Reviewer’s report

Title: Acute ingestion of a novel whey-derived peptide improves vascular endothelial responses in healthy individuals: A randomized, placebo controlled trial

Version: 1 Date: 2 June 2009

Reviewer: Edward P Weiss

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The authors hypothesized that a whey derived peptide, NOP-47, improves endothelial function, in humans. Results indicate that vascular function was acutely improved after NOP-47 ingestion in both conduit and resistance blood vessels. However, the compound did not have a longer term effect on vascular function as measured in the fasted state. The study was very well conducted and the report is thorough and well written.

Major Compulsory Revisions

1. It is not clear what potential implications are for using NOP-47 to improve vascular function. Was the goal to study this as a pharmaceutical agent or a possible digestion/degradation product of whey protein ingestion? This needs to be clarified in the introduction and a paragraph addressing the implications of the findings should be added to the discussion.

Minor Essential Revisions

1. Throughout manuscript: P values are often reported as "0.000" but this is impossible. These should be replaced with "<0.0001"

2. Page 4, 1st sentence in 1st full paragraph: A reference is necessary for the study on HPAE-26 cells.

3. Page 7, lines 11-16: the fact that dietary records were kept and were used to replicate diets on 2nd trial is stated twice.

4. Page 17: The fact that the company that provided the supplements was also the funding agency is a major competing interest and should be moved to the "Competing Interests" section.

5. Page 23 / Table 2: The primary structure of the NOP-47 peptide should be given. Or, if the primary structure is proprietary, this should be stated.

6. Is NOP-47 available to the general public as a dietary supplement or other form?

Level of interest: An article whose findings are important to those with closely
related research interests

**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 that I have no competing interests