Reviewer's report

Title: Usual choline and betaine dietary intake and occlusive coronary events: the Atherosclerosis Risk in Communities (ARIC) study

Version: 1 Date: 27 March 2007

Reviewer: Lyn M. Steffen

Reviewer's report:

General
This is a very interesting and well-written manuscript describing a prospective study of dietary choline and betaine intake predicting incident CHD. After an average of 14 years of follow-up, no significant relation was observed between choline intake and incident CHD even after correcting for measurement error in dietary intake.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Major Comments:
1. I may have missed it, but was dietary intake assessed at baseline only?
2. Page 5, lines 17-19. Who assigned the choline values to the FFQ food categories? Were the foods in the choline database comparable to the food groups listed on the FFQ? If there were several foods within a food category listed on the FFQ, how were choline values weighted across foods in the group? For example, did the choline value account for both ‘Spinach and Other greens’ in that food category? Is it possible that choline intake was not accurately assigned to the food groups and therefore, the risk estimate was attenuated due to possible misclassification?
3. Page 8, last paragraph. It is not clear how the investigators examined the effect of folate fortification since dietary intake was not assessed after fortification or was it assumed that food intake did not change over 10 years? Please explain.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare the I have no competing interests.