

Reviewer's report

Title: Freeze-dried strawberry powder improves cardiovascular risk factors in obese women with metabolic syndrome: pre- and post intervention effects

Version: 1 **Date:** 10 July 2009

Reviewer: ana cecilia C marin-guerrero

Reviewer's report:

The article outlines the benefits of freeze-dried strawberry powder on cardiovascular risk factors in obese women with metabolic syndrome.

It's very interesting the use of freeze-dried strawberry powder to improve some cardiovascular risk factors.

About Major Compulsory Revisions:

1. In the title: obese women with metabolic syndrome.

The definition of the metabolic syndrome given by the authors, according to National Cholesterol Education Program Adult Panel III treatment, includes obesity, therefore the term (obesity) could be omitted in the title.

2. The aim of the study is properly raised, but the hypothesis the authors want to test, does not agree with the title of the article. It is important to take into account that the cardiovascular risk factors are more numerous than those mentioned in the hypothesis.

3. The results: The main results show the significant reduction in total cholesterol and the reduction of lipid peroxidation indicators. With only these two outcomes it can't be said that there has been an improvement of cardiovascular risk factors.

4. The discussion reads: "The strawberry powder also provided an additional 8g of fiber to the diet which may contribute to overall satiety an possible replacement of unhealthy snacks in the daily diet". This assumption is contradicted by the said earlier by the authors in the results section, that there were no significant changes in the diet of women in the study.

5. The conclusions: Again the authors are using the terms metabolic syndrome and obese, when obesity is included in the metabolic syndrome definition.

We can't consider the freeze-dried strawberry powder as a potential therapeutic strategy to reduce cardiovascular risk factors, when in fact this study has only found improvement in LDL cholesterol and some of the markers of oxidative stress

About Minor Essential Revisions

No

Discretionary Revisions

What kind of compensation has been given to the women who participated in the study?

Due to the wide range of ages, have you thought that there may be differences in LDL and HDL between premenopausal and postmenopausal women? Although I understand that this is difficult considering the small group of individuals.

As the study population has not been selected at random, can you think about some possible limitation during the analysis of the data?

You have found improvement in LDL cholesterol and oxidation factors to four weeks of follow-up. Why have you chosen four weeks follow up?

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