

Cardiometabolic risk factors harden arteries early in Mexican-Americans

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Cardiometabolic risk factors, such as high blood pressure and elevated blood sugar, appear to have a bigger effect than obesity on hardening arteries early among Mexican-Americans, according to research in the *Journal of the American Heart Association*.

"Even among non-obese Mexican-Americans, there is already a high prevalence of clustering of cardiometabolic risk factors," said Susan T. Laing, M.D., M.Sc., lead study author and professor of cardiovascular medicine at the University of Texas Health Science Center at Houston.

"We will begin to see the impact of the high [cardiovascular disease risk](#) burden in this population over the next few decades as this relatively young minority group ages. That's why it's important to understand the magnitude and manifestations as well as the factors for [cardiovascular disease](#) development in Mexican-Americans now."

Researchers measured height, weight, body mass index (BMI), [blood](#) pressure, blood sugar and cholesterol in 503 Mexican-Americans living along the Texas-Mexico border. They measured thickness of participants' carotid artery to detect signs of atherosclerosis with ultrasound imaging.

Atherosclerosis is a condition in which the arteries gradually fill with plaque and thicken, reducing blood flow and increasing the risk for heart disease or stroke. The condition can go undetected for years.

In the study, an unhealthy metabolic profile was defined as the presence of two or more of the following risk factors: high cholesterol, [high blood pressure](#), elevated [blood sugar](#), elevated triglycerides, insulin resistance or elevated C-reactive protein.

Researchers found:

- Nearly 78 percent of the study participants were classified as being metabolically unhealthy; more than half (52 percent) were obese (BMI of 30 or higher).
- Those who were metabolically unhealthy and not obese were more likely to be male (49 percent versus 29 percent); were older (53 years versus 46 years); had a larger waist size (circumference about 38 inches versus almost 36 inches); and had less education.
- Those who were metabolically unhealthy were less likely to meet the recommended guidelines for eating four to five servings of fruits and vegetables every day.
- Nearly one-third of all participants had an abnormal carotid ultrasound, indicating signs of early atherosclerosis.

Researchers also found that those who weren't clinically obese but were metabolically unhealthy showed similar signs of early atherosclerosis compared with those who were obese.

The study's results suggest that metabolic risk has a greater effect on development of atherosclerosis among Mexican-Americans, whether you are obese or not. So it is important to evaluate their metabolic profiles to help reduce the risks of future [heart disease](#), heart attack and stroke.

"Our findings are particularly relevant to future public health planning as interventions to maintain metabolic health may be a more important goal than focusing on weight loss alone," Laing said. "That's a message we should be promoting."

Mexican-Americans are part of one of the biggest ethnic groups in America, expected to account for nearly one-third of the U.S. population by 2050.

"Hispanics bear a disproportionate burden of coronary [risk factors](#) such as diabetes and obesity," Laing said. "If we are to achieve the American Heart Association's goal of improving cardiovascular health for all Americans, then we cannot ignore Americans of Mexican descent."

Provided by American Heart Association

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