Published in final edited form as:

Circulation. 2016 February 23; 133(8): e416. doi:10.1161/CIRCULATIONAHA.115.020671.

Response to Letter to the Editor: A Lack of Plausible Evidence for a Relationship between Southern Dietary Patterns and Heart Disease

James M. Shikany, DrPH,

Division of Preventive Medicine, School of Medicine, University of Alabama at Birmingham, Birmingham, AL

Monika M. Safford, MD,

Division of Preventive Medicine, School of Medicine, University of Alabama at Birmingham, Birmingham, AL

P. K. Newby, ScD, MPH, MS,

Program in Gastronomy, Culinary Arts, and Wine Studies, Boston University and Program in Environmental Studies, Harvard University, Boston, MA

Raegan W. Durant, MD,

Division of Preventive Medicine, School of Medicine, University of Alabama at Birmingham, Birmingham, AL

Todd M. Brown, MD, and

Division of Cardiovascular Disease, School of Medicine, University of Alabama at Birmingham, Birmingham, AL

Suzanne E. Judd, PhD

Department of Biostatistics, School of Public Health, University of Alabama at Birmingham, Birmingham, AL

Dear Editor:

We appreciate the comments from Dr. Archer regarding our recent report in *Circulation* on dietary patterns and hazard of incident acute coronary heart disease in the Reasons for Geographic and Racial Differences in Stroke (REGARDS) study (1). However, we respectfully disagree with his characterization of the data in our report as “uncorroborated anecdotes” which are without scientific validity. Dr. Archer has argued for some time that memory-based dietary assessment methods, including the food frequency questionnaire used in REGARDS and countless other highly-regarded cohort studies, result in implausible dietary data due to an unknown percentage of such things as “false memories” and “lies.” While we believe that this method remains the most suitable one for assessing diet in a large population, we acknowledge the limitations of the food frequency questionnaire and agree

Correspondence to James M. Shikany, DrPH, Division of Preventive Medicine, University of Alabama at Birmingham, 1720 2nd Ave. S., MT 619, Birmingham, AL 35294-4410. Fax: 205-934-7959; Telephone: 205-975-7989; jshikany@uabmc.edu.

Conflict of Interest Disclosures: None

that energy underreporting is likely to occur with this method. However, a recent publication from a group of prominent experts in the field of diet assessment methodology provides strong, thoughtful, and well-supported counter arguments to Dr. Archer's contentions regarding the degree of this underreporting (2). Subar et al. conclude that the preponderance of scientific evidence does not support Dr. Archer's rather extreme claim that all self-report diet data are worthless.

We would like to point out that our report was in compliance with the four recommendations provided by this group regarding the collection, analysis, and interpretation of self-report dietary data. Specifically, 1) we collected self-report dietary data in the REGARDS population because the data contained a wealth of critical information about foods and beverages consumed in this population, information which was used to inform dietary pattern-coronary heart disease associations; 2) we did not use self-reported energy intake as a measure of true energy intake; 3) we did use self-reported energy intake for energy adjustment of other self-reported dietary constituents (in this case, dietary patterns) to improve risk estimates in our regression analyses; and, perhaps most importantly, 4) we acknowledged the limitations of assessing diet with a food frequency questionnaire and interpreted the results of our analyses appropriately and responsibly.

In short, we stand by both our decision to base our analysis on self-report dietary data and the scientific validity of our findings.

Respectfully,

James M. Shikany, DrPH

Monika M. Safford, MD

P. K. Newby, ScD, MPH, MS

Raegan W. Durant, MD

Todd M. Brown, MD

Suzanne E. Judd, PhD

References

1. Shikany JM, Safford MM, Newby PK, Durant RW, Brown TM, Judd SE. Southern dietary pattern is associated with hazard of acute coronary heart disease in the Reasons for Geographic and Racial Differences in Stroke (REGARDS) study. *Circulation*. 2015; 132:804–814. [PubMed: 26260732]
2. Subar AF, Freedman LS, Tooze JA, Kirkpatrick SI, Boushey C, Neuhauser ML, Thompson FE, Potischman N, Guenther PM, Tarasuk V, Reedy J, Krebs-Smith SM. Addressing current criticism regarding the value of self-report dietary data. *J Nutr*. 2015; 145:2639–2645. [PubMed: 26468491]