Reviewer’s report

Title: Differential effects of dietary protein quality on postprandial low-grade inflammation after a single meal in obese non-diabetic subjects: A randomized acute clinical intervention study

Version: 1 Date: 23 August 2011

Reviewer: Giovanni Annuzzi

Reviewer’s report:

Major Compulsory Revisions

1. The definition of low grade inflammation is usually based on more classical markers of inflammation, i.e. Hs-CRP, IL-6, TN#. None of these is given in the paper. If available, at least fasting levels should be added. This would help characterizing the subjects.

2. Page 7, lines 89-92: Subjects are categorized as non-diabetics. However, OGGTT was performed only in subjects with impaired fasting glucose, leaving the possibility that someone with normal fasting glucose could have a diabetic OGGTT.

3. The authors report the association between postprandial changes in MCP-1 and CCL5/RANTES and insulin. This is certainly interesting and suggestive. To this respect, however, insulin postprandial data should be added in the paper.

4. Page 15, lines 259-260: the conclusion “………whey protein might enhance the anti-inflammatory benefits ……” is not completely supported by the results, because of the divergent effects of whey protein on MCP-1 and CCL5/RANTES. As suggested in the text (Page 12, lines 210-211; Page 15, lines 254-255), reducing MCP-1 levels may be beneficial.

Minor Essential Revisions

5. Background: it could be made more clear whether findings refer to animal or human studies.

6. Page 6, line 77: “In accordance” is not appropriate to the two sentences.

7. Page 14, lines 241-244: the paragraph is not fully consistent.

8. Page 15, line 255: atherosclerosis is not an obesity related risk factor.

Discretionary Revisions

9. The implications of these results on foods/alimentary patterns associated with the proteins investigated in this study could be further discussed.

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.