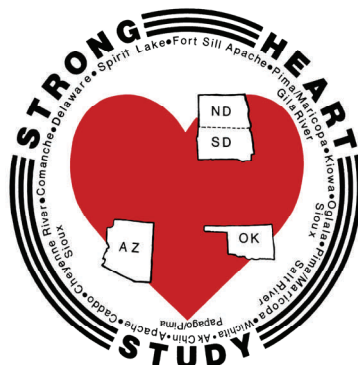


# Facts about The Strong Heart Study

- The Strong Heart Study (SHS) is a study of cardiovascular disease and its risk factors among American Indians.
- The SHS has a field center in each of the following areas: Arizona, the Dakotas, and Oklahoma. SHS also has a coordinating center in Oklahoma, Penn Medical Laboratory in Washington DC, an ECG and ultrasound reading center at Weill Medical College of Cornell University in New York, and a genetics center in San Antonio, TX.
- SHS began in 1988 and has continued through five phases of study. SHS added other family members to the study in 1997.
- SHS is the largest, longest longitudinal study in the U.S. of heart disease and its risk factors in individuals with diabetes.
- SHS is a population based study and has a retention rate of 90%. This shows the extraordinary commitment of SHS participants.



## Arizona

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## Dakotas

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## Oklahoma

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University of Oklahoma Health Sciences Center  
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<http://strongheart.ouhsc.edu>

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# Diet and You



RESEARCH RESULTS AND  
INFORMATION FROM:  
**STRONG HEART  
STUDY**



# Diet and You



## Nutritional Information from the Strong Heart Study?

The Strong Heart Study asked people about what they eat, in 13 communities in Arizona, Oklahoma and the Dakotas.

## What we have learned so far:

What people eat depends on where they live, how old they are and if they are men or women. In general, the diets of Indian people in the SHS are not very different from what people in the United States eat. As with the rest of the US, most of the SHS population are eating foods that are not “heart healthy” and are high in calories.

The diets in the SHS population are too high in the “bad” fats and low in “good” fats compared to the US populations; and this can increase the risk of heart attacks and strokes.

Foods containing saturated fats or trans fats are examples of “bad” fats.

**Saturated fats** are mainly found in animal products such as meat and whole fat dairy products.

**Trans fats** can be found in baked good such as doughnuts, pastry and deep fried foods such as fried chicken and French fries.

Foods containing **monounsaturated or polyunsaturated** fats are examples of “good fats.” They re found in plant products, vegetable oils and fish.

**Processed meat intake**—particularly spam, has been found to be associated with higher risk for diabetes in American Indians.

Moderate intakes of unprocessed red meats or dairy products have not been found to be associated with the occurrence of diabetes.



The low levels of several vitamins in the SHS diet indicate that **more fruits and vegetables should be eaten.**

SHS folks also have too little calcium in their diet, perhaps because of the indigestion some people experience from milk. **Examples of non-dairy calcium foods** include broccoli, celery, leafy green vegetables such as spinach, almonds, flax seed, enriched soymilk and oranges. Lower calcium intake was found more often in obese persons.



In the SHS population, a diet high in fats and simple carbohydrates has been found to contribute to obesity and poor health.

Both good and bad fats are high in calories and eating food high in fat often results in high calorie intake.

**Simple carbohydrates** are found in foods such as white ‘table’ sugar, honey, candy, regular soda, and many processed snack foods. These foods are often high in calories and have little nutritional value.

## What needs to happen:

Parents and grandparents must become involved in dietary choices for children. Lead by example. Add another vegetable or calcium rich food to your diet once a day.

Education on reducing intake of fats and sweets should start early in life for the American Indian population to reduce the risk of heart disease and prevent weight gain. Promote better meals at school and gatherings.

Avoid factory baked goods, pop, fried foods - potato chips and processed foods - like spam or canned sausages. Drink water rather than soda pop or sweet juices.

Make a simple plan. Reduce saturated and trans fats by replacing fatty meats, chips or packaged snacks with fruits or vegetables such as apples or carrots.

Don’t eat mindlessly. Think about what you put in your mouth.

