Author’s response to reviews

Title: In vivo imaging of free radicals produced by multivitamin-mineral supplements

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Author’s response to reviews:

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Tyler Barker, Ph.D.
BMC Nutrition
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Re: NUTN-D-15-00001

Dear Editor Barker:

We were pleased to learn that the reviewers viewed our manuscript very positively. We appreciate their comments and have edited the manuscript accordingly. Below is a point-by-point summary of our response to the critique. We have highlighted in yellow the changes we have made in the manuscript.

Reviewer #1: The manuscript by Rabovsky and colleagues examined the in vivo imaging of free radicals produced by multivitamin-mineral supplements. The authors are well recognized in this field and the manuscript is well written. This study is timely and could have important implications on future human studies. Listed below are a few concerns regarding the manuscript in its current form.
Comment 1. Unless I missed it for some reason, please reference Figure 4 in the text of the manuscript.

Response 1. Thank you for noting this omission. We realized that our referencing Figure 4 in the caption of Figure 5 is rather indirect. We added an appropriate reference to Figure 4 in the Results section; see manuscript page 13.

Comment 2. I am unable to see Figure 6.

Response 2. This again is an oversight that occurred when we rearranged figures during preparation of the initial submission. These two references to Figure 6 should have been to Figure 5. We have made this correction in this revision.

Comment 3. I believe a brief discussion regarding the sample size (i.e., 3 experiments) for Figure 2 is required. Specifically, do the authors believe that the sample size is adequate for their interpretation.

Response 3. n=3, this information is now included in the figure caption. Keep in mind these are:”chemical” experiments, not biological. The change in the average value for the rate of oxygen uptake is approximately 6-fold; for the ascorbate free radical is almost 3-fold. The variation of measurements is a considerably less than the change in the respective rates, +- 10 - 20%. Because of this the sample size is adequate.

Comment 4. Please list the sample size and p-values for Table 2.

Response 4. We added this information on sample size and p-values, as appropriate as table footnotes. See the edited Table 2 below.

Comment 5. At the discretion of the authors, please insert the y-axis labels on Figure 2 (although I do recognize that they are listed in the Figure Legend).

Response 5. We have edited Figure 2 so that the plots now have better labels for the ordinate. This should help readers. Thank you for the suggestion.

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Editorial Requests

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Ethics:

If your study involves humans, human data or animals, then your article should contain an ethics statement which includes the name of the committee that approved your study.
If ethics was not required for your study, then this should be clearly stated and a rationale provided.

Response: We have added more information on manuscript page 8 about the animal handling. This now reads:

Animals were handled in accordance with the Animal Welfare Act (AWA) (7 U.S.C. § 2131) and the German Animal Welfare Act (Tierschutzgesetz); all protocols were approved by the regional commission Emmendingen for animal care under registration number DE08316100121 accordingly § 3 of regulation #1069/2009.

Consent:

If your article is a prospective study involving human participants then your article should include a statement detailing consent for participation.

If individual clinical data is presented in your article, then you must clarify whether consent for publication of these data was obtained.

Response: Not applicable.

Availability of supporting data:

BioMed Central strongly encourages all data sets on which the conclusions of the paper rely be either deposited in publicly available repositories (where available and appropriate) or presented in the main papers or additional supporting files, in machine-readable format whenever possible. Authors must include an Availability of Data and Materials section in their article detailing where the data supporting their findings can be found. The Accession Numbers of any nucleic acid sequences, protein sequences or atomic coordinates cited in the manuscript must be provided and include the corresponding database name.

Response: Not applicable.

Authors Contributions:

Your 'Authors Contributions' section must detail the individual contribution for each individual author listed on your manuscript.

Response: We have clearly presented this in the appropriate sections; see manuscript pages 15-16.

We thank you and the reviewers. We hope our revision meets the expectation of the editors and reviewers and will now be acceptable for publication in BMC Nutrition.
Sincerely,

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