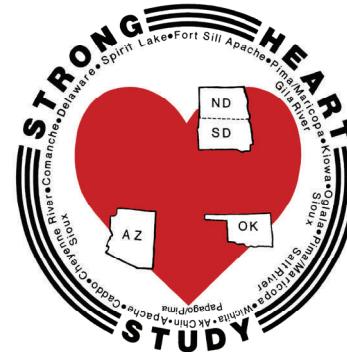


Facts about The Strong Heart Study

- 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

Medstar Health Research Institute
The Strong Heart Study
1616 E. Indian School Road
Suite #250
Phoenix, AZ 85016
Phone: (602) 277-0488

Dakotas

Strong Heart Study – Dakota Center
Missouri Breaks Ind. Research Inc.
HCR 64, Box 52
Timber Lake, SD 57656
Phone: (605) 964-3418 or (605)-964-1260

Oklahoma

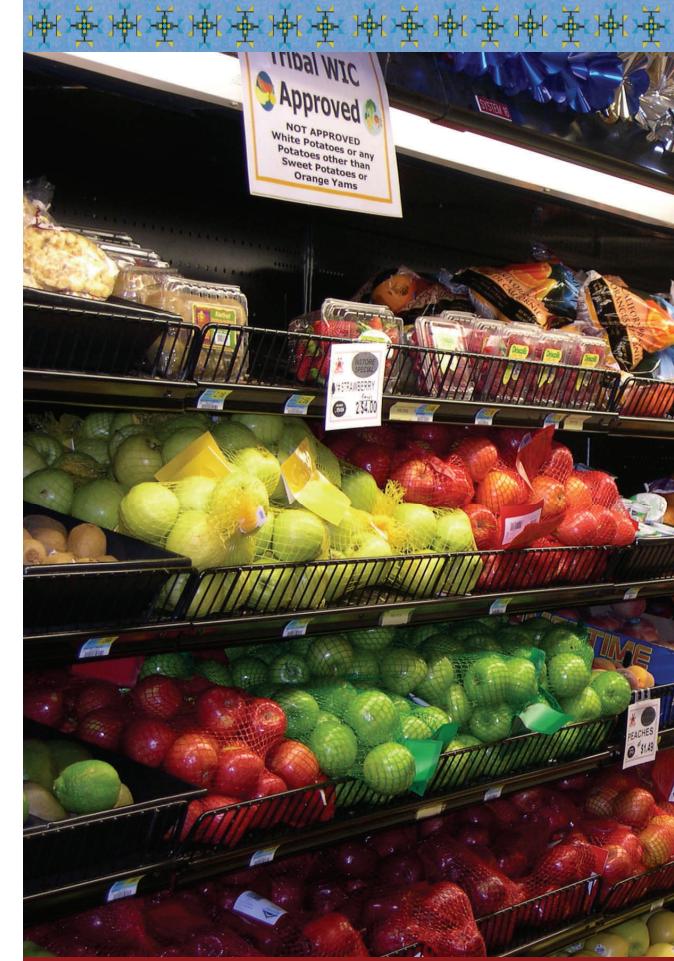
Center for American Indian Health Research
University of Oklahoma Health Sciences Center
1-888-231-4671

Strong Heart Study Field Clinic Lawton, Oklahoma
Lawton Indian Hospital
1515 N.E. Lawrie Tatum Road
Lawton, OK 73507
Phone: (580) 248-7715

Strong Heart Study Field Clinic Anadarko, Oklahoma
Anadarko Indian Health Center
115 Northeast Old Town Drive
Anadarko, OK 73005
Phone: (405) 247-2458, ext. 8705

**Visit our web site at:
<http://strongheart.ouhsc.edu>**

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Understanding Blood Fats



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



Understanding Blood Fats



What are Blood Fats?

Blood fats (also called lipids) are necessary molecules in your blood and are needed for healthy cells and good nutrition. Everyone has fats in their blood. Two of the major blood fats are cholesterol and triglycerides. Blood fats are good for you, but they can become bad for you if they are not at the proper levels.

Blood Fats in American Indians

- 25% of men and women in the Strong Heart Study (SHS) had high LDL cholesterol ("bad" cholesterol).
- 50% of men in SHS had low HDL ("good" cholesterol).
- 75% of women in SHS had low HDL ("good" cholesterol).
- 75% of men and women in SHS had high triglyceride levels.

Cholesterol and Triglyceride level guidelines:

Triglycerides..... Below 150 mg/dl

LDL, with diabetes..... Below 100 mg/dl

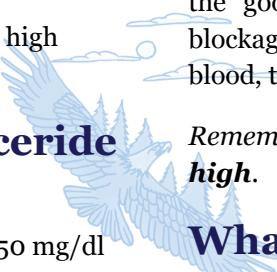
LDL, without diabetes... Below 130 mg/dl

Men:

HDL.....40 mg/dl and above

Women:

HDL.....50 mg/dl and above



What is Cholesterol?

Cholesterol is a fat found in the blood and the cells of your body. Cholesterol helps build cell membranes, and it also helps build some hormones. There are two types of cholesterol: HDL and LDL. Cholesterol becomes a health problem when a person has too much of the LDL (bad) cholesterol in their blood or not enough HDL (good) cholesterol in their blood.

LDL Cholesterol

LDL stands for Low-Density Lipoproteins, and this is the "bad" cholesterol. LDL cholesterol leads to blockage in the arteries. The higher the LDL level in your blood, the greater chance you have of getting heart disease.

*Remember: You want to keep your **LDL** cholesterol **low**.*

HDL Cholesterol

HDL stands for High-Density Lipoproteins, and this is the "good" cholesterol. HDL cholesterol helps reduce blockage in arteries. The higher the HDL level in your blood, the lower your chance is for getting heart disease.

*Remember: You want to keep your **HDL** cholesterol **high**.*

What are Triglycerides?

Triglycerides are the other major blood fat. High triglyceride levels can lead to heart disease and inflammation of the pancreas. If an individual has an extremely high triglyceride level, above 800 mg/dl, they should see a doctor or get medical attention as soon as possible.

How to Lower LDL Cholesterol

- Eat less saturated fat (animal fat).
- Eat more foods that contain fiber.
- Lose weight by eating less and increasing physical activity.
- Use a medicine prescribed by your doctor. Several medicines have been shown to be effective. They can lower your LDL cholesterol and prevent heart disease.

How to Raise HDL Cholesterol

- Lose weight if you are overweight.
- Increase physical activity.
- Some medications may help treat low HDL.

How to Lower Triglycerides

- Lose weight.
- Eat less sugar.
- If you drink alcohol, limit the amount.
- Use a medicine prescribed by your doctor.

