Reviewer's report

Title: Oxidative stress as a risk factor for osteoporosis in elderly Mexican as characterized by antioxidant enzymes

Version: 2 Date: 12 November 2007

Reviewer: Tuan V Nguyen

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Thank you for the response and the revised manuscript. I consider that it is much better than the previous version. However, I must say that it is quite frustrating to go through all the points because the authors do not indicate which parts they have changed/modified and which parts were not. In response to reviewers' comment, they often state "This was corrected" but it is not clear where in the manuscript the part has been corrected! In fact, at least one point that the authors have not addressed, and that is the issue of sample size. Some specific points are as follows:

1. Tables 3 and 4 essentially convey the same information. It should be combined into a single table.

2. Please note that in the logistic regression model, one can not compute the R-square statistic; however, one may compute the so-called pseudo R-square. The authors need to explain more clearly how did they calculate this statistic (preferably with a reference).

3. As I mentioned in the initial review, I found the rationale for categorizing the stress score rather unconvinced. The statement "A stress score ranging from 1 to 6 was used, representing the severity of biomarkers modification; a score 1 was given to each value higher or lower than the cut off" is not clear. I don’t understand it. Which cut-off value?

4. Some numbers in the manuscript are not consistent. For example, in page 11 the authors report an OR associated with age >70 of 4.45 but in Table 5 it is 3.45. Moreover, the OR associated with overweight (BMI>27) in page 11 is 0.39, but in Table 5 it is 0.36.

5. Why overweight was defined as BMI>27? While I understand that this could be an ethnic-specific cut-off value, I think the authors should provide a better rationale or reference to support their chosen cut-off value.
6. In Table 5, a risk factor called “Smoke”. The authors should explicitly state whether this is “Cigarette smoking”, past or present. “Alcohol ingestion” presumably means “Alcohol intake”.

In summary, the authors should carefully go through their manuscript and make sure that the figures are consistent and that all points raised by reviewers are addressed.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.