Reviewer's report

Title: Effects of Protein-Enriched Meal in a Weight Loss Program on Liver, Kidney or Bone: a Randomized Controlled Trial

Version: 1 Date: 18 June 2010

Reviewer: Vijay Ganji

Reviewer's report:

Authors evaluated the effects of high protein (HP) and standard protein (SP) weight loss plans on liver, kidney and bone function.

Abstract
Background: The objective does not include "weight loss". Weight loss is one of the outcomes of this study. I am not sure why this was not part of the objective.
Subjects: Actual number of subjects completed the study is different. It is misleading not mention real sample size.

Background
3rd paragraph Line 18: replace "damage" with "adversely affect".

Methods
Were subjects given any compensation for participation in the study?
There are several deficiencies regarding what the subjects ate while they were on the study.
Need to explain what the average calorie intake during the study? How did they achieve a 500 calorie deficiency? What instructions were given regarding this?
Did subjects receive MR or SP all at once at the beginning of the study?
How did the authors monitor the 30 min/d of aerobic activity? What procedures were taken to ensure compliance?
How many hours of fasting?
What methods did they use in measuring blood lipids, etc.
Standard deviations (sd)should be given in place of SE. For a relatively small sample size sd is more appropriate.

Results
Description regarding attrition of subjects should be mentioned in the methods.
Clearly state the overall sample size and the sample size in each treatment.

Discussion
Needs to comment on why there were no differences in weight loss between 2 diet plans tested in spite of a big difference in protein content between HP and SP. Looks like protein content was not per se important in weight loss but the total energy intake was. I am surprised why the authors did not comment on this.
I would like to see authors write a brief discussion on this.
Page 9, Line: Replace 'since' with "because".
Page 11, Line 8: Modify to "2.2 g/kg LBM". Line 19: Add reference # after "Johnston et al".

Figures
Needs to have a bit more descriptive legend. Figures are stand alone and should tell the story without referring the text. Most importantly, sample size should be given.

Tables lack footnotes. Tables are stand alone and should tell the story without referring the text.

Table 2: LDL cholesterol under HP for Month 12 can not be "32". Perhaps it may be "132".

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.