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TO : Mr. Bill White
FAX NUMBER CALLED: 202-456-6218
FROM : Samuel J. Simmons
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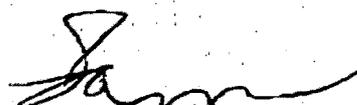
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MEMORANDUM

TO: Mr. William White
Office of Public Liaison
The White House

FROM: Samuel J. Simmons, President and CEO 

DATE: August 7, 1997

SUBJECT: PROPOSED STATEMENT FROM NCBA RE:
PRESIDENT'S MESSAGE ON DIABETES

Here is a proposed statement from The National Caucus and Center on Black Aged, Inc. (NCBA) relating to the President's message on Diabetes.

"President Clinton is to be commended for providing leadership in improving the quality of life for the 16 million Americans who suffer from Diabetes. This significant development is a positive step forward in expanding the life expectancy for the millions of African Americans who have been victims of this dreaded disease."

SJS:msm



DIABETES FACTS SHEET

Diabetes Mellitus is a chronic metabolic disorder that adversely affects the body's ability to manufacture or use insulin, a hormone necessary to permit the body to use food as energy.

The World Health Organization estimates that there are between 100 and 120 million people with diabetes worldwide.

In the United States 16 million people have diabetes:

- Eight million Americans have been diagnosed with diabetes, and a new case is diagnosed every minute.
- Another eight million have the disease but are undiagnosed.
- Diabetes significantly increases an individual's chance of premature death and often changes his lifestyle dramatically -- yet half of all Americans with diabetes do not know they have the disease.

There are two major types of diabetes: Type I (insulin-dependent, early onset or juvenile diabetes) and Type II (non-insulin-dependent or maturity-onset diabetes). In Type I, the body produces no insulin. In Type II, the body produces insulin, but does not use it effectively.

- The federal government estimates that there are 800,000 people with insulin-dependent diabetes (Type I). Type I diabetes is often called juvenile diabetes because its onset is usually before age 30. It is considered an autoimmune disease.
- In order to stay alive, people with insulin-dependent diabetes must inject themselves with insulin up to six times a day and check their blood glucose level up to eight times a day. Diabetes treatment takes one to three hours a day. Over a lifetime, the average individual with Type I diabetes will spend close to 60,000 hours doing self-treatment.
- There are between 7 and 7.5 million people diagnosed with non-insulin-dependent (Type II) diabetes. This disease usually develops in adults over age 40. Some 40 percent of these patients require some insulin to manage their diabetes.

Diabetes is a contributing factor of death from other major diseases. Diabetes alone is a leading cause of death by disease.

- The life expectancy of people with diabetes averages 20 years less than that of people without diabetes. Middle-

aged people with diabetes have a death rate twice as high as middle-aged people without diabetes.

- People with diabetes are two to four times more likely to have heart and vascular disease than people without diabetes.
- People with diabetes are 250% more likely to have a stroke.
- Diabetes is the leading cause of end-stage renal disease, accounting for more than one-third of new cases. It is also the primary cause of non-congenital kidney disease, accounting for one-fourth of all new cases.
- The death rate among infants born to mothers with diabetes is two to three times as high as for women without diabetes.

Diabetes can cause life-changing disability.

- More than half of all leg amputations in the U.S. are due to diabetes.
- Diabetes is the leading cause of new blindness among adults 20-74 years of age.
- About 60 to 70 percent of people with diabetes have mild to severe nerve damage.

Diabetes affects all ethnic and racial groups:

- Caucasians: 6%;
- Puerto Rican Americans: 10.9%;
- African Americans: 9.6%;
- Mexican Americans: 9.6%;
- Cuban Americans: 9.1%; and
- American Indians: ranging from 5% to 50%.

One out of every four Medicare dollars is spent on diabetes or its complications, and one out of every seven dollars spent on health care annually in the U.S. is spent on it.

- The U.S. health care expenditures for people with diabetes exceeds \$130 billion.
- Total direct and indirect cost (disability; work loss; premature death) of diabetes care costs Medicare \$28.6 billion annually.
- The average lifetime costs of diabetes for a child diagnosed at age three is \$600,000.

Sources

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Diabetes in America, 1995
Lewin VHI Study, 1994
World Health Organization, 1994

Diabetes in African Americans

National Diabetes Information Clearinghouse



National
Institute of
Diabetes and
Digestive
and Kidney
Diseases

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Today, diabetes mellitus is one of the most serious health challenges facing the more than 30 million African Americans. The following statistics illustrate the magnitude of this disease among African Americans.

- In 1993, 1.3 million African Americans were known to have diabetes. This is almost three times the number of African Americans who were diagnosed with diabetes in 1963. The actual number of African Americans who have diabetes is probably more than twice the number diagnosed because previous research indicates that for every African American diagnosed with diabetes there is at least one undiagnosed case.
- For every white American who gets diabetes, 1.6 African Americans get diabetes.
- One in four black women, 55 years of age or older, has diabetes. (Among African Americans, women are more likely to have diabetes than men.)
- Twenty-five percent of blacks between the ages of 65 and 74 have diabetes.
- African Americans with diabetes are more likely to develop diabetes complications and experience greater disability from the complications than white Americans with diabetes.

How Many African Americans Have Diabetes?

National Health Interview Surveys (NHIS) conducted between 1963 and 1990 show that African Americans have a rising prevalence of diabetes. (Prevalence is the

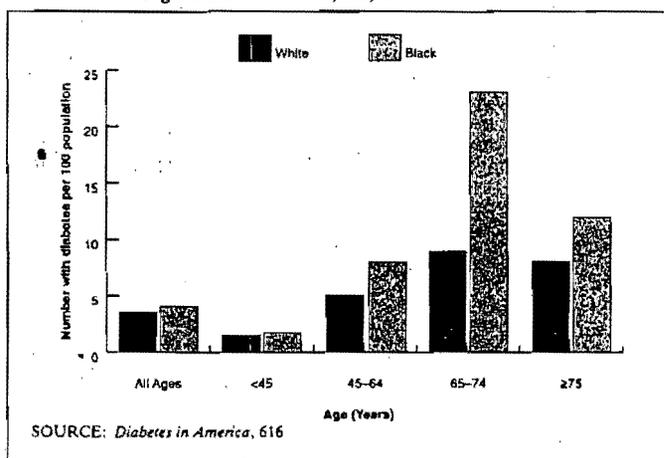
percentage of cases in a population.) Most African Americans with diabetes have Type 2, or noninsulin-dependent diabetes. Type 2 diabetes usually develops after age 40. However, in high-risk populations, susceptible people may develop it at a younger age. A small number of African Americans have Type 1 or insulin-dependent diabetes, which usually develops before age 20.

NHIS conducted from 1991 to 1992 indicate higher rates of diabetes among African Americans than among white Americans. At age 45 or older, the prevalence of diabetes is 1.4 to 2.3 times as frequent in blacks as in whites. The greatest difference seen in NHIS was among people aged 65 to 74. Figure 1 details these 1991-92 NHIS statistics. Statistics collected in 1993 indicate that in this age group, 17.4 percent of black Americans had diagnosed diabetes, compared to 9.5 percent of white Americans.

What Risk Factors Increase the Chance of Developing Type 2 Diabetes?

The frequency of diabetes in black adults is influenced by the same risk factors that are associated with Type 2 diabetes in other populations. Three categories of risk factors increase the chance of developing Type 2 diabetes in African Americans. The first is genetics, which includes inherited traits and group ancestry. The second is medical risk factors, including impaired glucose tolerance, hyperinsulinemia and insulin resistance, and obesity. The third is lifestyle risk factors, including physical activity.

FIGURE 1.—Prevalence of Diagnosed Diabetes
Among Blacks and Whites, US, 1991–92.



Genetic Risk Factors

Inherited Traits

Researchers suggest that African Americans—and recent African immigrants to America—have inherited a “thrifty gene” from their African ancestors. Years ago, this gene enabled Africans, during “feast and famine” cycles, to use food energy more efficiently when food was scarce. Today, with fewer “feast and famine” cycles, the thrifty gene that developed for survival may instead make weight control more difficult. This genetic predisposition, along with impaired glucose tolerance (IGT), often occurs together with the genetic tendency toward high blood pressure.

Group Ancestry

African-American ancestry is also an important predictor of the development of diabetes. To understand how rates of diabetes vary among African Americans, it is important to look at the historical origins of black populations in America. Genetic predisposition to diabetes is based, in part, on a person’s lineage. The African-American population formed from a genetic admixture across African ethnic groups and with other racial groups, primarily European and North American Caucasian.

Medical Risk Factors

Impaired Glucose Tolerance (IGT)

People with IGT have higher-than-normal blood glucose levels—but not high enough to be diagnosed as diabetes. Some argue that IGT is actually an early stage of diabetes. African-American men and women differ in their development of IGT. As black men grow older, they develop IGT at about the same rates as white American men and women. African-American women, who have higher rates of diabetes risk factors, convert more rapidly from IGT to overt diabetes than black men and white women and men.

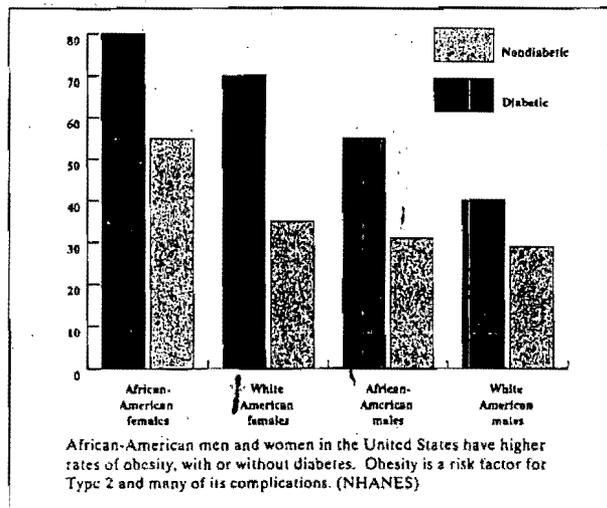
Hyperinsulinemia and Insulin Resistance

Higher-than-normal levels of fasting insulin, or hyperinsulinemia, are associated with an increased risk of developing Type 2 diabetes. It is known that hyperinsulinemia often predates diabetes by several years. One study showed a higher rate of hyperinsulinemia in African-American adolescents in comparison to white American adolescents. To date, insufficient information is available on the relationship between insulin resistance or hyperinsulinemia and the development of Type 2 diabetes in African Americans.

Obesity

Obesity is a major medical risk factor for diabetes in African Americans. The National Health and Nutrition Survey (NHANESII), conducted between 1976 and 1980, showed substantially higher rate of obesity in African Americans aged 20 to 74 years of age who had diabetes, compared to those who did not have diabetes. NHANESII also showed higher rates of obesity among African-American women and men than white Americans without diabetes. (See figure 2.)

FIGURE 2.—Obesity in African Americans and White Americans, Males and Females, With and Without Diabetes (Percent of Population).



Some recent evidence shows that the degree to which obesity is a risk factor for diabetes may depend on the location of the excess weight. Truncal, or upper body obesity, is a greater risk factor for Type 2 diabetes, compared to excess weight carried below the waist. One study showed that African Americans have a greater tendency to develop upper-body obesity, which increased their risk of Type 2.

Although African Americans have higher rates of obesity, researchers do not believe that obesity alone accounts for their higher prevalence of diabetes. Even when compared to white Americans with the same levels of obesity, age, and socioeconomic status, African Americans still have higher rates of diabetes. Other factors, yet to be understood, appear to be at work.

Lifestyle Risk Factors

Physical Activity

Physical activity is a strong protective factor against Type 2 diabetes. Researchers suspect that a lack of exercise is one factor contributing to the unusually high rates of diabetes in older African-American women.

How Does Diabetes Affect African-American Young People?

African-American children have lower rates of Type 1 diabetes than white American children. The prevalence of Type 1 diabetes in white American children aged 15 and younger is nearly twice as high as in African-American children of the same age.

Researchers tend to agree that genetics probably makes Type 1 diabetes more common among children with European ancestry. In fact, African-American children with some European ancestry have slightly higher prevalence of Type 1 diabetes. This incidence is also influenced by environmental and lifestyle factors.

How Does Diabetes Affect African-American Women During Pregnancy?

Gestational diabetes, which develops in about 2 to 5 percent of all pregnant women, usually resolves after childbirth. Several studies have shown that African-American women have a higher rate of gestational diabetes. An Illinois study showed an 80 percent higher incidence of gestational diabetes in African Americans compared with white women. Once a woman has had gestational diabetes, she has an increased risk of developing gestational diabetes in future pregnancies. In addition, experts estimate that about half of women with gestational diabetes—regardless of race—develop Type 2 diabetes within 20 years of the pregnancy.

How Do Diabetes Complications Affect African Americans?

Compared to white Americans, African Americans experience higher rates of three diabetes complications—blindness, kidney failure, and amputations. They also experience greater disability from these complications. Some factors that influence the frequency of these complications, such as delay in diagnosis and treatment of diabetes, denial of diabetes, abnormal blood lipids, high blood pressure, and cigarette smoking, can be influenced by proper diabetes management.

Kidney Failure

African Americans experience kidney failure, also called end-stage renal disease (ESRD), from 2.5 to 5.5 times more often than white Americans. Interestingly though, hypertension, not diabetes, is the leading cause of kidney failure in black Americans. Hypertension accounts for almost 38 percent of ESRD cases in African Americans, whereas diabetes causes 32.5 percent. In spite of their high rates of the disease, African Americans have better survival rates from kidney failure than white Americans.

Visual Impairment

The frequency of severe visual impairment is 40 percent higher in African Americans with diabetes than in white Americans. Blindness caused by diabetic retinopathy is twice as common in blacks as in whites. Compared to white women, black women are three times more likely to become blind from diabetes. African-American men have a 30 percent higher rate of blindness from diabetes than white American men. Diabetic retinopathy may occur more frequently in black Americans than whites because of their higher rate of hypertension.

Amputations

African Americans undergo more diabetes-related lower-extremity amputations than white or Hispanic Americans. One study of 1990 U.S. hospital discharge figures showed amputation rates for African Americans with diabetes were 19 percent higher than for white Americans. In a 1991 California study, however, African Americans were 72 percent more likely to have diabetes-related amputations than white Americans, and 117 percent more likely than Hispanic Americans.

Does Diabetes Cause Excess Deaths in African Americans?

Diabetes was an uncommon cause of death among African Americans at the turn of the century. By 1993, however, according to the Centers for Disease Control and Prevention's National Center for Health Statistics, death certificates listed diabetes as the fifth leading cause of death for African Americans aged 45 to 64, and the third leading cause of death for those aged 65 and older in 1990. Diabetes is more dangerous for African-American women, for whom it was the third leading cause of death for all ages in 1990.

Diabetes death rates may actually be higher than these studies show for two reasons. First, diabetes might not have been diagnosed. Second, many doctors do not list diabetes as a cause of death, even when the person was known to have diabetes.

How Is NIDDK Addressing the Problem of Diabetes in African Americans?

Within many African-American communities around the country, NIDDK supports centers that provide nutrition counseling, exercise, and screening for diabetes complications. These centers are called Diabetes Research and Training Centers.

Prevention

In 1996, NIDDK launched its Diabetes Prevention Program (DPP). The goal of this research effort is to learn how to prevent Type 2 diabetes in people with impaired glucose tolerance (IGT) and in women with a history of gestational diabetes. As mentioned, both are strong risk factors for Type 2 diabetes.

About 4,000 volunteers are needed to participate in DPP. The study will be conducted at 25 centers throughout the United States and will seek to enroll volunteers from groups at high risk for developing Type 2 diabetes. Because of the propensity toward diabetes among some ethnic groups, about half of the DPP participants will be African American, Hispanic American, and Native American. Other at-risk participants will be elderly, overweight people and women with a previous history of gestational diabetes.

DPP will evaluate three interventions to prevent Type 2: an intensive healthy eating and exercise program and the use of two diabetes medications—metformin and troglitazone. Researchers will tailor interventions to the cultural needs of individuals in the program. Beginning in 1996, DPP will follow participants for about 5 years, with findings to be released before 2005.

Points To Remember

- In 1993, 1.3 million African Americans were known to have diabetes. This is almost three times the number of African Americans who were diagnosed with diabetes in 1963.
- For every white American who gets diabetes, 1.6 African Americans get diabetes.
- The highest incidence of diabetes in blacks occurs between 65 and 74 years of age. Twenty-five percent of these individuals have diabetes.
- Obesity is a major medical risk factor for diabetes in African Americans, especially for women. Some diabetes may be prevented with weight control through healthy eating and regular exercise.
- African Americans have higher incidence of and greater disability from diabetes complications such as kidney failure, visual impairment, and amputations.
- If African Americans can prevent, reverse, or control diabetes, their risk of complications will decrease.
- Healthy lifestyles, such as eating healthy foods and getting regular exercise, are particularly important for people who are at increased risk of diabetes.

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Additional Resources

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The National Diabetes Information Clearinghouse (NDIC) offers additional information about diabetes and African Americans, including the following:

- Diabetes and African Americans: Search-on-File (annotated bibliography)
- *Noninsulin-Dependent Diabetes* (booklet)
- *The Diabetes Dictionary* (booklet available in English and Spanish)
- *Do Your Level Best: Start Controlling Your Blood Sugar Today* (booklet, limited literacy).

Single copies of all four publications are free. Bulk orders are available for health care professionals. In addition, these publications are available on the World Wide Web at <<http://www.niddk.nih.gov>>. For more information about diabetes and African Americans and to order publications, contact NDIC.

Weight-control Information Network
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Bethesda, MD 20892-3665
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Fax: (301) 951-1107
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Alexandria, VA 22314
Tel: (800) 232-3472
Fax: (703) 549-6995
Home page: <http://www.diabetes.org>

Additional Readings

National Institute of Diabetes and Digestive and Kidney Diseases. (1995). *Diabetes in America*, 2nd Edition. (NIH Publication No. 95-1468). Bethesda, MD: National Institutes of Health.

Centers for Disease Control and Prevention, Office of Surveillance and Analysis. (1994). *Chronic Disease in Minority Populations: African-Americans, American Indians and Alaska Natives, Asians and Pacific Islanders, Hispanic Americans*. (pp. 2-1 to 2-34). Atlanta, GA.

U.S. Department of Health and Human Services, Public Health Service. (1990). *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*.

(DHHS Publication No. 91-50212), Washington, DC: Department of Health and Human Services.

National Diabetes Information Clearinghouse

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The National Diabetes Information Clearinghouse (NDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases, one of the National Institutes of Health, under the U.S. Public Health Service. Established in 1978, the clearinghouse provides information about diabetes to people with the disorder and to their families, health care professionals, and the public. NDIC answers inquiries; develops, reviews, and distributes publications; and works closely with professional and patient organizations and Government agencies to coordinate resources about diabetes.

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March 1997

Diabetes in Hispanic Americans

National Diabetes Information Clearinghouse



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Diabetes in Hispanic Americans is a serious health challenge because of the increased prevalence of diabetes in this group, the greater number of risk factors for diabetes, greater incidence of several diabetes complications, and the growing population of people of Hispanic ethnicity in the United States.¹ Estimates of the prevalence of Type 2 diabetes, far more common than Type 1 diabetes, are between 9 and 11 percent of the population, compared with 6 percent in non-Hispanic white Americans.²

Hispanic Americans are the second-largest and fastest-growing minority group in the Nation. In 1993, there were 27 million Hispanics in the United States, representing 10 percent of the population.³ By the year 2050, Hispanics will constitute 21 percent of the U.S. population. The following statistics illustrate the magnitude of this disease among Hispanic Americans.

- About 5 percent of Hispanic Americans between the ages of 20 and 44 years and 20 percent of those between the ages of 45 and 74 years have diabetes.¹ These data translate to 1.8 million Hispanic American adults with diabetes. About half of these people have been diagnosed, but the other half remain undiagnosed.
- Diabetes is two to three times more common in Mexican-American and Puerto Rican adults than in non-Hispanic whites.⁴ The prevalence of diabetes in Cuban Americans is lower, but still higher than that of non-Hispanic whites.

- As in all populations, medical risk factors such as impaired glucose tolerance, hyperinsulinemia, insulin resistance, being overweight, central obesity, and a history of gestational diabetes increase the risk of Type 2 diabetes in Hispanic Americans.
- Higher rates of the diabetes complications nephropathy, retinopathy, and peripheral vascular disease have been documented in several studies with Mexican-Americans, whereas lower rates of myocardial infarctions (heart attacks) have been found.

According to the Bureau of the Census, 1990, the majority of Hispanic Americans live in the southcentral and southwestern United States.

Major Studies of Diabetes in Hispanic Americans

Four population studies conducted in the past 15 years provide the majority of information that exists about the incidence and progression of diabetes among Hispanic Americans. The four studies are briefly described below and citations are provided in the references:

- *The Starr County Study* (Texas) conducted in 1981 assessed the prevalence of severe hyperglycemia in almost 2,500 people 15 years of age and older.⁵
- *The Hispanic Health and Nutrition Examination Survey (HHANES)* of

Table 1. Hispanic American populations in the United States and percent with diabetes

Hispanic American population ²	% of total Hispanic population ³	% with diabetes ages 20–44 ⁴	% with diabetes ages 45–74 ⁴
Mexican-Americans	64.0%	3.8%	23.9%
Central/South Americans	13.4%	n/a	n/a
Puerto Ricans	10.5%	4.1%	26.1%
Cuban Americans	4.7%	2.4%	15.8%
Other Hispanic subgroups	7.0%	n/a	n/a

SOURCE: References 3 and 4

1982–84 is the only survey to provide information on the prevalence of diabetes in national samples of the three major Hispanic subgroups—Mexican-Americans in the southwestern United States, Puerto Ricans in the New York City area, and Cuban Americans in south Florida. Approximately 6,600 people were involved.⁴

- *The San Antonio Heart Study* (Texas), begun in 1979, assessed diabetes in over 3,000 Mexican-Americans and almost 2,000 non-Hispanic whites between the ages of 25 and 64.⁶
- *The San Luis Valley Diabetes Study* (Colorado), begun in 1984, estimated the prevalence of diabetes in Hispanics and non-Hispanic whites in two counties in southern Colorado.⁷

How Many Hispanic Americans Have Diabetes?

Mexican-Americans represent the largest Hispanic American subgroup with 64 percent of the Hispanic population. Central and South Americans represent the second largest Hispanic American subgroup, with 13 percent of the Hispanic population.

2 Diabetes in Hispanic Americans

Table 1 provides a list of Hispanic subgroups, the percent of the Hispanic population they each represent, and the percent of the population that has diabetes for two age ranges.

According to HHANES data, for the age range from 45 to 74 years, 26 percent of Puerto Ricans, 24 percent of Mexican-Americans, and 15 percent of Cuban Americans have Type 2 diabetes. The rates are significantly lower for ages 20 to 44.

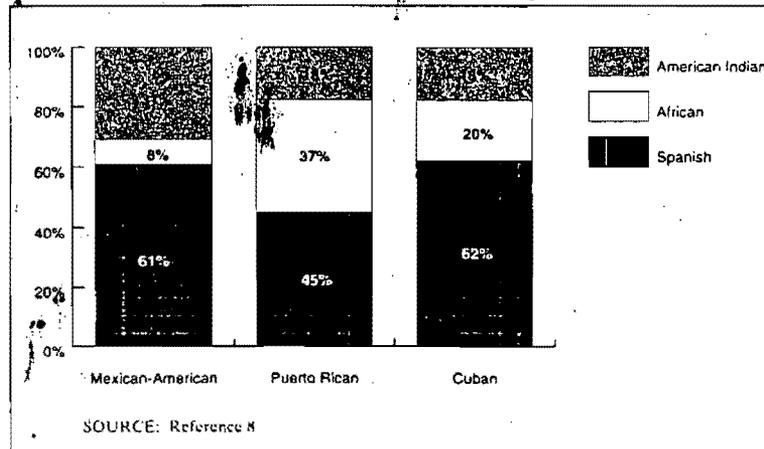
What Risk Factors Increase the Chance of Hispanics Developing Type 2 Diabetes?

The same risk factors that increase the chance of diabetes in other populations also operate in the Hispanic population.

Genetic Risk Factors

A family history of diabetes increases the chance that people will develop diabetes. The San Antonio Heart Study showed that the prevalence of diabetes among people who have first-degree relatives (e.g., parents with diabetes) was twice as great as for Mexican-Americans with no family history of diabetes.

Figure 1.—Genetic origins of the major Hispanic subgroups



Admixture with genes of Americans Indians and Africans (populations with high prevalence of diabetes) is also thought to be a factor for higher rates of diabetes in Hispanics. Hispanics, like members of all subpopulations, inherit their susceptibility to diabetes from their ancestors. Hispanics have three groups of ancestors—Spaniards, American Indians, and Africans. Both American Indians and Africans have high rates of diabetes. Figure 1 shows the genetic origins of major Hispanic subgroups.⁸

Although Cuban Americans have both American Indian and African ancestry, neither of these genetic roots contributes more than 20 percent to the current Cuban American gene pool. This fact may explain why Cuban Americans have a higher prevalence of Type 2 diabetes than non-Hispanic white Americans, yet not as high as the other Hispanic groups.

Medical Risk Factors

Impaired Glucose Tolerance

One of the best predictors—or risk factors—of Type 2 diabetes is impaired glucose tolerance (IGT). People with IGT have higher-than-normal blood glucose levels—but not high enough to be diagnosed with diabetes. Most experts believe that IGT is an early stage in the natural history of diabetes. As with Type 2 diabetes, IGT is very prevalent among Hispanic Americans.

Hyperinsulinemia and Insulin Resistance

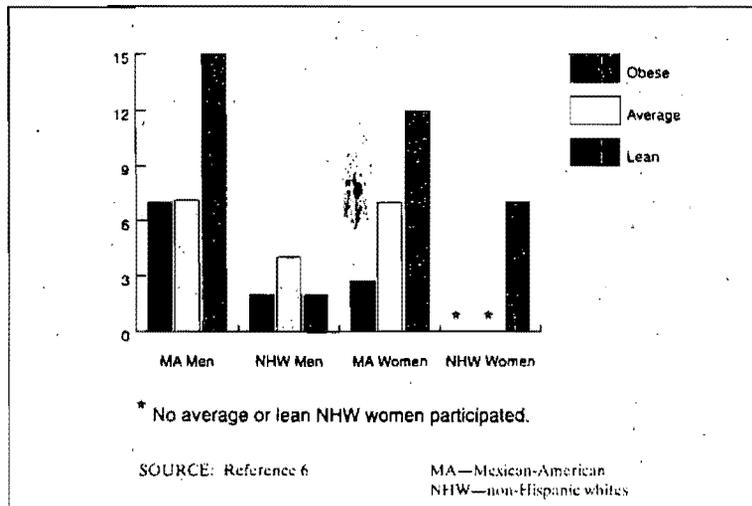
Higher than normal levels of fasting insulin (called hyperinsulinemia) and insulin resistance (an inability to use the body's own insulin to properly control blood glucose) are both hallmarks of an increased risk for Type 2 diabetes.

Obesity

Obesity is a major risk factor for Type 2 diabetes, and Hispanics are more likely than non-Hispanic whites to be overweight. It is known that the prevalence of obesity is higher in Mexican-Americans and they are known to be two to four times more likely to have Type 2 diabetes than non-Hispanic white Americans of similar weight. Figure compares the prevalence of Type 2 diabetes between Mexican-Americans and non-Hispanic whites by the level of obesity.

The degree to which obesity is a risk factor for diabetes depends not just on overall weight, but also on the location of the excess weight. Central, or upper body, obesity is a greater risk factor for Type 2 diabetes, compared to excess weight carried below the waist. Mexican Americans with upper body obesity have increased risk of Type 2 diabetes.

Figure 2.—Prevalence of Type 2 diabetes by ethnicity and body weight.



Lifestyle Risk Factors

HHANES data showed that fewer men with high levels of work-related physical activity developed diabetes. The San Antonio Heart Study also found that decreased levels of leisure-time physical activity was related to higher incidence of diabetes. Consuming more than twice the alcohol intake per week and having a higher body mass index (an indication of being overweight) also lead to a higher incidence of diabetes. In women, the lifestyle factors were being older, being from lower socioeconomic strata, avoiding sugar more often, and being 40 percent or more above desirable body weight. Leisure-time physical activity and alcohol consumption were not predictors of Type 2 diabetes as they were in men.

How Does Diabetes Affect Hispanic Young People?

Hispanic children, both male and female, have lower rates of Type 1 diabetes than non-Hispanic white children. Figure 3 shows the incidence of Type 1 diabetes by age group.⁹

How Does Diabetes Affect Hispanic Women During Pregnancy?

Gestational diabetes is a form of diabetes that develops in about 2 to 5 percent of all pregnant women and usually resolves after childbirth. Mexican-American women, especially when they are overweight, have higher rates of gestational diabetes than non-Hispanic white women.

How Do Diabetes Complications Affect Hispanic Americans?

Kidney Disease

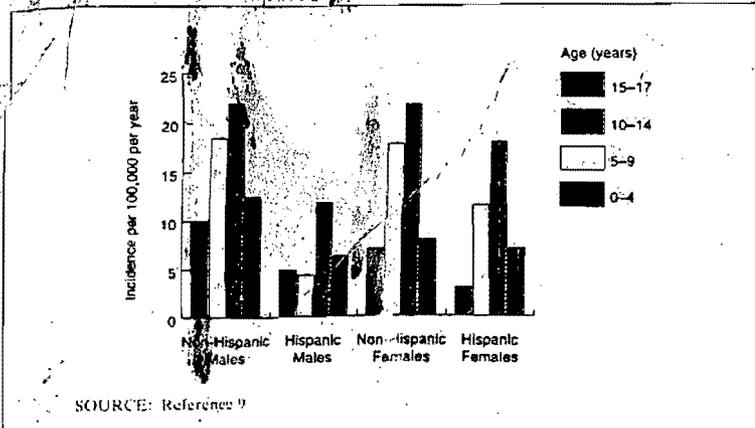
The San Antonio Heart study showed that the prevalence of clinical evidence of kidney damage (proteinuria) was more frequent in Mexican-Americans with diabetes than in non-Hispanic whites. A higher incidence of microalbuminuria, an early indicator of diabetic nephropathy, was also seen in the San Antonio Heart study comparing Mexican-Americans to non-Hispanic whites. However, the San Luis Valley study showed no difference when comparing the incidence of diabetic nephropathy between Hispanics and non-Hispanic whites or an excess of nephropathy in non-Hispanic whites.

Mexican-Americans who develop kidney failure fare better than others on kidney dialysis. According to a report from Texas, Mexican-Americans survived longer on renal dialysis than non-Hispanic white Americans.

Eye Disease

In the San Antonio Heart Study, the rate of diabetic retinopathy among Mexican-Americans was more than twice that of non-Hispanic white Americans. The Third National Health and Nutrition Survey (NHANES III) also found that Mexican-Americans had higher rates of diabetic retinopathy. However, the San Luis Valley

Figure 3.—Incidence of Type 1 diabetes in Colorado by age.



study found lower rates of retinopathy in Hispanics. The results of both the San Antonio Heart Study and the San Luis Valley study indicated that insulin use and level of glycemia were significantly associated with retinopathy.

Nerve Disease

In the San Luis Valley Diabetes Study there was no significant difference in the prevalence of diabetic neuropathy when comparing Hispanics and non-Hispanic whites.

Peripheral Vascular Disease

In the San Antonio Heart Study, Mexican-Americans with Type 2 diabetes had a higher rate of peripheral vascular disease when compared with non-Hispanic whites; however, this increased incidence was not statistically significant.

Heart Disease

Heart disease is the most common cause of death in people with diabetes, especially Type 2 diabetes. However, in the Texas and Colorado studies, Mexican-Americans had lower rates of myocardial infarctions than non-Hispanic white Americans.

How Is NIDDK Addressing the Problem of Diabetes in Hispanic Americans?

In 1996, NIDDK launched its Diabetes Prevention Program (DPP) to learn how to prevent Type 2 diabetes in people with impaired glucose tolerance (IGT) and in women with a history of gestational diabetes

About 4,000 volunteers will be enrolled in DPP, and the study will be conducted at 25 centers throughout the United States. Because of the propensity for diabetes among some minority groups, about half of the DPP participants will be Hispanic American, African American, Native American, and Pacific Islanders. Other high-risk participant will be elderly and overweight people.

DPP will evaluate three interventions to preventing Type 2: an intensive healthy eating and exercise program, and the use of two diabetes medications—metformin and troglitazone. Researchers will tailor interventions to the cultural needs of individuals in the program. Beginning in 1996, DPP will follow participants for about 5 years, with findings to be released before 2005.

Points to Remember

- Hispanic Americans, especially Mexican-Americans and Puerto Ricans, develop Type 2 diabetes at higher rates than non-Hispanic white Americans.
- 1.8 million Hispanic American adults (more than 1 in 10) have Type 2 diabetes. Half of these individuals are diagnosed and the other half remain undiagnosed.
- Different Hispanic groups have different rates of diabetes. In the 45 to 74 age group, about 26 percent of Puerto Ricans, 24 percent of Mexican-Americans, and 15 percent of Cuban Americans have diagnosed diabetes.
- Genetic risk factors for Type 2 diabetes are diabetes in first degree family members, significant American Indian or African ancestry or both.
- Medical risk factors for Type 2 diabetes are impaired glucose tolerance, hyperinsulinemia and insulin resistance, overall obesity, central obesity, and a history of gestational diabetes.
- Higher rates of the diabetes complications nephropathy, retinopathy, and peripheral vascular disease have been documented in several studies with Mexican-Americans, whereas lower rates of myocardial infarctions (heart attacks) have been found.

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Resources from the National Diabetes Information Clearinghouse

The National Diabetes Information Clearinghouse, a service of NIDDK, provides Spanish-language diabetes education materials and information on diabetes in Hispanic Americans including the following titles:

- *Diabetes and Hispanics: Search-on-File.* An annotated bibliography of current Spanish-language diabetes education materials from other institutions.
- *Diabetes Statistics.* A descriptive review of the prevalence and treatment of diabetes in the United States.
- *Diccionario de la Diabetes (The Diabetes Dictionary in Spanish).*
- *Insuficiencia renal crónica terminal: elección del tratamiento que le conviene a usted (End-Stage Renal Disease: Choosing a Treatment That's Right for You).*

Single copies of these publications are free. Bulk orders are available for health care professionals. For more information about diabetes and Hispanic Americans and to order publications, contact

National Diabetes Information Clearinghouse
1 Information Way
Bethesda, MD 20892-3560
Tel: (301) 654-3327
Fax: (301) 907-8906
E-mail: ndic@aerie.com

Additional Readings

National Institutes of Health. *Diabetes in America*, 2nd Edition. National Institute of Diabetes and Digestive and Kidney Diseases, NIH Publication No. 95-1468.

Centers for Disease Control and Prevention. *Chronic Disease in Minority Populations: African-Americans, American Indians and Alaska Natives, Asians and Pacific Islanders, Hispanic Americans.* Centers for Disease Control and Prevention, Office of Surveillance and Analysis, Atlanta, GA. Pages 2-1 to 2-34.

This fact sheet, *Diabetes in Hispanics Americans*, draws on statistics reported in *Diabetes in America*, 2nd Edition, Chapter 32, *Diabetes in Hispanic Americans*, published by the National Institute of Diabetes and Digestive and Kidney Diseases; NIH Publication No. 95-1468, 1995. Several other citations are provided in the references.

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Comments:

JDFI's mission is to find a cure for diabetes and its complications through the support of research.



Statement by Mr. David Roos
for the Juvenile Diabetes Foundation International
before the House Labor, HHS Subcommittee
April 16, 1997

←→ Inviting

Mr. Chairman and Subcommittee Members:

My name is David Roos, and I am from Atlanta,
Georgia. Next to me is Leah Mullin, a member of the
JDF national board and a parent of a child with diabetes.
I welcome the opportunity to be here today representing
the Juvenile Diabetes Foundation and the sixteen million
people in this country with diabetes. I do not have a lot
of statistics for you to digest, since I am appearing before

this committee not as a professional, but to talk to you from the heart.

Twenty years ago, my wife and I were told that our daughter Debbie had Juvenile Diabetes. While we knew this was bad news, we had no idea how bad it really was. Sure, there would be times when she would not feel well, and we knew that she would have to give herself several shots a day but, what the hell, it could be worse, we thought. She would, with our help, live to an old age.

In short, my wife and I believed in our capacity to protect our little girl from the daily and long-term threats of diabetes—insulin shock, comas induced by otherwise

normal illnesses such as the flu, and the usual, crushing litany of kidney failure, neuropathy, heart disease and blindness. Debbie was only twelve at the time of her diagnosis.

We were wrong twenty years ago. Debbie's diabetes was, in fact, about the worst news we could have received. My wife and I were ultimately unable to prevent the insidious, destructive process that diabetes

Debbie's mother and I are grateful, however, that we had her with us for thirty-two years during which time she was able to lead an almost normal life. She went to overnight summer camp for nine years and attended the usual schools, culminating in her graduation from the University of Texas as a Dean's List student. After graduation, she was able to function at a high level in the work place, working in corporate sales for such large corporations as Coca Cola, Pac Tel and AT&T. Her mother and I were very proud of her.

Approximately eighteen months ago, things began to change. She started losing her sight and eventually

became legally blind because of diabetes. Because she could no longer function in the corporate world, she came to work for me. What I saw was a tragedy unfolding. In addition to being legally blind, she had developed gastroparesis, a paralysis of the stomach caused by diabetic neuropathy, which among other things caused her to be nauseated for the better part of each day. In fact, she was sick to her stomach virtually every day for nearly five years. We were finally able to help her stomach condition by purchasing the drug Motillem in the Bahamas, since it is not available in the U.S. But that's a story for another day. What I have

described is just the tip of the iceberg, and I realize that

and its complications contribute to the deaths of 170,000 Americans, more than die of AIDS and breast cancer combined each year, and that is probably an understatement due to reporting inaccuracies relating to primary causes of death. People with diabetes are 2 to 4 times more likely to die from heart disease, and diabetes accounts for approximately 40 percent of kidney failures.

One thing I know for sure is that the lives of sixteen million people with diabetes and the one hundred million or so who love them change for the worse once diabetes comes into their lives. It is we who implore you -- you who are in positions to really make a difference --

to take decisive action to eradicate diabetes, once and for all.

Do not be deluded into thinking that insulin is a cure. Do not assume that people, and particularly youngsters, with diabetes can live the robotic, regulated lives that tight control of glucose levels demands. Do not for a moment think that we have solved the problems of diabetes-related complications when genetic researchers are hinting that yet unidentified genes may well determine the fate of a person with diabetes.

You should be thanked, on behalf of these families who know diabetes on a personal level, for all the

research breakthroughs made possible to date by your support of diabetes research. And on a personal level, I am grateful for the medical advances that allowed my daughter to live the twenty years since her initial diagnosis. She had the opportunity to be married to a wonderful man for four years, which despite being fraught with medical problems, were her happiest. We were provided with memories of Debbie living life to its fullest, memories which will continue to be a source of comfort to us. But we as a nation cannot rest on those accomplishments. For all the Debbies out there, we need to make finding a cure for diabetes a national priority.

It looks to me as if diabetes funding at NIH has languished a bit, and I wonder why, given the increasing numbers of those afflicted and the \$138 billion of direct and indirect costs of diabetes borne by this country annually. And if, as the Speaker of the House suggests, twenty-five percent of Medicare costs go to the care of diabetes and its complications, our strategy should be clear.

As a businessman, I know that an increased investment in diabetes research is a good deal. As a grieving parent and as a concerned citizen, I know that increased funding of diabetes research is for the good of

all mankind. It is too late to help my daughter, except to honor her memory by helping those who still suffer from diabetes. Some people may wonder how I can appear before you today so soon after my daughter's death. As difficult as it is, what helps keep me going is the search for a cure so that others do not have our experience. My family, as well as the Juvenile Diabetes Foundation, is committed to creating a world where no one will fear diabetes and its complications.

I thank you, Chairman Porter, other members of this Committee, and especially my good friend Jay Dickey for the opportunity to be heard today. You have

the opportunity to positively shape the future of tens of millions of your constituents and their families, and I hope that you rise to the challenge. More than anything, I want to come back here someday soon to share what might become one of this nation's finest moments—the day when we will finally announce, as partners, a cure for diabetes.