

African Americans less likely to adhere to DASH diet for lowering blood pressure

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The Dietary Approaches to Stop Hypertension (DASH) diet, which promotes consumption of more fruits, vegetables, low-fat dairy products, and whole grain, and less meats and sweets, is a proven effective treatment for hypertension. For some individuals, adherence to the diet can be just as effective in lowering blood pressure as taking antihypertensive medication. A new study has found that greater adherence to the diet can lead to significant reductions in blood pressure, but that African Americans are less likely to adopt the diet compared to whites. The study is published online today in the *Journal of the Academy of Nutrition and Dietetics*.

"After DASH dietary counseling, African Americans increased their consumption of DASH foods, but continued to lag behind whites in overall adherence to the DASH eating plan, consuming considerably more meat, sweets, and fat, and less fruit," reports lead investigator James A. Blumenthal, PhD, Professor of [Behavioral Medicine](#) in the Department of Psychiatry and Behavioral Sciences at Duke University Medical Center in Durham, NC.

The study was a new analysis of the ENCORE study, which evaluated the effectiveness of the DASH diet alone and in combination with [exercise training](#) and weight reduction. 144 sedentary, overweight, and [obese adults](#) with high [blood pressure](#) were randomly assigned to three treatment groups. The first group ate the DASH diet and was engaged in weekly education, support, and feedback in group sessions. The second group also ate the DASH diet and received structured support and

feedback, and in addition began a weight management program with [caloric restriction](#), behavior modification, and aerobic exercise three times a week. The third group was instructed to maintain their normal diet and activity, but did not receive instruction in the DASH diet nor were they encouraged to exercise or lose weight.

Researchers evaluated adherence to the diet, clinic and ambulatory blood pressure, and [cardiorespiratory fitness](#). Participants also underwent a number of psychosocial assessments to evaluate their mental and social wellbeing and to identify potential predictors of dietary adherence including depression, anxiety, level of support from family and friends, and their beliefs about health and exercise. Demographic and background variables, including sex, age, ethnicity, income, education, and baseline body mass index were also examined.

After four months, participants in the DASH plus weight management group lost more weight compared to the DASH diet alone and control groups. There was no difference in dietary compliance between the DASH plus weight maintenance and the Dash alone groups. Participants with higher post-treatment DASH adherence scores had lower blood pressure levels, and the more participants adhered to the daily recommendations in the diet, the more their blood pressure decreased.

While both African-American and white participants in the DASH treatment groups increased their consumption of DASH foods after treatment, African Americans in both treatment groups had lower adherence scores compared to whites. No other demographic, behavioral, or social variable predicted DASH adherence.

"Strong cultural influences on food preferences, food preparation, and perceptions about eating practices might make it more challenging for African Americans to adhere to the DASH diet," Dr. Blumenthal notes. "In light of the considerable role that food plays in African-American

culture, greater cultural sensitivity is likely to be needed to achieve greater adoption of the DASH eating pattern when prescribing dietary modification programs. For example, it might be more effective to modify traditional recipes to meet current nutritional guidelines rather than to recommend that such foods be eliminated altogether."

In a video accompanying the article, co-investigator Pao-Hwa Lin, PhD, a nutritionist from the Department of Medicine at Duke University Medical Center, discusses the implications of the study and possible reasons for lower adherence to the DASH diet in African Americans.

More information: "Determinants and Consequences of Adherence to the Dietary Approaches to Stop Hypertension Diet in African-American and White Adults with High Blood Pressure: Results from the ENCORE Trial," Dawn E. Epstein; Andrew Sherwood, PhD; Patrick J. Smith, PhD; Linda Craighead, PhD; Carla Caccia, RD; Pao-Hwa Lin, PhD; Michael A. Babyak, PhD; Julie J. Johnson, PA-C; Alan Hinderliter, MD; James A. Blumenthal, PhD. *Journal of the Academy of Nutrition and Dietetics*, Volume 112/Issue 11 (November 2012), [DOI: 10.1016/j.jand.2012.07.007](https://doi.org/10.1016/j.jand.2012.07.007)

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