Author’s response to reviews

Title: Daily egg consumption in hyperlipidemic adults - Effects on endothelial function and cardiovascular risk

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Version: 3 Date: 27 May 2010

Author’s response to reviews: see over
May 27, 2010

Editor, *Nutrition Journal*

Dear Sir or Madam:

My co-authors and I respectfully re-submit the research manuscript: “Effects of Sugar-Sweetened and Sugar-Free Cocoa on Endothelial Function: A Randomized, Controlled Trial” for your consideration.

We have fully addressed the reviewers’ comments (below) and hope you now find our manuscript suitable for publication.

My address, phone and fax numbers, and e-mail address are provided above. My colleagues and I thank you in advance for your time and attention to our work, and look forward to your response.

Sincerely,

David L Katz, MD, MPH, FACPM, FACP
Title: Daily egg consumption in hyperlipidemic adults - Effects on endothelial function and cardiovascular risk

Version: 2 Date: 30 March 2010

Reviewer 1

Original question: “The authors should also provide the baseline brachial artery diameter (in mm) since FMD is usually inversely related to the brachial artery diameter (S. Schroeder, MD, Enderle, A, Baumbach, et al. Influence of vessel size, age and body mass index on the flow-mediated dilatation (%FMD) of the brachial artery. Int J Cardiol. 76 (2000) 219-225).”

Original Response: “We have provided the baseline diameter of the brachial artery (see Table 2).”

Follow-up Question: “Authors provided a baseline brachial artery diameter of 0.40+/−0.08 mm which I think is not a detectable value. Authors should look again at their results.”

Follow-up Response: We have made this correction in Table 2.

Follow-up Question: “Still I see no baseline brachial artery diameter values before/after egg/sausage & cheese. These data should be provided in the text/table.”

Follow-up Response: We have provided the baseline brachial artery diameter (see Table 3).

Original question: “Did the authors find any correlation between total- or LDL-cholesterol and FMD? Did the authors control their findings to concomitant medications and or other variables which could affect FMD (such as lipoproteins, age, sex, hypertension, etc.)? Some studies have found an association between LDL change and FMD (Shechter M, et al. Improvement in endothelium-dependent brachial artery flow-mediated vasodilation with low-density lipoprotein cholesterol levels < 100 mg/dl. Am J Cardiol 2000;86:1256-1259).”

Original Response: “In a regression analysis we controlled for demographic information, lipoproteins and blood pressure. Controlling for these variables had no influence on our outcome. As we mentioned earlier, our participants were not on any medications.”

Follow-up Question: “This is not enough. Some of the subjects in the study had morbid obesity and some had lower BMI (in Table 2 the range of BMI from 20.4 to 38.4). In addition some were hypertensive subjects (SBP> 140 mmHg; DBP>90 mmHg) and age. I see no controlling for these variables. These variables can impact the results, especially when study population is relatively small. Authors should provide the data.”

Follow-up Response: As indicated in the manuscript, we employed a cross-over design. In a cross-over design, a person serves as his or her own ‘control’. This means that between groups differences (intervention vs. control) are nil because both groups are identical. The variability in the regression analyses that we ran controlled for was for within group differences and we found no significant influence on outcome measures. We have provided these data in table 3 and 4.

Original Question: “Did subjects undergo blood withdrawal on the same day as the BART? When exactly in relation to the FMD?”

Original Response: “Yes, our participants underwent blood withdrawal on the same day as the BART.”
Follow-up Question: “The point is what exact time in relation to the BART was the blood withdrawal since any irritation of the blood vessels PRIOR the BART could potentially impact the endothelial function results. Authors should be more specific and add this in the text.”

Follow-up Response: *We have specified this in the paper (see methods)*

**Reviewer 2**

Follow-up: “The columns in Table 3 are not aligned correctly (P=0.31 should directly follow the postprandial change value for the egg treatment group).

Follow-up Response: *This has been addressed and highlighted (see Table 3).*

Follow-up: “I did not see a reference inserted within the text supporting differences in gastric emptying times.”

Follow-up Response: *We have inserted a reference to this sentence as suggested.*