Response to “Article on Sodium Intake Should Include Ethnic Disclaimer”

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To the Editor: In the letter “Article on Sodium Intake Should Include Ethnic Disclaimer,” Professor Hilliard states that “healthy blacks who consume more than 1,500 mg of sodium per day are at risk for hypertension and chronic kidney disease” and that “accumulation of irrefutable medical data on the subject” shows that “American blacks are 4 times more likely than whites to die of kidney failure.” The last statement may be correct, but the link to sodium is not established, and the 2 references provided by Professor Hilliard do not connect sodium intake to increased morbidity or mortality. The first shows that blacks on a high-sodium diet have lower potassium intake (measured as urinary excretion) than whites on a high-sodium diet. This reflects multiple differences in their diets. The other reference shows that increased risk of kidney disease in blacks is due to diabetes and hypertension. In fact, in our meta-analysis¹ none of the 25 included studies reported an increased risk associated with sodium intake in blacks compared with whites, and 4 reported no difference between blacks and whites.²–⁵

Concerning the relation between salt intake and blood pressure, our meta-analysis of randomized blood pressure trials was the first to indicate that blacks may be more sensitive to salt reduction than whites.⁶ In this analysis, 9 studies of hypertensive blacks showed the effect of sodium reduction on blood pressure to be similar in blacks and whites. In contrast, 7 studies of normotensive blacks showed that the effect in blacks was higher than in whites (4/2 mm Hg vs. 1.2/0.3 mm Hg). However, if 1 study with an extreme salt loading of 300 mmol and 1 study of borderline hypertensives were excluded, there was no longer a substantial difference between blacks and whites. Consequently, the assumption of sodium as a high-risk factor in blacks may be overestimated.

In conclusion, although Professor Hilliard’s concerns are reasonable, the evidence relating sodium intake on health outcomes in blacks is sparse and equivocal and insufficient to support reliable conclusions. We thank Professor Hilliard for providing the opportunity to emphasize that more studies in blacks are needed.

DISCLOSURE

The authors declared no conflict of interest.

REFERENCES