

Diabetes in Minorities

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Every day, someone new joins the approximately three million African Americans in the United States with diabetes. It is estimated that 730,000 African Americans do not know that they have diabetes. During the years 1980 to 1994, the Centers for Disease Control (CDC) reported a 33% increase of diabetes among African Americans, so that currently one in ten African Americans has diabetes, and one in four African American women 55 years of age or older has diabetes.

We know that African American men and women live 15 years less than African Americans without diabetes. African Americans have higher in-hospital mortality and higher rates of sudden death. Diabetes is the third leading cause of death from disease among African American women.

The most devastating consequence of having diabetes is the many long-term complications that occur earlier and with more severity in the African American population. We must take control of our lives and begin to educate the community so that we can stop the progression of this very controllable disease. What can you do to help your families live a longer, healthier life? The answers are simple:

- ☞ If you have a family history of diabetes, have your blood sugar (glucose) checked immediately. Either participate in one of the free health screenings that occur in your city or at your next physical

exam have your blood sugar measured. Be sure to ask your doctor if your blood sugar is in the normal range.

- ☞ Start eating a well-balanced diet with five fruits and vegetables per day, decreasing the amount of sugar and fats that you eat.
- ☞ Exercise 4 to 5 times a week for at least 30 minutes.

You may be wondering what diabetes is. Diabetes is a disease that changes the way our bodies use food. People normally make a hormone called insulin. Insulin is stored in the pancreas that is located behind the stomach. It helps the body to lower the amount of glucose or sugar in the blood, allows the body to use blood glucose for energy, and helps store the glucose for future use. When your body is unable to make enough insulin or cannot use the insulin that it makes, the cells of the body cannot use the glucose for energy or fuel.

Everyone's blood glucose goes up and down every day in response to eating, exercise, stress, illness, etc. In people with diabetes, the amount of glucose in the blood can rise too high because your body may not have any insulin or may not optimally use the insulin that is present. This high blood glucose may eventually damage the eyes, kidneys, blood vessels, and nerves. The diagnosis of diabetes is made when your fasting blood sugar is greater than or equal to 126mg/dL on two occasions or if a random blood



sugar test is over 200mg/dL with symptoms.

There are many possible signs of diabetes. Some people do not have any signs of diabetes. You may not have diabetes if you have only one of the signs listed below. If the signs do not go away or you have more than one sign, you should see your doctor.

- ☞ Always thirsty and hungry
- ☞ Going to the bathroom many times a day (passing of urine)
- ☞ Weight loss (when not trying to lose weight)
- ☞ Blurred vision (not seeing things clearly)
- ☞ Always feeling tired or feeling tired more often
- ☞ Tingling (pins and needles sensation) or numbness in the hands or feet
- ☞ Infections that happen again and again
- ☞ Sores on the legs or feet that do not heal
- ☞ Nausea and vomiting (type 1)

If you have diabetes, it is important that you seek treatment right away so that you can prevent or delay the long-term complications of diabetes by getting your blood sugar under control.

Control means to keep your blood glucose (or sugar) level as close to normal as possible. Someone **without** diabetes usually has a blood glucose value **between 60 and 110 mg/dl**. Although this normal range may not be possible for people with diabetes, you can get very close to this range with

proper diet, exercise and medications. Keeping your blood glucose in your goal range should help delay complications of diabetes. People with diabetes should achieve a blood glucose **GOAL** of 80-120mg/dL. You can know what your blood sugar numbers are by using a blood glucose monitor. I recommend that all people with diabetes test their blood glucose at home.

The long-term complications of diabetes are more likely to develop in African Americans and tend to occur earlier and are more severe. The long-term complications of diabetes include:

- ¥ eye problems (retinopathy, cataracts)
- ¥ kidney problems (nephropathy)
- ¥ nerve damage (can lead to amputations)
- ¥ strokes and heart attacks
- ¥ sexual dysfunction (impotence)
- ¥ infections

The problems mentioned above are generally due to damage to nerves, small and large blood vessels, and reduced ability to fight off infection.

Diabetes is the leading cause of blindness in the United States. African Americans have a 40% higher rate of eye disease. When your blood sugar is high and remains high for long periods of time, the small blood vessels in the back of the eye become damaged, swollen and leaky. This can cause bleeding in the back of your eye. Cataracts and glaucoma also seem more frequent in people with diabetes.

African Americans have kidney failure two to five times more often than Caucasians. Nephropathy is the medical term for kidney damage. Your kidneys contain many areas of small blood vessels. The kidneys filter out the unneeded things in the blood and pass them into the urine. High blood glucose and high blood pressure

damage the blood vessels and the filtering ability of the kidneys. Damage to the filtering system of the kidney causes waste products to stay in the blood. When the kidneys are damaged, things such as protein leave the blood and spill into the urine. If the damage continues, the kidneys will stop working. Your doctor can do a simple test to check for protein in the urine. This test detects small amounts of protein in the urine or microalbuminuria. Protein in the urine has been shown to predict the possibility of dying early from diabetes. It is important that you check how well your kidneys are functioning at least twice a year when you see your doctor.

African Americans are 72% more likely to develop diabetes related amputations. Amputations are due to both nerve damage and circulation problems seen in diabetes. Your nerves are like telephone or electrical lines that help different parts of your body talk to each other. Diabetes quite often damages your nerves. *Neuropathy* is the medical term for nerve damage. High blood glucose is often the cause of this damage. When this occurs, the nerves do not send out their signals as well as before. Some of the signs of nerve damage in the feet and legs include numbness, tingling (pins and needles sensation), burning, and aching. Sometimes the damage is so serious that injuries happen to the feet and legs and the patient does not know it has happened. The numbness and tingling are signs of nerve damage in your feet. Untreated foot problems can cause gangrene, a serious infection that can spread to the bloodstream. Untreated gangrene may lead to amputation of the foot.

Diabetes can cause sexual problems through nerve damage. Men may be less likely to get and/or keep an erection. Women may be less likely to have an orgasm. These problems can usually be treated

through blood glucose control.

People with diabetes tend to have more infections that are difficult to treat due to poor blood flow. High blood glucose slows down the body's infection-fighting team, the white blood cells. Nerve damage prevents you from knowing when you injure yourself. A cut or scrape may turn into a serious infection if it is not treated quickly.

People with diabetes tend to have heart disease (also known as cardiovascular disease), which includes hypertension, coronary artery disease, and congestive heart failure. There are certain risk factors that increase your chances of having heart disease.

These include:

- ¥ Being Overweight
- ¥ High Blood Pressure
- ¥ High Cholesterol Levels
- ¥ Diabetes

Through living a healthy lifestyle, you can decrease your risk and prevent the complications of heart disease. The following guidelines will help decrease your risk of diabetes and heart disease.

¥ **Eat Healthy** Choose foods that are low in calories and fat; replace fried foods with baked foods; try to eat small portions at each meal; add more fish and lean meats to your diet. Limit your intake of beef, lamb and pork; eat more fruits, leafy green vegetables, dried peas and beans.

¥ **Drink Less Alcohol** Drinking too much is not good for your health. Excessive use of alcoholic beverages can harm the liver, brain and heart. If you don't drink, don't start. If you drink, it's best to limit the number of drinks to no more than two each day. Drinking wine may be better than drinking hard liquor (i.e., gin, scotch, whiskey, or rum) since it has fewer calories and actually may benefit your cholesterol levels. Alcohol can cause

your blood sugar to increase, so check with your doctor before you add alcohol to your diet.

¥ **Choose Foods Low in Salt and Sodium** Americans generally eat more salt than they need. Studies have shown that the average American eats 25 grams of sodium per day. Practically everything you eat contains salt. Make sure you read food labels carefully for the salt or sodium content. Avoid deli foods and processed foods. People with heart disease should limit their sodium intake.

¥ **Lose Weight If You Are Overweight** Controlling your weight can help your cholesterol and blood pressure; it also plays a major role in helping to control diabetes. Eating a well-balanced diet that is low in fat, sodium and sugar will help you lose weight. Eat three meals a day. Do not skip breakfast (Note: it has been found that eating breakfast boosts your metabolic rate).

African Americans tend to have very high rates of obesity. Fifty percent of African Americans have a body mass index (BMI) greater than 25m/kg². Black women have the highest rate of obesity compared to any other ethnic group. One of the reasons for the increased obesity seen in minority populations stems from their diet that is high in saturated fat. Lack of physical activity also contributes to the higher rates of obesity.

¥ **Avoid Fast Foods** Avoid fast foods. Most fast foods are high in fat, salt and sugar. Try to avoid eating fast food more than once a week. Eat a hamburger instead of a cheeseburger; don't supersize the fries; try the grilled selections or choose from the low-fat menu and watch the mayonnaise.

¥ **Keep Active** Regular activity or exercise is good for your heart and lungs and it can make you feel and look better. You don't have to engage in strenuous exercise brisk walking, bicycling, taking the

stairs instead of the elevator and playing with your children or grandchildren all count as activity if done three or four times a week for at least 30 minutes. Getting enough exercise not only can help you feel better, but, if you are taking medications, it also can help your medication work more efficiently.

¥ **Don't Smoke** Smoking increases your risk of heart attack and stroke. It also injures blood vessel walls and speeds up hardening of the arteries. It may not be easy, but kicking the habit can have a very positive impact on your health.

You can achieve your target blood sugar level by taking control of your life. It is important for you to get as much information about your diabetes as possible. There are many information sources available to you. Check with your local American Diabetes Association. **NB**



Illustration by Donn S. Jobe, Sr.

OTHER WAYS TO TAP INTO YOUR HEALTH

For those of you with Internet access, you can obtain on-line information from the following sources:

www.blackandbrownsugar.com

www.diabetes.org

www.niddk.nih.gov

www.aade.net.org

www.eatright.org