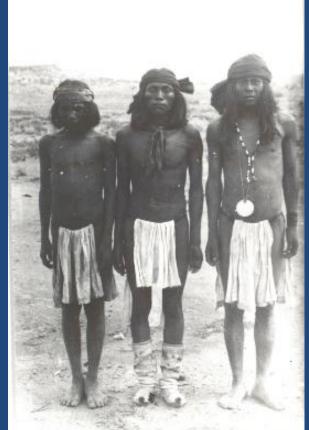


"If the People ate their Apache foods and exercised, there would be none of these new sicknesses. If the People respected themselves, respect this land, this country would be beautiful again."





## Today's Diet

- Low in fiber
- High in saturated fat/Low in healthy fats
- High in cholesterol
- High in sodium and added sugars
- High in processed foods





#### Reservation Health Rates

- 18% formally diagnosed with Diabetes Mellitus Type 2
- Over 50% overweight or obese; 49% of our children



## Diseases Related to Obesity

- Coronary/Heart Disease
- Stroke
- Pulmonary Embolism
- Enlarged Heart
- High Cholesterol
- Diabetes
- Chronic Renal Failure
- Hypertension
- Osteoporosis
- Sleep Apnea
- Gout
- Hernia

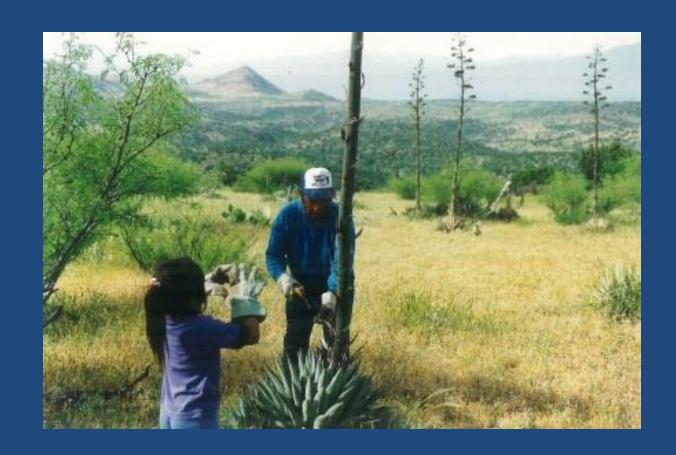
- Gastro-Esophageal Reflux
- Osteoarthritis
- Fatty Liver Disease
- Erectile Dysfunction
- Lymph Edema
- Urinary Incontinence
- Depression
- Cellulitis
- Gall Bladder Disease
- Dementia

## Cancers Associated with Obesity

- Lung
- Breast
- Colon/Rectal
- Pancreatic
- Stomach
- Esophageal
- Uterine
- Prostate

- Kidney
- Cervical
- Gall Bladder
- Liver
- Multiple Myeloma
- Ovarian
- Non-Hodgkin
   Lymphoma

# Traditional Apache Healthcare Models



## Project Progress



#### Since 2011, we have:

- Created database of information on the traditional Apache diet
- Conducted and analyzed information from hundreds of interviews with Apache elders and traditional cultural authorities.
- Detailed information regarding close to 300 food species.
- Compiled 96 (8 per month) sample, pre-Reservation Apache daily menus for nutritional analysis.

## **Nutrition Analysis**

Recommendation for men and women as described								
	Average	% Rec	% Rec					
	of days March	lightly active	very active		mod active	very active	mod active	very active
		woman	woman		woman	woman	man	man
Cals (kcal)	1940.91	101.23	71.5		2216.27	2714.39	2904.08	3399.93
FatCals (kcal)	415.18	77.33	54.63		620.56	760.03	813.14	951.98
SatCals (kcal)	67.35	39.03	27.57		199.46	244.3	261.37	305.99
Prot (g)	87.28	209.16	209.16		41.73	41.73	46.81	46.81
Carb (g)	285.01	108.1	76.36		304.74	373.23	399.31	467.49
TotFib (g)	40.05	149.21	105.4		31.03	38	40.66	47.6
TotSolFib (g)	0.14							
Sugar (g)	26.78							
MonSac (g)	0.01							
Disacc (g)	0.06							
OCarb (g)	0.13							
Fat (g)	46.13	77.33	54.63		68.95	84.45	90.35	105.78
SatFat (g)	7.48	39.03	27.57		22.16	27.14	29.04	34
MonoFat (g)	11.94	56.04	39.59		24.63	30.16	32.27	37.78
PolyFat (g)	16.04	83.66	59.09		22.16	27.14	29.04	34
TransFat (g)	0							
Chol (mg)	223.68	74.56	74.56		300	300	300	300
Water (g)	1076.91	46.82	46.82		2300	2300	3300	3300
Vit A-IU (IU)	218.86							

### Project Findings: Overview of Diet

- Wild plant foods 40%-60% of total diet
- Agricultural foods 25%-50% total diet
- Wild meat 20%–40% of total diet.
- The most important individual foods by volume in the traditional diet were roasted agave hearts, Emory oak acorns, wild seeds (primarily sunflower family, mustards, and grasses), corn, and meat.



### Project Findings: Overview of Diet (2)

- There are over 200 documented Apache edible wild plant species—greens, seeds, nuts, fruits, roots and tubers, stalks, flowers, fungi, and minerals.
- Our traditional agriculture centered on several varieties of corn, a few varieties of squash, and (rarely) beans.
- We ate about 30 species of mammals, mostly rodents by volume, and 9 main species of birds, supplemented by several species of songbirds.



#### Project Findings: Key Aspects of the Traditional Apache Diet

- 1. The pre-Reservation Apache diet was extremely nutritious:
- High in fiber
- High in protein
- Low in saturated fat
- High in healthy fats
- Low in cholesterol
- Low in sodium and added sugars
- Rich in whole foods
- Filling, with little volume



#### Project Findings: Key Aspects (2)

## 2. The Traditional Apache Diet is Seasonal in Nature

The diet varies according to the seasons, tying individuals and the whole community to the natural order of seasons in terms of nutrition, activity, and ceremony.



#### Project Findings: Key Aspects (3)

- 3. Food Production Was The Basis of Traditional Apache Activity and Movement, Economy, Ceremony, and Political Structure
- Following wild plant harvests drove the community's movement throughout the year and consumed most day-to-day activity.
- Food and food-gathering was the basis of the traditional economy.
- The origins and timing of foods is the basis or key component of most ceremonies.
- Political leaders were chosen largely by their ability to anticipate, organize, and administer food production systems and activities.

## Project Findings: Key Aspects (4)

- 4. The Traditional Apache Relationship with Food is Deeply Personal, Respectful, and Spiritual
- The Holy People, Nigosdzán, food plants and animals, and attaining a state of Gozho' are all interconnected.

## Strategy

#### Bridging the Information Gap By:

- Using the Apache Education Model
- Remaining Earth-Based and Seasonal
- Connecting Land and Family



#### **Current Activities**

- Nutritional Analysis
- Field Trips
- Natural World Information
- Calendars
- Dahitaa
- Year-Round Apache Curriculum
- Foodbooks/Recipes/Posts
- Seeds and Gardens
- History Presentation
- Parenting and College Curriculum
- Museum Exhibit
- Meth Rainbow Treatment
- Clinical Projects

## Rats are Gross! Gluscho is Beautiful







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