



Strong Heart Study Newsletter

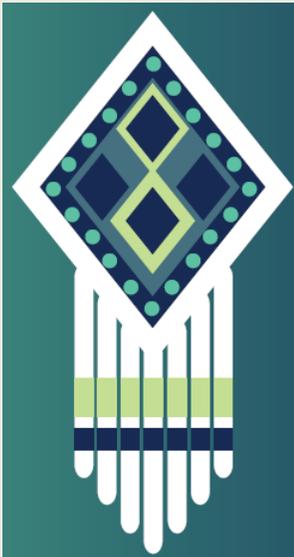
Investigating Cardiovascular Disease in American Indians
Updates for Community Members and Strong Heart Study Participants
Volume 33, Issue 2 Winter 2023

FINDINGS AND RESULTS FROM THE STRONG HEART STUDY (SHS)

Improving Cardiovascular Health among Indigenous Communities

The American College of Cardiology Program Featuring Strong Heart Study Investigators
Jason Deen MD, FAAP, FAAC; and Amanda M. Fretts, PhD, MPH

Cardiovascular disease (CVD), such as heart attack and stroke, is the leading cause of death for Native Peoples, and the second leading cause in Native women. Major CVD risk factors in Native Peoples are overweight and type 2 diabetes. About 25% of Native youth are at higher risk of type 2 diabetes and heart diseases.



What are the ways to prevent heart diseases and stroke in Indigenous Peoples? On November 8th, 2023, Strong Heart Study (SHS) investigators Dr. Deen and Dr. Fretts shared the following strategies with audiences in a program hosted by the American College of Cardiology, a nonprofit medical association focus on education, formulation of health policy, and supporting heart disease research.

- ◆ **Acknowledge that Indigenous Peoples have profound CVD health inequities stemming from systemic racism.**
- ◆ **Understand local landscape (barriers, facilitators to health)**
- ◆ **Partner with community leaders & health care organizations.**
- ◆ **Preventing CVD should be strength-based and start early.** Strength-based methods make use of an individual's strengths, abilities, and resources to promote

positive change and well-being.

- ◆ **CVD assessment should be tailored using the SHS coronary heart disease risk calculators.**
- ◆ **Medical treatment should be strength-based acknowledging the history of colonialization and its lingering effects.**

Adopting a lifestyle to take care of **Life's Essential 8** is likely to reduce CVD risk in Indigenous peoples. Can you identify the eight elements mention in the figure of Life's Essential 8?

Eat Better, Be More Active, Quit Tobacco, Get Healthy Sleep, Manage Weight, Control Cholesterol, Manage Blood Sugar, Manage Blood Pressure



Greetings from Sarah

Hello, My name is Sarah Bank and I am the Contracting Officer (CO) for the Strong Heart Study. I have worked in the Office of Acquisitions at the National Heart, Lung, and Blood Institute (NHLBI) since 2012 and I have worked on the Strong Heart Study for 3 years. Most of my experience is with Research and Development (R&D) contracts but I have slowly expanded my portfolio. I appreciate all the

knowledge I have gained while being a part of the Strong Heart Study and working with this wonderful group.

I have a 4 year old daughter and a 4 month old son who keep me very busy. Prior to having children I traveled regularly and I hope to continue that with my



Physical Activity & Coronary Heart Disease — A STAR Project



In the spirit of enhancing community research capacities, the Strong Heart Study introduced the STAR program in 2022. This initiative aimed to offer mentorship and financial support to community members and stakeholders for the purpose of conducting their public health research projects. This article presents findings from a recently completed STAR project that investigated the relationship between physical activity and coronary heart disease (CHD).

CHD, characterized by narrowed heart arteries leading to symptoms such as chest pain, shortness of breath, weakness, light-headedness, nausea, cold sweat, pain, or discomfort in the arms or shoulder, may result in heart attack. This condition often originates from cholesterol build-up. Risk factors include high blood pressure, unhealthy cholesterol levels, diabetes, obesity, poor diet, physical inactivity, excessive alcohol consumption, tobacco use, and genetic factors.

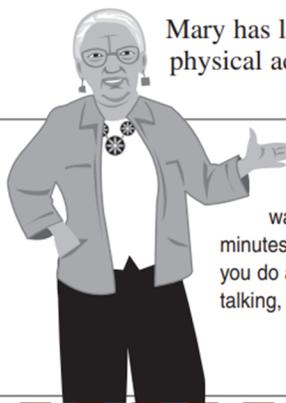


In this project, researchers led by Steven Pan utilized the average daily step count, measured by pedometers between 2000 and 2005, as a proxy for physical activity. Medical records were examined to identify CHD development between 2000-2005 and the end of 2020. Participants were categorized into four groups based on daily step count ranges (Group 1: 159 – 3,009, Group 2: 3,010 – 4,924, Group 3: 4,925 – 7,282, and **Group 4: 7,283 – 38,756**).

The study findings indicate that individuals taking a higher number of daily steps had lower odds of developing CHD, with Group 4 participants showing significantly reduced odds compared to those in Group one.

This study emphasizes the preventive benefits of physical activity in lowering the risk of CHD. Adopting lifestyle changes to increase physical activity, such as setting achievable daily step count goals, incorporating regular walks, and promoting a culture of physical activity among peers and community members, can significantly contribute to reducing the likelihood of developing CHD.

Make staying active a lifelong habit



Mary has learned that the more physical activity you do, the easier it gets.

“I do not wait until the end of the day. I am active throughout the day. I take the stairs and walk everywhere I can. Now I am up to walking 30 minutes a day with my neighbor. It helps to like what you do and to do it with someone else. We are so busy talking, we walk even longer.”

FOSTERING A COMMUNITY FOCUSED ENVIRONMENT IN ARIZONA

When entering the Arizona field office, you are greeted by a lobby decorated with traditional O’Oodham baskets and photos of the Phoenix staff hanging from the walls. After a long morning of fasting, participants are greeted with oatmeal, toast, and a steaming cup of coffee in a mug that you might find in your grandmother’s cabinets. **“We want to make our participants feel like they are home,”** Cynthia (Wyandotte) describes the atmosphere of the office. For the Phoenix office, participants enter as visitors and leave feeling like part of a larger community, or rather a family... *The Strong Heart Study (SHS) Family.*

Through time the Phoenix staff has welcomed hundreds of participants into their office, and in return staff has been welcomed into participants’ homes. **“To be valued as kin and be accepted unconditionally is very special,”** states Ditas (Filipino) who has worked with the SHS community for over 15 years. She reflects on past visitations to participants’ homes and states that she had the privilege to see the full spectrum of life: **“[from] births, birthdays... wakes and funerals; in sadness and happiness, health, and pain we rejoiced with our participants.”**



Strong Heart Study Community Breakfast 2023



Arizona team with Salt River community members at the 2023 Walk for O’oodham/Piipash

Often research undermines the importance of fostering quality relationships with participants. Therefore, **fostering a community atmosphere with participants has become a priority at the Phoenix office.** The office begins by fostering a familial atmosphere within the office staff itself. The Phoenix staff celebrates life events together (birthdays, holidays, successes, etc.); they take part in wellness outings within the community; and collaborate with local schools. Building a community within the office enables the team to foster a community with indigenous communities throughout the surrounding metropolitan and rural areas.

This past year, the Phoenix team connected with their community through events such as Walk for O’Oodham/Piipash and organizing a community breakfast held at the River People Center on the Salt River Pima Indian Community Reservation. These opportunities opened doors for reconnecting with past participants and solidifying a stronger sense of community.

Follow the SHS–Arizona Facebook at Strong Heart Study – Arizona and on Instagram at [strongheartstudyaz](https://www.instagram.com/strongheartstudyaz)

Three Sister Soup (Make 4 servings)

Ingredients

- * 3 tablespoons butter
- * 4 cups chicken or vegetable stock
- * 1 cup onion, diced
- * 1 clove garlic, minced
- * 1 butternut or acorn squash, pre-baked and pureed
- * 1 teaspoon curry powder
- * ½ teaspoon salt
- * ½ cup yellow corn kernels
- * ¼ teaspoon ground coriander
- * ½ cup hominy, cooked
- * 1 cup white beans, cooked
- * 1/8 teaspoon crushed red pepper

Directions

- * Melt butter in a large saucepan over medium-high heat.
- * Add onion and garlic, cook for 3 to 5 minutes or until ten-

der.

- * Stir in spices, cook for 1 minute.
- * Add stock, corn, hominy, and beans, and bring to a boil.
- * Reduce heat to low and cook, stirring occasionally, for 15-20 minutes to develop flavors.
- * Stir in pureed squash, cook for 5 minutes or until heated through.
- * Serve warm with chives and plain yogurt as a garnish.

<https://www.firstnations.org/recipes/three-sisters-soup/>

