Reviewer's report

Title: Postprandial effects of polyphenolic grape extract (PGE) on appetite and food intake: a randomised dose-comparison trial

Version: 3
Date: 27 July 2015
Reviewer: Julien Cases

Reviewer's report:

Reviewer's report: The article by Shin et al., entitled “Postprandial effects of polyphenolic grape extract (PGE) on appetite and food intake: a randomised dose-comparison trial”, has been improved accordingly by authors since last review in 2015 May 18th.

Only few remarks still remain and the reviewer has a major question regarding presentation of the results in Figure 2 before accepting publication of the article. Questions are below as Q and remarks as R. For the present paper it is recommended to follow R1, 2, 4 and 5 & Q1 or to justify

R1: Reviewer recommend authors to change encapsulated PGE for PGE in capsule or PGE in gastro-resistant capsule.

R2: Statistically speaking SD is more recommended than SEM as the later underestimates the statistical appreciation of the mean. Please harmonize results with SD.

R3: It would have been of interest for further studies to evaluate, based on preliminary nutritional interview, the average daily intake of polyphenol for volunteers before the start of the experiment; even if polyphenols are considered as poor in breakfast and lunch during the intervention period, their level of occurrence is important to know.

R4: In the conclusion it would be interesting to introduce for further investigations that a possible studied correlation of VAS-rated hunger/fullness or/and TOF/satisfaction with postprandial glycaemia would be of interest to ensure that despite there are no significant modification regarding these scales in the present study, in addition, then would therefore be confirmed that there is no effect of the product on CHO digestion as well, if this is actually the speculations of authors.

R5: Reviewer is surprised to see that power calculation is established based on one primary and one secondary outcome at the same time. Indeed, generally during an intervention study as it is developed here, the main objective is to answer only 1 question which corresponds to the primary outcome; secondary outcomes are possibly correlated with primary outcome but they do not have to be considered for power calculation in food supplement intervention studies.

Q1: As the reviewer is probably less an expert than authors regarding VAS-rated
hunger/fullness or/and TOF/satisfaction, he is wondering if it would be relevant in the present study to evaluate the area under curve (AUC) for rating and if so what would be the differences in % between the 3 supplements considering it even if there would be only a trend to discuss with 0.05 < p-value # 0.1 as there are positive results with animal studies. In addition, with biological/physiological effects of polyphenols it is important to remind that must often the time the optimal dose is not the higher one and it is possible that 500 mg might be efficient whereas 1500 mg not as much than placebo. Accordingly, it could be interesting to let figures as they are and to describe AUC in both the results and for the discussion, obviously if AUC is relevant.

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

As Director of Innovation and R&D of a company involved in development of polyphenol extracts for nutraceutical industries, I declare that it can be considered that there is a possible conflict of interest to review a paper on effects of polyphenols in Nutrition. Nevertheless I declare that my company has no links with the team and the company that wrote the paper neither is a known competitor of this team and this company. I declare that my company is not directly involved on appetite and food intake management, the main topic of this paper, and that my review of the paper is a true and faithful representation of the ethic that can be expected from a honourable researcher.