



Strong Heart Study Newsletter

Investigating Cardiovascular Disease in American Indians

Updates for Community Members and Strong Heart Study Participants

Volume 34, Issue 2 Fall 2024

STUDY RESULTS: Achievement of American Heart Association Goals Lowers Risk of Heart Disease

Heart disease is a leading cause of illness and death in the USA. In 2022, the American Heart Association came up with 8 goals to improve heart health for all Americans. The goals are called "Life's Essential 8", which consist of **eight health behaviors and factors that predict heart health**:

- ◆ Eat a healthy diet.
- ◆ Be physically active.
- ◆ Quit commercial tobacco and avoid second-hand smoke.
- ◆ Maintain a healthy weight.
- ◆ Control cholesterol.
- ◆ Manage blood sugar.
- ◆ Manage blood pressure.
- ◆ Get adequate sleep.



In a recent report, researchers studied how achievement of these goals impact long-term heart disease risk in the **Strong Heart Family Study**. In 2001-2003, participants completed an in-person exam that included collection of information on all of the Life's Essential 8 goals, except sleep.

Using this information, researchers categorized participants into 3 categories: "ideal heart health" - achieved the most goals, "moderate heart health" - achieved some of the goals, and "poor heart health" - achieved few of the goals. Participants' risk of developing heart disease and stroke in the next 20 years (through 2021) was evaluated.

There were 22% with "ideal heart health", 50% with "moderate heart health", and 28% with "poor heart health". Participants who achieved "ideal heart health" had a 75% lower risk of developing heart disease compared to those with "poor heart health". Similarly, participants who achieved "moderate heart health" had a 50% lower heart disease risk compared to those having "poor heart health".

The take home message is simple: eat healthy foods, move more, don't smoke, maintain a healthy weight and normal levels of cholesterol, blood sugar, and blood pressure to keep your heart healthy.



Ms. Pyone Yadanar Paing (left) was advised by Dr. Amanda Fretts (right) in completing this research project.

ASK DR. BEST

"I have a habit of watching TV or shows on my phone after work to relax. Sometimes, I watch shows in bed, which makes it hard to fall asleep. As a result, I end up watching more YouTube videos, which not only makes it harder to fall asleep but also harder to stay asleep. What should I do to have a good night of sleep?" From two Oklahoma Strong Heart Study members.

Dr. Best Prescribe:

As any parent will tell you, when lacking a good night's sleep, even your favorite child may be one you don't want to claim. The medical field has just begun to investigate this, including the Strong Heart Sleep Study (SHSS) in phase 2, but the evidence is building up that better sleep health will improve mental health and reduce heart disease. It's not easy to study sleep, but the Strong Heart Study found that increased exercise improved sleep quality, and also that better sleep habits in one's 60's lead to better memory function 10 years later.

The American Heart Association has added getting 7 to 9 hours of sleep each night to its Life's Essential 8. Some ways to make this happen are to increase your exercise during the day, limit your "screen time", especially in late evening, and try to establish a routine "bed time". If you snore a lot, or your bed partner says you hold your breath for long periods, ask if you should be checked for sleep apnea. Good night!



Building a Supportive and Professional Working Environment

Report from the Strong Heart Study Oklahoma Field Center

In late July and early August 2024, **Dean Bratzler** and **Associate Dean Ms. Skrepnek** from the Hudson College of Public Health at the University of Oklahoma Health Sciences (OUHS) visited Lawton and Anadarko field offices of the Strong Heart Study Oklahoma Field Center. They discussed the importance of Strong Heart Study with field staff and emphasized the value of building a supportive and professional working environment.

Field staff raised questions about better connecting with the main OUHS campus in Oklahoma City (OKC); following the chain of command in research settings, showing OU pride in Lawton and Anadarko with signs outside office spaces, and career development opportunities.

Dean Bratzler and **Ms. Skrepnek** shared their perspectives and encouraged field staff to engage with colleagues on OKC's main campus by participating in college-wide events. Later, they sent a care bag to each field staff member and purchased OU signs to be displayed outside field offices.

The COVID-19 pandemic disrupted field work in the past several years. We appreciate the Hudson College of Public Health's leadership in focusing on improving work environments and workforce development **as we ramp up SHS7 recruitment efforts.**



New Team Members of the Strong Heart Study Coordinating Center

Ms. Alison Hamblin joined the SHSCC recently and becomes the **SHSCC project coordinator**. Alison came to us from Owasso, OK. She graduated from OU after studying Public Relation's. She brings her artistic talents and attention to details to many SHS projects. In her free time, Alison likes to forage for mushrooms, volunteer at the Sam Noble Museum and works as a scare actor, during the Fall.

Ms. Weiyi (Wendy) Li joined the SHSCC recently and becomes one of the **SHSCC biostatisticians**. She earned her MPH in biostatistics from the Department of Biostatistics and Epidemiology in the Hudson College of Public Health last May. In her free time, Wendy likes hanging out with her dog, exploring delicious food, and spending time with her family.



Alison Hamblin



Weiyi (Wendy) Li



We welcome Alison and Wendy to join us and wish that they grow their careers in the Strong Heart Study!

Training the Next Generation of Researchers in the Strong Heart Study

Ms. Marina Chen and Ms. Heather Willmott earned master's degrees of biostatistics from the Department of Biostatistics and Epidemiology in May 2024. They worked as graduate research assistants in the Strong Heart Study Coordinating Center while pursuing their degrees. Marina's thesis topic was about depressive symptoms during the COVID-19 pandemic using data collected in the Collaborative Cohort of Cohorts for COVID-19 Research (C4R) and the Strong Heart Study.

Heather became a member of the C4R Data Committee to represent SHS and served as a liaison between the research team and three SHS centers regarding data issues and COVID event review.

Both Marina and Heather contributed significantly to the digital conversion of SHS M&M forms accumulated over 35 years. They were awarded **Outstanding Graduate Research Assistant** by the Center for American Indian Health Research at the Hudson College of Public Health upon their graduation.

Heather continues her research in the Strong Heart Study and became one of the biostatisticians at the Strong Heart Study Coordinating Center. We wish them the best in their scientific adventure.



Zucchini Bread

Ingredients

1 ½ cups grated zucchini
or yellow squash (1-2 medium)
½ cup olive oil
½ cup honey
2 eggs
½ cup water
1 teaspoon baking soda

1 teaspoon ground cinnamon
2 teaspoons vanilla extract
¼ teaspoon nutmeg
½ teaspoon salt
1 ½ cups white or whole wheat flour
¼ cup toasted hazelnuts or walnuts
(optional)

Directions

1. Preheat oven to 325° F and grease a 9x5 loaf pan.
2. In a large mixing bowl, whisk together the olive oil and honey. Add the eggs and beat well.
3. Add the water, baking soda, cinnamon, vanilla extract, nutmeg, and salt to the large mixing bowl and whisk until combined. Before adding the shredded zucchini, squeeze out the excess moisture. Use a mixing spoon to fold in the zucchini.
4. Add the flour and stir until just combined (do not over mix or the bread will have a tough texture).
5. Pour the batter into the prepared loaf pan. If desired, sprinkle toasted hazelnuts or walnuts on top.
6. Bake for 50-60 minutes or until a toothpick inserted into the center comes out clean. Let the bread cool before slicing. Store at room temperature in an airtight container for up to 3 days, or in the refrigerator for up to 7 days.

To Freeze: Wrap the completely cooled loaf (sliced or unsliced) in plastic wrap and then place into a sealed freezer bag. Zucchini bread will keep in the freezer for up to 6 months.

Chef's notes: Zucchini bread is fantastic and what is great about this recipe is that it can be simply modified to create many other ranges of delicious bread. Substitute the zucchini with yellow squash or better yet combine the two on equal parts to the recipe quantity. Try carrot or pumpkin or again, better yet combine the two. Take notes, have fun, and find your favorite bread. These are all great cut into a sliced, quickly warmed and added to breakfast.

Honey: ḡṇḡṇ

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Get a Good Night's Sleep — from the American Heart Association

(Excerpt prepared by Lyle Best, MD, for the Strong Heart Study Participants)

Getting a good night's sleep every night is vital to cardiovascular health. Adults should aim for an average of 7-9 hours, and babies and kids need more depending on their age. Too little or too much sleep is associated with heart disease, studies show:

Poor sleep may put you at higher risk for:

- ♦ Cardiovascular disease.
- ♦ Cognitive decline and dementia.
- ♦ Depression.
- ♦ High blood pressure, blood sugar and cholesterol.
- ♦ Obesity.

Learn the Benefits of Sleep:

- ♦ Heals and repairs cells, tissues and blood vessels.
- ♦ Strengthens immune system.
- ♦ Improves mood and energy.
- ♦ Better brain function including alertness decision-making, focus, learning, memory, reasoning and problem-solving.

Have a question for Dr. Best? Go to our website at strongheartstudy.org/Contact-Us, or use the QR code, to send us your questions!

