



UNITED TRIBES
TECHNICAL COLLEGE
LAND GRANT EXTENSION

UTTC LAND GRANT EXTENSION



Diabetes Overview

WHAT IS DIABETES?

Diabetes is a disease where glucose (sugar) levels in the blood are higher than they should be. Glucose is the sugar in the blood made from the food we eat. Glucose is used as energy when it enters the cells. Insulin acts as the key to open the cells letting the sugar enter the cell for use. Insulin is a hormone made by the pancreas which is located near the stomach. When people have diabetes, their body either doesn't make enough insulin or cannot use the insulin as the key to open the cells. Both of these problems cause the glucose (sugar) to build up in the blood and is measured as "high blood sugar."

FACTS & FIGURES:

- Young Native American's are **NINE** times more likely to be diagnosed with **Type 2** diabetes.
- In the last 20 years, diagnosis in Native American youth has increased **110 percent** (3.24 to 6.81 per 1,000).
- Northern Plains Indian Health Service Area ranks second in the nation for numbers of persons with **Type 2** diabetes.
- People of indigenous ancestry have diabetes at twice the rate of people of European ancestry (16.1 percent to 7.1 percent).
- Kidney failure and death rate due to diabetes are also nearly twice as high for indigenous people.
- Diabetes is related to obesity and obesity is generally caused by poor food choice and lack of activity.

MAINTAIN HEALTHY NUMBERS:

Healthy Fasting Blood Sugar Level = 70 to 100

The prevalence of obesity in Tribal Nations has increased dramatically over the past 30 years. Although indigenous people are from many different Tribes and genetic backgrounds, all tribes throughout the U.S. have suffered adverse effects from the high prevalence of obesity related to generational trauma (Story et al, 2000)). Overall, studies demonstrate that obesity begins early for native children and is also a significant problem for the adult population (IHS, 2001). Many chronic diseases such as **Type 2** diabetes, heart disease, stroke, arthritis, and breathing problems are associated with the increasing prevalence of obesity in Native Americans (DHHS, 2001, Story et al, 1999).

“4” Types of Diabetes – “too much sugar in the blood!”

<p>Type 1 diabetes (about 10% of total diagnosed cases)</p> <ul style="list-style-type: none"> • The body’s immune system destroys pancreatic beta cells – a hormone called insulin that regulates blood glucose is no longer made. • Persons must have insulin delivered by injection or a pump for a lifetime. • Approximately 5 percent of those diagnosed are adults, the remainder are children. • No current way to prevent Type 1 diabetes. • Lifelong blood sugar monitoring is required to balance food and activity plans. 	<p>Type 2 diabetes (over 80% of total diagnosed cases)</p> <ul style="list-style-type: none"> • Usually caused by poor food choice and lack of body movement leading to obesity. • Disease symptoms may be controlled, if people eat smarter and move more. • May require medication, by mouth, to help the cells open and accept the glucose energy. • Often called insulin resistance, meaning cells still produce insulin but do not use it properly forcing glucose or energy to stay in the blood. • Is a progressive disease, so the need for insulin injections is likely in time, as the pancreas slowly loses its ability to produce insulin.
<p>Gestational diabetes (diagnosed during pregnancy)</p> <ul style="list-style-type: none"> • A form of glucose intolerance diagnosed during pregnancy. • If mom controls her blood sugar, baby and mom remain healthy. • If mom does not control her blood sugar, baby may be born with high birth weight and perhaps elevated blood sugar. • Disappears in mom’s body after delivery, but frequently returns as Type 2 diabetes if her lifestyle choices do not include eating smarter and moving more. 	<p>Pre-diabetes (diagnosed for prevention)</p> <ul style="list-style-type: none"> • Diagnosed when fasting blood sugar level is over 100 but below the 125 range. • Provides warning to people so they can improve food and movement choices, as an effort to prevent diabetes. • Controlling the blood sugar numbers to within normal range can delay Type 2 diagnosis and the complications, for a long period of time. • Good news! Moving More and Eating Smarter and losing a few extra pounds (as little as 7% of total body weight) may reduce blood sugar levels to a healthy range.

WHAT is United Tribes Technical College doing to HELP?

- UTTC Wellness Center offers FREE blood sugar screening. KNOW YOUR NUMBERS! Stop in and ask.
- UTTC Land Grant Extension Nutrition Educators offer healthy food selection, food preparation, cultural community-based education, and informational publications. They are also trained in the American Diabetes Association’s Diabetes Prevention Program and the Diabetes Empowerment Education Programs (DPP and DEEP). Find class schedules at www.uttc.edu/landgrant/trainings.
- UTTC Land Grant Extension offers FREE Individualized Medical Nutrition Therapy (MNT = diet counseling), for all types of diabetes from a Licensed Registered Dietitian (LRD).
- UTTC Land Grant Extension Agroecology Educators offer opportunity to grow or learn how to grow some of your own healthy food. Watch for community gardening and food preservation announcements.
- UTTC Nutrition and Foodservice Department offers a 3-credit class titled *Mother Earth, Food Sovereignty and Health* which includes, *Strong in Body and Spirit: Healthy Choices*, a 5-lesson diabetes education curriculum.

RESOURCES:

Local Tribal Diabetes Program
 State Departments of Health
 American Diabetes Association – www.diabetes.org
 Academy of Nutrition and Dietetics www.eatright.org
 NDSU State Extension Program <http://www.ag.ndsu.edu/extension/>
 Learn About Diabetes. www.diabetes.about.com<http://www.standingrock.org/tribalPrograms/>
http://www.mhanation.com/main2/health_care/diabetes_program.html
<http://www.ihs.gov/greatplains/healthcarefacilities/spiritlake/>
<https://www.facebook.com/TurtleMountainDiabetesPrevention>
<http://www.swo-nsn.gov/HealthandFitness.aspx>
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