Reviewer's report

Title: No evidence of differential effects of SFA, MUFA or PUFA on post-ingestive satiety and energy intake: a randomised trial of fatty acid saturation

Version: 1 Date: 8 January 2010

Reviewer: Vicky Drapeau

Reviewer's report:

Comments regarding the manuscript

This study investigates the effects of fatty acid saturation on post-ingestive satiety and energy intake. The design of the study is well done (randomized, 3 treatment cross-over trial, simple blind) and the paper is well written. I only have some minor comments to suggest to the authors which I hope will contribute to improve this paper.

-Abstract, line 15: Please specify that VAS were also completed before the test breakfast.
-Abstract, line 21: Are the authors meaning: …« prospective food consumption»…?
-Page 4, lines 2-6: This sentence is very long.
-Page 4 and 5, last sentence: « As did high-PUFA and … ». Please clarify this sentence.
-Page 5, line 4: Change « ad lib » for « ad libitum »
-Page 6, line 8: Is it possible to specify how the authors collected the data regarding dieting? Is it possible that the participants were not dieting but could have been moderately or highly restrained? Event thought this variable has not been evaluated, it would be interesting to know what the authors think of the impact of this behavior on their results. I do not think that this has been taken into account before...
-Page 13, line 17: «There were also small differences in the energy density…» Here, it is not clear here if the authors talk about their study...If yes, is it possible to provide the information regarding ED in table 1? Is it significant? Probably not...
-Page 7, line 11: Why 200 ml of water before VAS ratings?
-Page 7, line 13 and 14: The authors indicate that a venous cannula was inserted for sequential collection of blood samples throughout the morning...Which blood parameters were assessed throughout the study? Why the paper does not provide information about this? Were lipid profile, full blood count and blood glucose assessed the same morning? Please specify in this section.
-Page 7, line 2: Please specify in the results section where the authors present...
the data regarding the LINZ questionnaire.

- Page 9, line 17: I do not understand why the authors used two different statistical softwares for the AVOVA (Excel and SAS). Please specify.

- Page 10, line 4: « Missing data was assumed missing at random and no data imputation was performed » What does this mean and what are the possible bias induced by this decision in this study?

- Page 14, line 5: …have been able to confirm…

- Page 15, last sentence: « At lower doses …». This sentence is not clear.

- Page 16, conclusion: The conclusion is well done. I would not use the term « bolus » which could be confusing with « ingastrointestinal infusion ». I suggest to use « test meal ».

- Conclusion and table 4: The discussion section is clear with a good use of references. Table 4 is particularly interesting. However, the information concerning some studies is not complete (% of fat diet, g of fat, lipid composition in %). Moreover, it would have been interesting to have a column « result » in this table to fully appreciate the methodological differences between trials.

Level of interest: An article of importance in its field

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'