

## 69 TRIBES IN 19 STATES PROUDLY SERVING THE BUFFALO NATION

Alutiiq Tribe of Old Harbor  
Blackfeet Nation  
Cherokee Nation  
Cheyenne Arapaho Tribe of Oklahoma  
Cheyenne River Sioux Tribe  
Chippewa Cree Tribe of Rocky Boy  
Confederated Salish & Kootenai Tribes  
Confederated Tribes of Umatilla  
Crow Tribe  
Crow Creek Sioux Tribe  
Eastern Shoshone Tribe  
Flandreau Santee Sioux Tribe  
Forest County Potawatomi Community  
Fort Belknap Indian Community  
Fort Peck Assiniboine & Sioux Tribe  
Ho-Chunk Nation  
Iowa Tribe of Oklahoma  
Jicarilla Apache Nation  
Kalispel Tribe of Indians  
Leech Lake Band of Ojibwe  
Lower Brule Sioux Tribe  
Mesa Grande Band of Mission Indians  
Modoc Nation  
Nambe O-ween-ge Pueblo  
Northern Arapaho Tribe  
Northern Cheyenne Tribe  
Oglala Sioux Tribe  
Omaha Tribe of NE  
Oneida Nation  
Osage Nation  
Picuris Pueblo  
Pit River Tribe

Ponca Tribe of NE  
Prairie Band Potawatomi Nation  
Prairie Island Indian Community  
Pueblo de Cochiti  
Pueblo of Pojoaque  
Pueblo of Sandia  
Pueblo of Tesuque  
Quapaw Tribe of Oklahoma  
Red Lake Nation  
Rosebud Sioux Tribe  
Round Valley Indian Tribes  
Ruby Tribe  
Sac & Fox Tribe of Mississippi in Iowa  
Sac & Fox Nation of Missouri  
Salt River Pima - Maricopa Indian Community  
San Juan Pueblo  
Santee Sioux Tribe of NE  
Seminole Nation of OK  
Seneca-Cayuga Tribe of OK  
Shakopee Mdewakanton Sioux Community  
Shoshone-Bannock Tribes  
Sisseton Wahpeton Oyate  
Skull Valley Band of Goshute Indians  
Southern Ute Tribe  
Spirit Lake Tribe, ND  
Standing Rock Sioux Tribe  
Stevens Village  
Stillaguamish Tribe of Indian of WA  
Taos Pueblo  
Three Affiliated Tribes (MHA Nation)  
Tonkawa Tribe of OK  
Turtle Mountain Band of Chippewa Indians  
Ute Indian Tribe  
White Earth Band  
Winnebago Tribe of NE  
Yakama Nation  
Yankton Sioux Tribe



## DIABETES AND THE NATIVE AMERICAN INDIAN POPULATION



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## WHAT IS DIABETES?

Diabetes is a group of diseases marked by high levels of blood glucose resulting from problems in how insulin is produced, how insulin works, or both. People with diabetes may develop serious complications such as heart disease, stroke, kidney failure, blindness, and premature death.

Type 1 diabetes develops when the cells that produce the hormone insulin, known as the beta cells, in the pancreas are destroyed. This destruction is initiated or medicated by the body's immune system and limits or completely eliminates the production and secretion of insulin, the hormone that is required to lower blood glucose levels. To survive, people with type 1 diabetes must have insulin delivered by injection or a pump. In adults, type 1 diabetes accounts for approximately 5% of all diagnosed cases of diabetes. There is no known way to prevent Type 1 diabetes.

Type 2 diabetes usually begins with insulin resistance, a disorder in which the cells primarily within the muscles, liver, and fat tissue do not use insulin properly. As the need for insulin rises, the beta cells in the pancreas gradually lose the ability to produce sufficient quantities of the hormone. The role of insulin resistance, as opposed to beta cell dysfunction, differs among individuals, with some having primarily insulin resistance and only a minor defect in insulin secretion, and others with slight insulin resistance and primarily a lack of insulin secretion.

Among American Indian and Alaska Native adults, the age-adjusted rate of diagnosed diabetes varied by region from 6.0% among Alaska Natives to 24.1% among Native Americans in southern Arizona.



## CO-EXISTING CONDITIONS & COMPLICATIONS

### AMONG PEOPLE WITH DIAGNOSED DIABETES

Diabetes can affect many parts of the body and is associated with serious complications, such as heart disease, stroke, blindness, kidney failure, and lower-limb amputation. Some complications, especially microvascular (e.g., eye, kidney, and nerve) disease, can be reduced with good glucose control. Also, early detection and treatment of complications can prevent progression, so monitoring with dilated eye exams, urine tests, and foot exams is essential. Because the risk of cardiovascular diseases is increased with diabetes and prediabetes, blood pressure and lipid management, along with smoking cessation, are especially important. By working together, people with diagnosed diabetes, their support network, and their health care providers can reduce the occurrence of these and other complications.

## DIABETES IN AMERICAN INDIANS AND ALASKA NATIVES

**2.3 times higher** Likelihood of American Indian and Alaska Native adults to have diagnosed diabetes compared with non-Hispanic whites (16.1% vs. 7.1%; 2009).

*Source: National Diabetes Fact Sheet, 2011*

**9 times higher** Likelihood of American Indian and Alaska Native youth ages 10-19 to have diagnosed type 2 diabetes compared to non-Hispanic white (1.74 per 1000 vs. 0.19 per 1000; 2001)

*Source: SEARCH for Diabetes in Youth Study*

**110%** Percent increase in diagnosed diabetes from 1990 to 2009 in American Indian and Alaska Native youth aged 15-19 years (3.24 vs. 6.81 per 1000) *Source: I.H.S. Division of Diabetes Statistics (unpublished analysis)*

**1.6 times higher** Death rate due to diabetes for American Indians and Alaska Natives compared with the general U.S. population (34.5 vs. 21.8 per 100,000; 2008) *Source: Health, United States, 2011: With Special Feature on Socioeconomic Status and Health*

## BISON MEAT

Buffalo meat is low in fat and cholesterol and is compatible to the genetics of Native American Indian people. Buffalo meat was the main diet of the Plains Indian who never had cancer, heart disease or heart attacks, and lived to be 85-90.

Buffalo meat is a good source of conjugated linoleic acid (or CLA), an important cancer-fighting fat. It is rich in vitamin beta-carotene, a vital antioxidant that reduces cancer by preventing cell degeneration. It is also rich in a balanced combination of essential omega-3 fatty acids.

A serving of buffalo meat has as much calcium as a 6oz glass of milk; as much potassium as a medium banana; and contains vitamins E, B6, and B12.

Studies indicate that including buffalo meat in your diet can reduce the risk of diabetes and other diet related diseases. Combined with the cultural and spiritual benefits of this delicious meat, buffalo is a healthy and life-giving food source for Native American people.



## BENEFITS OF BUFFALO MEAT

### Nutritional Comparison

Per 100-gram Serving, Cooked Meat

Meat	Protein(g)	Fat(g)	Calories	Iron(mg)
Buffalo	28.5	2.5	143	3.42
Beef	29.5	10	219	2.99
Pork	29.5	9.5	212	1.1
Chicken	29	7.5	190	1.29
Salmon	27	11	216	.55

Sources: National Bison Associations, USDA

Figure .1 Benefits of Buffalo Meat-Nutritional Comparison

>> The diagram above shows the nutritional benefits of eating buffalo meat. Buffalo meat has fewer calories, less saturated fat, and has more iron.