauce.
- **Choose lean meats** like cuts of beef and pork that end in "loin" such as pork loin and sirloin. Remove the skin from chicken and turkey.
- **Choose nonfat dairy** such as skim milk, nonfat yogurt, and nonfat cheese.

- **Choose water and calorie-free "diet" drinks** instead of regular soda, some sports/energy drinks, fruit punch, sweet tea, and other sugar-sweetened drinks.
- **Choose liquid oils for cooking** instead of solid fats that can be high in saturated and trans fats.
- **Cut back on high-calorie snack foods and desserts** like chips, cookies, cakes, and full-fat ice cream.
- **Eating too much of even healthful foods can lead to weight gain.** Watch your portion sizes. Consider eating six mini meals at regular intervals throughout the day, rather than three larger meals. Be careful to watch your caloric intake.

Remember to consult with your healthcare professional first before starting any new eating/nutrition plan or exercise program.

The following recipes plus healthy cooking tips are available on the American Diabetes Association Web site, available at www.diabetes.org.



Resource:

American Diabetes Association. Making Healthy Food Choices. Available at: <http://www.diabetes.org/nutrition-and-recipes/nutrition/healthyfoodchoices.jsp>

Creamy Macaroni and Cheese

Serves 6

- 2 tsp. margarine
- 2 tbsp. all-purpose flour
- 1½ cups fat-free milk
- 1¼ cups shredded, reduced-fat cheddar cheese
- ½ tsp. salt
- ½ tsp. ground black pepper
- ¼ tsp. hot pepper sauce
- cooking spray
- 1 package uncooked elbow macaroni

Preheat oven to 350 degrees. Cook macaroni according to directions on box, omitting salt. Drain.

In a small nonstick skillet, heat margarine over medium heat. Stir in flour and cook for 4-5 minutes to create a roux.

In a small saucepan, add milk and bring to a boil; whisk in roux. Reduce to a simmer for 7 minutes. Add cheese (except reserved 2 tablespoons) to pan and whisk while simmering 2 more minutes. Add salt, pepper, and hot pepper sauce.

In a large bowl, combine noodles and cheese sauce and mix well.

Coat an 8-inch glass baking dish with cooking spray. Spread macaroni mixture in dish. Sprinkle remaining cheese over the top. Bake for 15 minutes.



Stuffed Peppers

Serves 6

- 2/3 cup uncooked instant brown rice
- 6 medium green bell peppers
- 1 small onion, chopped
- 2 14.5-ounce cans no-salt-added diced tomatoes
- 2 garlic cloves, minced
- ¼ teaspoon ground black pepper
- 1 lb. lean ground beef or turkey

Preheat oven to 350 degrees. Cook rice according to package directions, omitting salt.

Boil water in a large saucepan. Cut the tops off the green peppers and remove the seeds and membranes. Place the peppers in the boiling water for 5 minutes. Remove and drain.

In a large skillet, brown ground beef or turkey and onion. Drain fat. Add the brown rice and diced tomatoes to the skillet with ground beef or turkey and mix well. Add garlic and black pepper.

Place peppers right side up in a large baking dish and fill with beef and rice mixture. Bake, covered, for 30 minutes.

Resource:

American Diabetes Association. My Food Advisor. Available at: <http://tracker.diabetes.org/myfoodadvisor.html>

The answer is on the menu

Good nutrition becomes way of life for a family in Georgia

Justyse and Jonathan Williams are every parent’s dream children: A 9-year-old girl and a 6-year-old boy who eat their veggies and don’t complain. At their home in Atlanta, Georgia, sodas and candy are treats, not a regular part of their diet. And so is fast food. All courtesy of their grandmother, Yvonne Young, who learned about good nutrition the hard way.

A 55-year-old registered nurse, Yvonne Young was diagnosed with diabetes nearly 25 years ago but says she was in denial and didn’t want to accept it. “I ignored it,” she said. “I can’t tell you why, it took me 15 years to accept it. I just kept eating as usual.”

For Young at the time, eating as usual meant eating with no end. “I ate as much as I wanted, and whatever I wanted. And I ate a lot of it,” she remembers today. She got to weigh a bit over 200 pounds. And she smoked too – about 2 to 3 packs a day.

“My lifestyle was killing me,” she says.

Today Yvonne is a size 12, her blood glucose is down, her energy up, and most people would consider her a nutrition expert. “I don’t know if I’m an expert,” she said. “But I’ve gotten it down pretty good.” She certainly has. A cup of Cheerios® with 2 percent milk or soy milk and a small banana for breakfast; a salad or a sandwich and a piece of fruit for lunch; and a meat, a green vegetable and a starchy vegetable, and bread for dinner. “I try not to eat after 7 p.m. except for a snack of light yogurt, fruit, or peanut butter and crackers, 6 to 8,” she said.

But how do you go from eating with no control to such a balanced diet? “It’s very difficult,” she said. “It’s hard, but it’s doable. Holidays are still a challenge. You are never totally over it.”

To others who struggle the way she did for so many years, she recommends meeting with a dietitian and developing an individual meal plan.

African Americans are at a higher risk of diabetes, but the challenge of eating healthy and controlling your weight is universal. “Food is such an integral part of our lives,” Yvonne said. “It takes discipline and commitment.”

It will be easier for Justyse and Jonathan. Yvonne started feeding them the way she eats as soon as they started on solid food. “So this is a way of life for them,” she said. “They eat broccoli, spinach, collard greens, and green beans, just to name a few. I explain to them the importance of healthy eating and how it can prevent them from developing diabetes. I explain to them the effects of diabetes and they take it very well. They don’t complain about not having sweets every day either. I make exercise fun, and we all enjoy it, including granddaddy!”

“I ate as much as I wanted, and whatever I wanted. And I ate a lot of it. My lifestyle was killing me.”

**Yvonne Young
Atlanta, Georgia**



Dancing your way to a new life

Diabetes leads 40-year-old woman to active, healthy lifestyle



Zumba combines Latin rhythms with cardiovascular exercise, and the name comes from a Colombian word that means to move fast and have fun. But for Christina Bone, a 40-year-old Zumba instructor in Loganville, Georgia, Zumba is much more than a good aerobic routine. It has been her way to a new life after she was diagnosed with diabetes eight years ago. "I love the music and making people have fun," she said.

To learn about Christina's life before and after diabetes is inspiring. Before: little to no exercise and a diet that favored cake and sodas, burgers with all the toppings, and a habit of eating dessert first or only dessert. After: healthy food and a rigorous routine of aerobics, skating, dancing, walking, and bowling.

"Diabetes is the best thing that happened to me," she said.

But Christina's first reaction when she learned she had diabetes was different. She cried when she talked with the doctor about it, and she cried again when she sat with a diabetes educator. "I was a wreck because I didn't know enough," she said. "My ignorance caused my own fear."

"All I knew is that I had to exercise," she said. "Nobody told me what type of exercise or how much." But she created her own workout plan and lost 40 pounds in roughly five months. She took it so seriously that the doctor had to tell her to slow down. "He told me to chill out," she said. "I was afraid of death. Nobody could tell me any different. I knew it was going to break my body down."

Today Bone knows diabetes is not a death sentence, and that the chances of having complications from the disease can be reduced or delayed significantly by controlling blood glucose, blood pressure, and cholesterol, called the ABCs of diabetes. "Just because your mom or dad has diabetes doesn't mean that you are going to get it. You don't have to get on the train even if you are at the station."

Christina has become an advocate and educator for others. "I love speaking to others because their perception isn't always the true reality (about diabetes)," she said. At a health fair last year, a teenage girl came up to her for information. "I asked her if she knew the difference between diabetes and sugar. She replied, 'I know a lot of people with sugar but I don't know anyone with diabetes.'"

Knowledge is key, Bone says. "What we do not know can hurt us. Stop 'sugar' coating and understand the seriousness of diabetes." Living with the disease is not easy. "You wake up with it in the morning and you go to bed with it every day," she says. But in between, you can dance your way to health and have lots of fun.

"What we do not know can hurt us. Stop 'sugar' coating and understand the seriousness of diabetes."

Christina Bone
Loganville, Georgia

Stepping Up Activity



Exercise

Exercise includes anything that requires you to move, such as walking, dancing, or working in the yard. Being physically active helps both physical and mental health.

Physical activity can lower blood glucose, blood pressure, and cholesterol. It also reduces risk for heart disease and stroke; relieves stress; and strengthens the heart, muscles, and bones. In addition, regular activity helps insulin work better, improves blood circulation, and keeps joints flexible.

A comprehensive physical activity routine includes three types of activities: aerobic exercise, strength training, and flexibility exercises.

Aerobic Exercise

Aerobic exercise increases your heart rate, works your muscles, and raises your breathing rate. For most people, it's best to aim for a total of about 30 minutes a day, at least 5 to 7 days a week.

Examples of aerobic exercise:

- Take a brisk walk
- Go dancing
- Swim or do water aerobic exercises
- Play tennis

Strength Training

Strength training, done several times a week, helps build strong bones and muscles and makes daily chores like carrying groceries easier.

Ways to strength train:

- Join a class to do strength training with weights, elastic bands, or plastic tubes
- Lift light weights at home

Flexibility Exercises

Flexibility exercises, also called stretching, help keep joints flexible and reduce chances of injury during other activities. Gentle stretching for 5 to 10 minutes helps your body warm up and get ready for aerobic activities such as walking or swimming.

Remember to consult with your healthcare professional first before starting any new eating/nutrition plan or exercise program.



Resources:

American Diabetes Association. Exercise.

Available at: <http://www.diabetes.org/exercise>

The State of Diabetes – National Trends

Diabetes is a chronic disease that has no cure. If present trends continue, one in three Americans, and nearly one in two minorities, born in 2000 will develop diabetes in their lifetime. Each day, nearly 4,400 people are diagnosed with diabetes.

There are 23.6 million children and adults in the United States, or 7.8% of the population, who have diabetes. While an estimated 17.9 million Americans have been diagnosed with diabetes, unfortunately, 5.7 million (or nearly one quarter) are unaware that they have the disease. Fifty-seven million Americans have pre-diabetes.

The prevalence of diabetes also increases with age. Among Americans aged 60 years and older, 23.1% have diabetes. The rate of diabetes also varies by race with most minority groups having higher rates of diabetes than non-Hispanic whites. National survey data indicates that 6.6% of non-Hispanic whites, 7.5% of Asian Americans, 10.4% of Hispanics, and 11.8% of non-Hispanic blacks had diagnosed diabetes. Among Hispanics, rates were 8.2% for Cubans, 11.9% for Mexican Americans, and 12.6% for Puerto Ricans.

11.8% African Americans have diagnosed diabetes

10.4% Hispanics have diagnosed diabetes

Resources:

American Diabetes Association. The Dangerous Toll of Diabetes, and Direct and Indirect Costs of Diabetes in the United States.

Available at: <http://www.diabetes.org/diabetes-statistics/dangerous-toll.jsp>

American Diabetes Association. Total Prevalence of Diabetes and Pre-diabetes.

Available at: <http://www.diabetes.org/diabetes-statistics/prevalence.jsp>

American Diabetes Association. African Americans and Diabetes.

Available at: <http://www.diabetes.org/communityprograms-and-localevents/africanamericans.jsp>

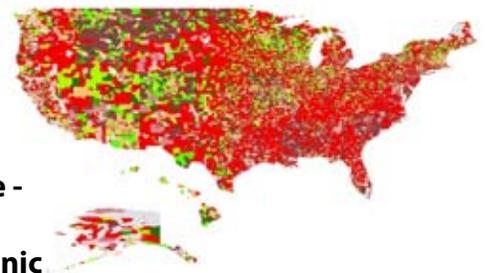
Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2007 General Information. US Department of Health and Human Services, Centers for Disease Control and Prevention.

Harvard University, Joslin Diabetes Center, Latino Diabetes Initiative.

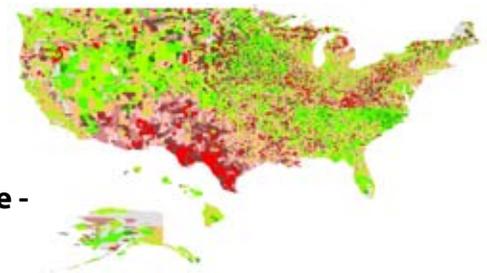
Available at: <http://www.joslin.org/3250.asp>

2007 Prevalence of Diabetes in United States

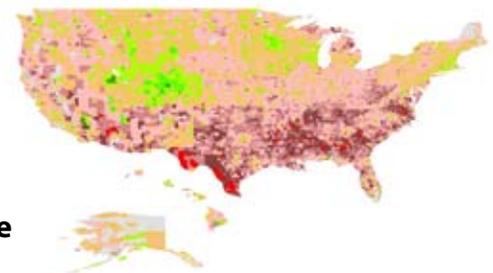
National Prevalence - Black Non-Hispanic



National Prevalence - Hispanic

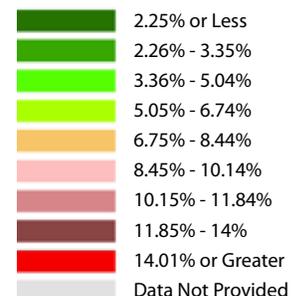


Overall National Prevalence



Brought to you by the collaboration among the National Minority Quality Forum, Amylin Pharmaceuticals, Inc. and Lilly USA, LLC.

Prevalence



Patent Pending



It runs in the family

African Americans and Latinos need to raise diabetes awareness with parents, children, and siblings

People with a family history of type 1 or type 2 diabetes are at a higher risk for developing diabetes than the general population, and this is especially true if first-degree relatives – parents, children, or siblings – have the disease. Everyone who is a blood relative should be made aware of their risk for diabetes.

But in the African American and Latino/Hispanic communities – the two ethnic groups with the highest risk in the United States – parents, grandparents, and siblings don't seem to be talking about who has had diabetes.

And there is no excuse, said Shenekqual Robertson, a 38-year-old African American in Dallas, Texas, with a long history of diabetes in her family. "We are dying just because we don't know. We could save a lot of lives in the African American community."

The same seems to happen among Latinos, whose strong family ties don't necessarily translate into good communication when it comes to health. María Rodríguez, a 71-year-old Mexican immigrant in Los Angeles, California, says her mother never told her that she had diabetes. "We learned about her diabetes from an aunt who used to take her to the doctor," she said. María then was surprised when she faced her own diagnosis two years ago. "I would have liked to know then what I know now."

Shenekqual Robertson grew up unaware that a family history of type 2 diabetes is one of the strongest risk factors for getting the disease. Both her mother and her father have type 2 diabetes, and her grandmother died of complications associated with the disease.

Robertson herself was diagnosed at 32 and her son, Gevon, now 18, learned that he had type 1 diabetes eight years ago.

She believes "lack of education is the biggest challenge among African Americans," and now teaches others in her community. Her message is clear: "If you have a history of diabetes in the family, you should live as if you had diabetes, because you may get it."

For many Hispanic immigrants, awareness about diabetes in the family is part of their process of acculturation too. "In Mexico you almost never hear of people with diabetes," said María Rodríguez. "People there just don't talk about it as they do here."

But talking about it can save lives, Shenekqual said. "The disease is with you every single day of your life. It's important for people to understand that if someone has diabetes, the entire family needs to be educated about it."

She has taught her son Gevon well. "He is very good at managing his diabetes, and he knows the differences between type 1 and type 2 diabetes. He understands the seriousness of the disease," she said.

Diabetes runs in the family, but thanks to Shenekqual's work, so does good communication, support, and disease management. "We coach each other," she said.



"We learned about (my mother's) diabetes from an aunt that used to take her to the doctor."

**María Rodríguez
Los Angeles, California**

Check Your Facts – Myths About Diabetes



Myth #1

You can catch diabetes from someone else.

No. Although we don't know exactly why some people develop diabetes, we know diabetes is not contagious. It can't be caught like a cold or flu virus. There are genetic factors behind both type 1 and type 2 diabetes. Lifestyle factors also play a part.

Myth #2

People with diabetes can't eat sweets or chocolate.

If eaten as part of a healthy meal plan, or combined with exercise, sweets and desserts can be eaten by people with diabetes. They are no more "off limits" to people with diabetes than they are to people without diabetes.

Myth #3

Eating too much sugar causes diabetes.

No. Diabetes is caused by a combination of genetic and lifestyle factors. However, being overweight does increase your risk for developing type 2 diabetes. If you have a history of diabetes in your family, a healthy meal plan and regular exercise are recommended to manage your weight.

Myth #4

If you have diabetes, you should only eat small amounts of starchy foods, such as bread, potatoes, and pasta.

Starchy foods are part of a healthy meal plan. What is important is the portion size. Whole grain breads, cereals, pasta, rice, and starchy vegetables like potatoes, yams, peas, and corn can be included in your meals and snacks.

Myth #5

People with diabetes are more likely to get colds and other illnesses.

No. You are no more likely to get a cold or another illness if you have diabetes. However, people with diabetes are advised to get flu shots. This is because any infection interferes with your blood glucose management, putting you at risk of high blood glucose levels and, for those with type 1 diabetes, an increased risk of ketoacidosis.

Myth #6

Fruit is a healthy food. Therefore, it is ok to eat as much of it as you wish.

Fruit is a healthy food. It contains fiber and lots of vitamins and minerals. Because fruit contains carbohydrate, it needs to be included in your meal plan. Talk to your dietitian about the amount, frequency, and types of fruits you should eat.

Myth #7

Starting on insulin can lead to blindness and amputations.

No. The belief that insulin causes complications or death often comes from seeing what happened in the past to family members or friends with diabetes. Although it can be hard to get past your fear, it is more likely that insulin might have delayed or even prevented these complications had it been started earlier.



Resources:

American Diabetes Association. Diabetes Myths.

Available at: <http://www.diabetes.org/diabetes-myths.jsp>

American Diabetes Association. Insulin Myths and Facts.

Available at: <http://clinical.diabetesjournals.org/cgi/content/full/25/1/39>

A lifesaving lesson

Diabetes patient teaches himself about disease, risks, and treatments

Alester Oliver has learned more than a few lessons over the years. But one of them, he thinks, has probably saved his life.

The diabetes lesson is not an easy one, and those who live with the disease are tested every day. So it pays off to be a quick study. "I try to read and learn as much as I can," said Alester, a 58-year-old Vietnam veteran in Garland, Texas, who was diagnosed with diabetes in 2001.

At the time of his diagnosis, Alester had no reason to believe anything was wrong with his health. Excessive thirst and frequent urination didn't mean much. Like so many others, he had never heard about the basic symptoms of diabetes, nor was he aware that as an African American he was probably at a higher risk of having diabetes than whites. In fact, according to national data, 11.8 percent of non-Hispanic blacks have diagnosed diabetes, the highest percentage of all ethnic groups. The percentage for non-Hispanic whites is 6.6 percent.

The diagnosis felt sudden to Alester, and unexpected. "I was in shock," he said from his home in Texas. "I had never been sick, and I didn't think anything was wrong."

Daughter Sherry Hill in Dallas, Texas, describes her father as a tough, do-it-yourself-type ex-Marine, who was not used to listening to anybody. "But he listened to his doctor immediately," she said. And every day he taught himself about diabetes, overcoming myths and misconceptions about the disease with every reading.

Probably the biggest misconception Alester was able to overcome is that if you have diabetes you will have serious and life-threatening complications. Not necessarily. Not if you learn to manage the disease.

With the same discipline and rigor he applied to everything in his life before, he set hard-to-reach goals for himself, lowering his blood glucose levels, counting carbs and calories, and even refusing to eat when his wife Daisy didn't cook healthy. "You can cook it, but I won't eat it," he would tell her. "He stopped driving and instead he rides the bus and walks, he drinks tons of water and eats fruits and vegetables," his daughter said.

Alester Oliver is the father of seven: two boys and five girls. He has 15 grandchildren and wants to be around to enjoy every one of them. That's why he took charge of his diabetes. "Doctors do the best they can, but they can only do so much," he said. The key is knowledge and self-management. The test is every day, and your life depends on how well you score every time. "I feel pretty good, I really do," says Alester. "I know that if I learn how to eat right and exercise, I'll be all right."

"Doctors do the best they can, but they can only do so much. I try to read and learn (about diabetes) as much as I can."

**Alester Oliver
Garland, Texas**



Diabetes and Its Long-Term Consequences

Diabetes is associated with an increased risk for a number of serious, sometimes life-threatening complications, and certain ethnic groups experience an even greater threat. Good diabetes control can help reduce your risk; however, many people are not even aware that they have diabetes until they develop one of its complications.

Diabetes is a leading cause of death by disease in the United States. People with diabetes are more likely to develop complications than people without diabetes, including heart disease, stroke, blindness, end-stage kidney disease, nervous system damage, and amputation of a foot or leg.



FACTS ABOUT COMPLICATIONS

Heart Disease and Stroke

- Heart disease and stroke account for about 68% of deaths in people with diabetes.
- Adults with diabetes have heart disease death rates about two to four times higher than adults without diabetes.
- The risk for stroke is two to four times higher among people with diabetes.

High Blood Pressure

- About 75% of adults with diabetes have blood pressure greater than or equal to 130/80 millimeters of mercury (mm Hg) or use prescription medications for hypertension.

Blindness

- Diabetic retinopathy causes 12,000 to 24,000 new cases of blindness each year, making diabetes the leading cause of new cases of blindness in adults 20 to 74 years of age.

Kidney Disease

- Diabetes is the leading cause of kidney failure, accounting for 44% of new cases in 2005.

Nervous System Disease

- About 60% to 70% of people with diabetes have mild to severe forms of nervous system damage. The results of such damage include impaired sensation or pain in the feet or hands, slowed digestion of food in the stomach, carpal tunnel syndrome, and other nerve problems.
- Severe forms of diabetic nerve disease are a major contributing cause of foot and leg amputations.

Amputations

- More than 60% of foot and leg amputations occur in people with diabetes.
- The rate of amputation for people with diabetes is 10 times higher than for people without diabetes.

Dental Disease

- Periodontal (gum) disease is more common in people with diabetes. Among young adults, those with diabetes have about twice the risk of those without diabetes.
- People with poorly controlled diabetes (A1C

greater than 9%) were nearly three times more likely to have severe periodontitis than those without diabetes. (An A1C, also known as glycated hemoglobin or HbA1c, test gives you a picture of your average blood glucose control for the past 2 to 3 months. The results give you a good idea of how well your diabetes treatment plan is working.)

Complications of Pregnancy

- Poorly controlled diabetes before conception and during the first trimester of pregnancy can cause major birth defects in 5% to 10% of pregnancies and spontaneous abortions in 15% to 20% of pregnancies.
- Poorly controlled diabetes during the second and third trimesters of pregnancy can result in excessively large babies, posing a risk to both mother and child.

Sexual Dysfunction

- Diabetes significantly increases the risk for sexual dysfunction in both men and women.

Resources:

American Diabetes Association. Complications of Diabetes in the United States. Available at: <http://www.diabetes.org/diabetes-statistics/complications.jsp>

Centers for Disease Control and Prevention. National Diabetes Fact Sheet, 2007 General Information. US Department of Health and Human Services, Centers for Disease Control and Prevention.

Tips to Manage Diabetes

Living with Diabetes

Questions to Ask Your Healthcare Professional

Time with your healthcare professional can be limited, and it is important to get the most out of your visit. Make sure you describe all your symptoms to the healthcare professional, even those that may not seem relevant to you. It can be very helpful to write down your questions before your appointment to be sure you ask them all. Below are 10 typical questions you may want to ask during your visit:

1. Should I check my blood glucose levels at home with a glucose monitor?
2. What are my goals regarding blood glucose levels?
3. What are the warning signs or symptoms that my blood glucose is too high?
4. What are the warning signs or symptoms that my blood glucose is too low?
5. How can I change my lifestyle and diet in a way that will be healthy?
6. What are the side effects of my current course of treatment?
7. Do I need medications/insulin now or in the future?
8. What are the long-term complications of diabetes, and how can I avoid them?
9. How do other factors such as high cholesterol and high blood pressure affect me if I have diabetes?
10. How often should I be seeing you to optimize my diabetes management?

Resource:

MedicineNet. Diabetes Questions to Ask Your Doctor.
Available at: <http://www.medicinenet.com/script/main/art.asp?articlekey=16146>

While diabetes can lead to serious complications, people with diabetes can take steps to control the disease and lower the risk of complications.

Talk to Your Healthcare Professional

Talking to your healthcare professional is an important step to putting together a diabetes care plan that fits your life. For example, it needs to take into account your work or school schedule, how active you are, what and when you like to eat, cultural background, and other medical problems.

Along with exercise and nutrition, proper treatment is important to control diabetes. Talk to your healthcare professional about available treatments to control your diabetes.

Eat Healthy

The right meal plan will help improve blood glucose, blood pressure, and cholesterol numbers and also help keep weight on track. Whether you need to lose weight or stay where you are, your meal plan can help.

People with diabetes have to take extra care to make sure their food is balanced with insulin and oral medications, and exercise to help manage blood glucose levels.

Exercise

Physical activity can lower blood glucose, blood pressure, and cholesterol. It also reduces the risk for heart disease and stroke, relieves stress, and strengthens the heart, muscles, and bones. In addition, regular activity helps insulin work better, improves blood circulation, and keeps joints flexible.

Blood Glucose Checks

The main goal of diabetes treatment is to bring glucose levels down to as close to normal as is safely possible. Blood glucose checking is one of the best tools for keeping diabetes in control. Frequent testing and good record keeping give the most accurate possible picture of diabetes control.

How often a person checks could change from day to day. Talk to your healthcare professional or diabetes educator about when and how often to check on a normal day. Your healthcare professional or educator can work to determine the best treatment plan.

Resources:

American Diabetes Association. Checking Blood Glucose.
Available at: <http://www.diabetes.org/for-parents-and-kids/diabetes-care/CheckingBG.jsp>

American Diabetes Association. What is Exercise?
Available at: <http://www.diabetes.org/weightloss-and-exercise/exercise/what-is-exercise.jsp>

American Diabetes Association. Diabetes Meal Plans & A Healthy Diet.
Available at: <http://www.diabetes.org/nutrition-and-recipes/nutrition/diabetes-meal-plan.jsp>

Where to Go for Help

The following is a partial list of national resources available to help you learn more about diabetes care, prevention, treatment, and risk-assessment.

American Diabetes Association (ADA)

Information about prevention and treatment of diabetes
<http://www.diabetes.org>
1-800-DIABETES

American Association of Diabetes Educators

Information about the self-management of diabetes
<http://www.diabeteseducator.org>
800-832-6874

American Dietetic Association

To find a Registered Dietitian for nutrition counseling
<http://www.eatright.org>
800-877-1600

Diabetes Exercise and Sports Association (DESA)

Information about exercise and physical fitness for persons with diabetes
<http://www.diabetes-exercise.org>
800-898-4322

Diabetes EyeCare Program

Information about free annual dilated eye exams and care for persons age 65 and older
<http://www.eyecareamerica.com>
800-272-EYES

National Alliance for Hispanic Health

Information about preventing, diagnosing, and treating diabetes
<http://www.hispanichealth.org>
866-SU-FAMIL

National Black Nurses Association, Inc.

Provides culturally competent healthcare services to communities
<http://www.nbna.org>
800-575-6298

National Center for Chronic Disease Prevention and Health Promotion

Information about prevention and control of diabetes
<http://www.cdc.gov/diabetes>
877-CDC-DIAB

National Diabetes Education Program (NDEP)

Information about prevention and control of diabetes
<http://www.ndep.nih.gov>
888-693-NDEP

National Diabetes Information Clearinghouse (NDIC)

Information about all aspects of diabetes
<http://diabetes.niddk.nih.gov>
800-860-8747

National Hispanic Council on Aging

National health resources for the Latino/Hispanic older adult population
<http://www.nhcoa.org>
202-347-9733

National Hispanic Medical Association

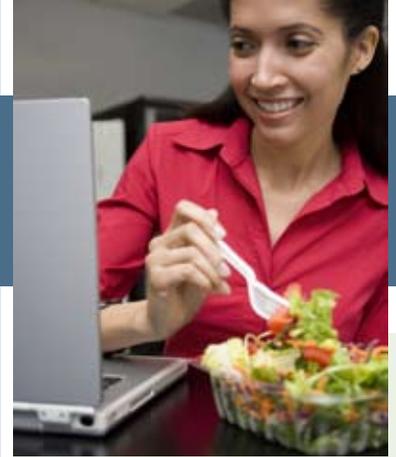
Provides policymakers and healthcare providers with information and support in health service delivery to Hispanic communities across the nation
<http://www.nhmamd.org>
202-628-5895

National Medical Association

Information on African American national health resources
<http://www.nmanet.org>
202-347-1895

National Association of Hispanic Nurses

Information on Hispanic national health resources
<http://www.thehispanicnurses.org>
202-387-2477



Insurance/ Prescription Assistance Programs

Medicare

A federal health insurance program for people age 65 and older and for individuals with disabilities
<http://www.medicare.gov>
800-MEDICARE

Partnership for Prescription Assistance (PPA)

A free service for people who are uninsured, underinsured, or have a limited income that matches qualified patients with prescription assistance programs
<https://www.pparx.org>
888-4PPA-NOW

