



*Diabetes and Asian Americans and Pacific Islanders**

WHAT IS DIABETES?

Diabetes is a serious chronic disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches, and other food into energy needed for daily life. People who have diabetes have high levels of glucose (sugar) in their blood.

WHAT IS THE SCOPE AND IMPACT OF DIABETES?

Diabetes is one of the leading causes of death and disability in the United States, costing more than \$98 billion each year. It was the seventh leading cause of death listed on U.S. death certificates in 1995. It is the fifth leading cause of death in Asian Americans and Pacific Islanders between the ages of 45 and 64.

Diabetes is associated with long-term complications that may affect a person's quality of life. It is the leading cause of adult blindness, end-stage kidney disease, and amputations of the foot or leg due to nerve disease. People with diabetes are 2 to 4 times more likely to have heart disease and stroke than people without diabetes and about two-thirds die of cardiovascular disease.

HOW MANY ASIAN AND PACIFIC ISLANDER AMERICANS HAVE DIABETES?

Although data on the number of Asian and Pacific Islander Americans who have diabetes are limited, studies show that type 2 diabetes is a growing problem among some groups within this population. For example, the prevalence of type 2 diabetes is 2 to 3 times higher among Japanese Americans living in Seattle compared with non-Hispanic whites. The prevalence is 2.5 times higher among Native Hawaiians compared to white residents of Hawaii.

WHAT ARE THE DIFFERENT TYPES OF DIABETES?

Type 1 diabetes, which used to be called juvenile diabetes, results when the body's immune system attacks and destroys its own insulin-producing beta cells in the pancreas. People with type 1 diabetes need daily injections of insulin to live. A small number of Asian and Pacific Islander Americans have type 1 diabetes.

Type 2 diabetes, which used to be called adult-onset diabetes, occurs when the body doesn't make enough insulin or cannot use the insulin it makes effectively. This form of diabetes usually develops in adults over the age of 40 but is becoming more prevalent in younger age groups. Most Asian Americans and Pacific Islanders with diabetes have type 2 diabetes.

Gestational diabetes develops or is discovered during pregnancy. This type usually disappears when the pregnancy is over, but women who have had gestational diabetes have a greater risk of developing type 2 diabetes later in their lives.

WHAT ARE THE SYMPTOMS OF DIABETES?

Symptoms of type 1 diabetes usually develop over a short period of time. They include increased thirst and urination, constant hunger, weight loss, blurred vision, and extreme fatigue. If type 1 diabetes is not diagnosed and treated, a person can lapse into a life-threatening coma.

The symptoms of type 2 diabetes develop gradually and are not as noticeable as in type 1 diabetes. Symptoms include feeling tired or ill, unusual thirst, frequent urination especially at night, weight loss, blurred vision, frequent infections, and slow-healing wounds.

HOW IS DIABETES DIAGNOSED?

Diabetes is diagnosed by a simple lab test of a person's blood sugar levels after they have not eaten for eight hours. A person has diabetes if the fasting plasma glucose is 126mg/dL or greater.

WHAT FACTORS INCREASE THE CHANCES THAT ASIAN AMERICANS AND PACIFIC ISLANDERS WILL DEVELOP TYPE 2 DIABETES?

People whose family members have diabetes are at increased risk for the disease. Also, people who are obese, who eat a high fat diet, and who are physically inactive are more likely to develop type 2 diabetes. Contrary to what many people believe, diabetes is not caused by eating too many sweets or sugary foods.

The food choices of some Asian Americans and Pacific Islanders have changed due to their migration to the United States and to modern times. Instead of their traditional plant- and fish-based diets, they are choosing foods with more animal protein, animal fats, and processed carbohydrates. In addition, they have become less physically active. As a result, their chances of developing diabetes have increased.

CAN TYPE 2 DIABETES BE PREVENTED?

Yes. The Diabetes Prevention Program, a research study sponsored by the National Institutes of Health, showed that by increasing their physical activity, eating a healthier diet, and losing between 10 and 15 pounds, 58 percent of participants at high risk for diabetes were able to prevent the onset of the disease.

HOW DO PEOPLE MANAGE DIABETES?

Diabetes is a self-managed disease. People with diabetes must take responsibility for their day-to-day care by trying to keep their blood sugar near normal levels.

People with type 1 diabetes need daily injections of insulin because their bodies no longer produce it. Treatment requires a strict regimen that usually includes a carefully planned diet, a physical activity program, self-testing of blood sugar levels, and insulin injections several times per day.

Treatment for people with type 2 diabetes typically includes following a diet plan, getting regular physical activity, self-testing of blood sugar levels, and in many cases, oral medication and/or insulin injections. About 40 percent of people with type 2 diabetes require insulin injections.

Major research studies have shown that people who keep their blood sugar levels in the normal range can significantly delay the onset and the progression of eye disease, kidney disease, and nerve disease. In fact, research shows that **any** sustained lowering of blood sugar levels helps prevent these diabetes complications.

The best way to measure blood glucose control is the A1C (pronounced A-one-C) test, a simple lab test that measures the average level of glucose in the blood over the last three months. In addition, since people with diabetes are at an increased risk for heart disease and stroke, they also must control their blood pressure and cholesterol. The NDEP recommends the following targets for reducing risk of heart disease and stroke for people with diabetes:

- Blood Sugar** (A1C test) < 7 percent
- Blood pressure**.....< 130/80 mmHg
- Cholesterol** (LDL)..... < 100 mg/dl)

*Adapted from Diabetes Overview and Diabetes in Asian and Pacific Islander Americans, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health.