Reviewer’s report

Title: Effect of lysine supplementation on Hypertensive Men and Women in selected peri-urban community in Ghana

Version: 0 Date: 05 Jan 2017

Reviewer: Carlotta Giromini

Reviewer's report:

COMMENTS FOR THE AUTHOR

This study was a randomized double-blind controlled longitudinal study made up in subjects with hypertension (SBP >140 mm Hg).

The topic of the manuscript is of great interest. The concept of the study appears to have merits. However, there are problems that need to be solved.

Minor comments:

Line 47: Unit is missed.
Line 49-59: please consider to reduce or use this paragraph.
Line 75-76: Please consider rewriting the sentence; it may be confusing.
Line 81: please could the author clarify the use of Totalling?
Line 92: what do you mean for protein quality?
Was the Lysine supplement a commercial product? could the authors include more information regarding lysine supplements used in the study?
Line 130-131: the sentence is not clear. Please consider to revise the sentence.
Please revise page numbers and references font.

Major comments:

* Method section is too much descriptive, the methods used to collect data need to be better detailed (e.g. line 129: BP was measured by automated oscillometric ambulatory blood pressure monitor?).
* Have the authors considered to use a crossover study design? It can have advantage over a non-crossover study due to statistical efficiency and due to the fact that each subject serves as his/her control.

* Line 13 and 75-84 (methods): please clarify the sample size of the study (men and women).

* Line 95: Why have the authors chosen di-calcium phosphate as control? Maybe this point could be underlined.

* Line 109: Have the authors considered to measure other plasma or serum variables after lysine supplementation (other than lysine which can be correlated with blood pressure changes)?

* Line 128: Could the authors define or reference standard procedures?

* It is a question if this is a double-blinded study. People who have previously tasted protein supplements would be able to distinguish this from the taste of placebo, since there is apparently not added any substance to cover the taste. But since the participants only taste one of the supplements it may be OK to call it double-blinded. Maybe this point could be underlined.

* Was the double-blinded protocol maintained throughout the study and also during statistical analysis?

* Line 140: Have the authors considered DBP>85mm Hg in the study? was it measured?

* Apart for the BP level, which were the inclusion/exclusion criteria of the study (apart elevated BP)?

* Line 169-170: this sentence is not clear to me. Can you better explain the effect of the addition of lysine?

* Line 171-178: Why the authors did not consider DBP? The study will benefit of the results on DBP, if available.

* Line 177-178: can the author make available the results on normotensive participants?

* Line 176: the result is significant only in men. Please consider to revise the sentence.

* How did the authors explain the different results observed in men and women SBP?
Line 234-5: it seems that part of the discussion is missed.

Figure 2 and 3: please consider to merge figure 2 and 3 in a table with all data

The discussion is too descriptive. It should be revised and data on BP should be further discussed.

Table 2, 3 and 4: please consider to merge the tables with all results of baseline condition.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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