Reviewer’s report

Title: Postprandial energy metabolism and substrate oxidation in response to the inclusion of a sugar- or non-nutritive sweetened beverage with meals differing in protein content

Version: 0 Date: 24 Jan 2017

Reviewer: Matthew W Hulver

Reviewer’s report:

Well written manuscript, and very well controlled human studies that add nicely to the scientific literature.

Specific comments:

page 5, line 77: The abbreviation NNSB was defined in the abstract but not again within the body of the manuscript. Perhaps define again here for the reader.

Was habitual physical activity considered and controlled in research design? Please describe accordingly. If participants were physical activity, was this a factor in the analysis of data?

Habitual macronutrient composition has profound effects on fasting substrate oxidation and energy expenditure. Were research participants instructed to adhere to specific dietary patterns during the 1-8 week period between testing periods. If so, please describe. If not, perhaps consider as a limitation in discussion.

Was physical activity controlled during 1-8 period between test periods?

Were analyses performed to assess the relationship between habitual macronutrient composition and metabolic responses to test diets? Perhaps consider.

What standards were used to assure energy balance conditions during the testing periods? Please describe.

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

Yes

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:

Acceptable

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