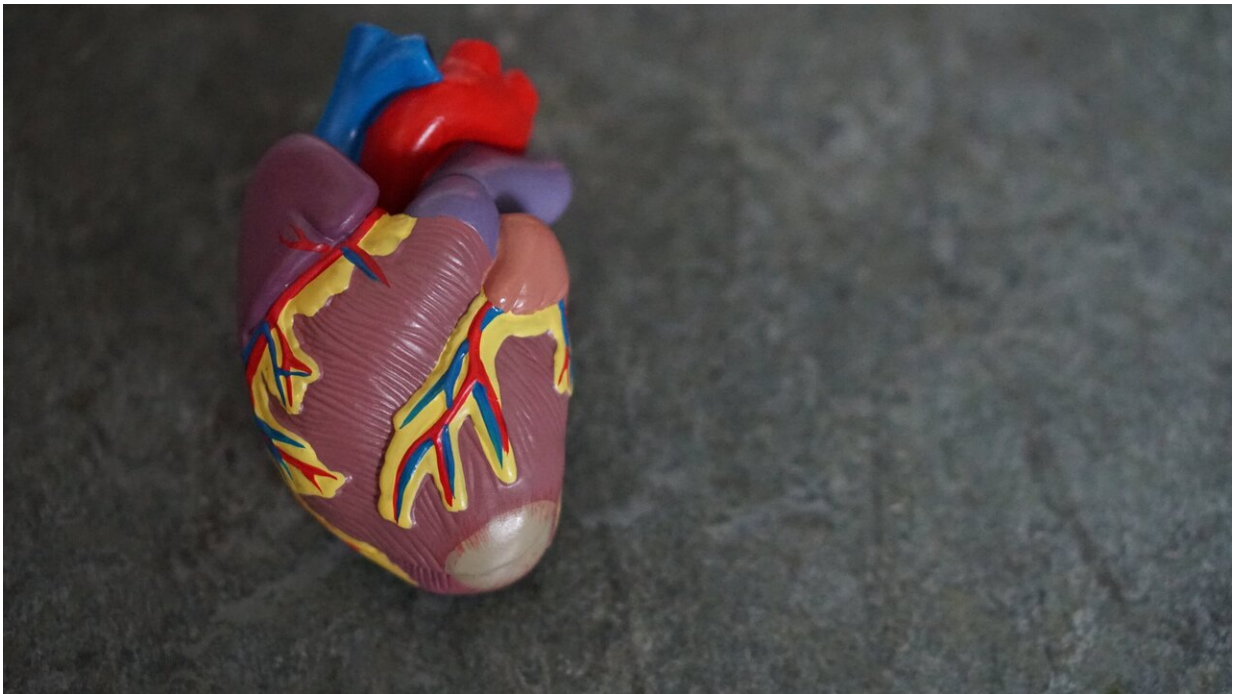


Healthy eating linked to better heart structure and function among Latino adults

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Latino adults who followed a healthy dietary plan had healthier hearts in terms of structure and function, according to preliminary research to be presented at the American Heart Association's Scientific Sessions 2021. The meeting will be fully virtual, Saturday, November 13 through Monday, November 15, 2021, and is a premier global exchange of the latest scientific advancements, research and evidence-based clinical

practice updates in cardiovascular science for health care professionals worldwide.

"Healthy diet quality is an important and vital tool in the prevention of [heart](#) disease," said lead study author David Flomenbaum, B.S., B.A., a medical student at the Albert Einstein College of Medicine in New York City. "Many of our results correspond to current knowledge about diet quality and cardiovascular health."

Evaluating more than 1,800 participants enrolled in the Echocardiographic Study of Latinos (Echo-SOL) ancillary study, researchers compared adherence to two popular healthy eating plans with the heart's efficiency at pumping blood and its size and shape, as measured by ultrasound images of the heart (echocardiograms). Echo-SOL is the largest dataset of echocardiographic parameters focused solely on U.S. Latino adults, with strong subgroup representation from people who have Cuban, Puerto Rican, Mexican and South/Central American heritage. More than half of the study participants in this analysis were female, and their average age was 56.

Participants were recruited to join the study from 2008 to 2011. At their initial visit, participants responded to detailed questions about their food consumption over the prior 24-hour period and again via a phone call 5-45 days later. Researchers focused on gauging adherence to two healthy dietary patterns: the DASH diet (Dietary Approaches to Stop Hypertension), which is designed to help people manage their blood pressure, and the AHEI (Alternative Healthy Eating Index), which measures adherence to the U.S. Department of Agriculture's Dietary Guidelines for Americans. The DASH diet is low in [total fat](#), saturated fat and cholesterol, while rich in fruits, vegetables, and fat free or low-fat dairy products. This eating plan emphasizes whole grain products, fish, poultry and nuts but limits sodium, fatty red meat, sweets, added sugars and sugary beverages. Better AHEI scores correspond to higher

intake of vegetables, whole fruits, whole grains and nuts as well as lower intake of sugar-sweetened beverages, red/processed meat, trans fats, long-chain fats, polyunsaturated fats, sodium and alcohol.

Both eating plans aim to lower risk of heart and blood vessel disease by focusing on nutritious foods. Scoring systems were used to measure how well participants adhered to one of the dietary plans.

From 2011 to 2014, all participants received a noninvasive ultrasound test of the heart, or echocardiogram, to measure the heart's function (including the fraction of blood pumped with each contraction of the heart) and structure (particularly the thickness of the walls of the heart).

Researchers noted:

- For the participants who adhered more to either of the two dietary plans, an increase in the adherence score corresponded with improved heart function and structure. Specifically, greater adherence to either dietary plan was associated with a greater fraction of blood pumped out with each beat of the heart as measured on the echocardiogram.
- In addition, higher adherence to DASH corresponded with decreased thickness in the walls of the heart as measured on the echocardiogram, indicating better heart health. (High [blood pressure](#) can cause of the walls of the heart to become enlarged.)

"The results underscore the importance of a healthy diet as a means of preventing heart disease, one of the leading causes of death among Hispanic and Latino people," Flomenbaum said. "The association between adherence to one of the healthy eating patterns and better heart pumping function reassures us that these diet scores are associated with healthier hearts."

The study had some limitations that could have affected the results. As an observational study, it found a relationship between a healthy eating pattern and heart health but could not prove cause and effect. In addition, the study relied on participant's memory of what they ate, and it did not control for other factors that could have also affected the heart's function and structure.

A [new scientific statement from the American Heart Association](#) (live on Nov. 2) emphasizes an overall dietary pattern to support cardiovascular health and general well-being that accommodates personal preferences, ethnic and religious practices, and life stages.

"We can all benefit from a heart-healthy dietary pattern regardless of stage of life, and it is possible to design one that is consistent with personal preferences, lifestyles and cultural customs," said Chair of the scientific statement writing group Alice H. Lichtenstein, D.Sc., FAHA, the Stanley N. Gershoff Professor of Nutrition Science and Policy, and director and senior scientist at the Cardiovascular Nutrition Laboratory at Tufts University in Boston.

The new statement outlines key features of a dietary pattern to promote heart health including balancing food and calorie intake with physical activity to maintain a healthy weight; choosing a wide variety of fruits and vegetables; whole grains; healthy proteins such as fish or seafood, low fat or non-fat dairy, lean cuts of meat; and limiting red and processed meats, plant oils and processed foods with added sugars, salt and alcohol.

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More information: professional.heart.org/en/meet.../scientific-sessions

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