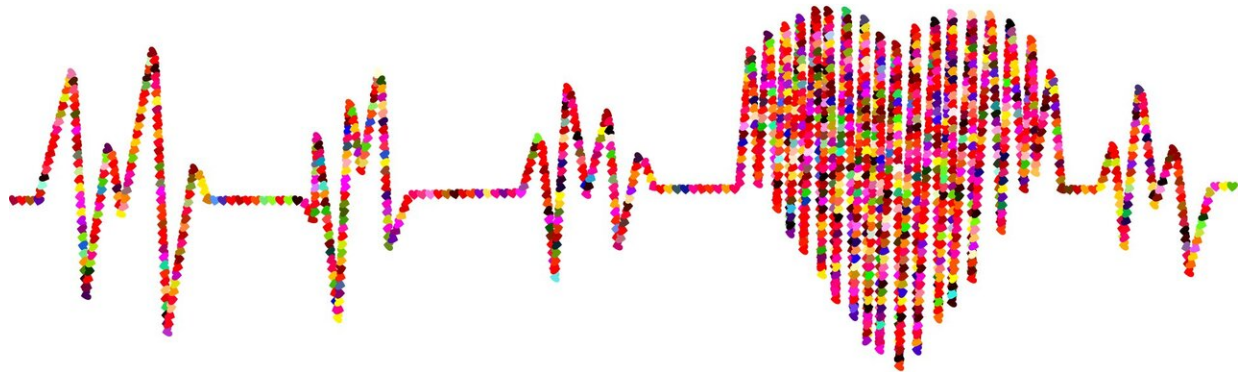


Mediterranean diet found to lower blood pressure in older adults in U.S.

November 17 2020, by Margaret Nagle



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Eating a diet similar to the Mediterranean diet is associated with lower blood pressure among U.S. adults, according to a study by University of Maine and the University of South Australia researchers.

The study, conducted by researchers Fayeza Ahmed, Benjamin Guenther and Merrill Elias at UMaine, and Alexandra Wade and Karen Murphy at the University of South Australia was published in the *Journal of*

Clinical Hypertension in September.

The researchers examined the relationship between adherence to a Mediterranean [diet](#) (Med diet) and [blood](#) pressure in a sample of older (average age 62.2 years) women and men living in the United States and participating in the [Maine-Syracuse Longitudinal Study](#) (MSLS).

Maintaining a healthy blood pressure is a key component for healthy living. Cardiovascular disease is the leading cause of death, and [high blood pressure](#) is a leading risk factor for cardiovascular disease and diabetes. The Med diet has been associated with a range of health benefits, including anti-inflammatory properties.

A number of studies also have associated the Med diet with lowering of [blood pressure levels](#), but many used self-reported blood pressure values that often are unreliable, according to the authors of the journal article. Moreover, many studies have not adequately addressed additional variables that must be considered when studying hypertension.

In addition, many studies examining Med diet and cardiovascular disease risk factors have been done in Mediterranean populations. The diet may be less effective in United States populations where Med diet is not common to the culture.

The study addressed these issues and related consumption of a Med diet to blood pressure to measured blood pressure values with statistical adjustment for multiple risk factors related both to rise and lowering of blood pressure and dietary preferences.

Using MSLS data, the UMaine–University of South Australia research team analyzed cross-sectional data (Wave 6) for 851 participants. Med diet adherence was calculated using food frequency questionnaire data and a literature-based Med diet adherence score. Dependent (outcome)

variables included systolic blood pressure (SBP), diastolic blood pressure (DBP), pulse pressure (PP) and mean arterial pressure (MAP). Controls included age, gender, education, and numerous variables related to blood pressure and diet.

The researchers found statistically significant but modest associations between higher levels of Med diet and lower levels of systolic and diastolic BP among those who consumed higher amounts of Med diet foods, albeit only minor lowering of BP values were observed. While minor on an individual level, the lowering of [blood pressure](#) even by this amount is important in terms of the U.S. population as a whole. Indeed, it's been determined that lowering SBP by even 2mmHg at the population level reduced cardiovascular disease by 10% (Lewington et al., 2002).

MSLS, a study of aging, hypertension, [cardiovascular disease](#) and cognitive function, was launched in 1974 at Syracuse University by Elias. It has obtained longitudinal and cross-sectional data from young adulthood to the elder years for 1,000 individuals, and cross-sectional data for more than 2,400 individuals initially recruited from central New York and followed throughout the U.S. Data collection support has included the National Heart, Lung, and Blood Institute, and the National Institute on Aging; and travel grants from NATO and the University of South Australia. Ahmed is associate director for the MSLS and Guenther serves as the UMaine statistician for the MSLS.

Provided by University of Maine

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