Reviewer's report

Title: Increases in summer serum 25-hydroxyvitamin D (25OHD) concentrations in elderly subjects in Sao Paulo, Brazil vary with age, gender and ethnicity

Version: 3 Date: 23 April 2010

Reviewer: Denise von Muhlen

Reviewer's report:

The authors addressed the majority of the issues, and the paper is much improved.

I understand the authors resourced to an outside service for proper English language and overall style. However, there are still a few mistakes and improper use of adverbs and prepositions. Please consider my suggestions as follows:

1. Page 2 – Abstract.
   a) Please change “ethnical groups” for “ethnic groups”
   b) I still believe the authors used one way anova, and not one-way repeated measures Anova. The comparison was only between 2 independent groups --- where are the repeated measures?

2. Page 3, 3rd line
   It should read “... observed in age groups ranging from 51-60 to 61-10 years old”

3. Page 5. Typo. Blood samples and not boold sample

4. Page 7. Again, it is one-way anova to test for differences between 2 independent groups.

5. Page 9. The last paragraph is confusing. 95% confidence intervals should be presented as 95%CI, and not IC95%. Please consider the following:

   “We found a significant correlation between 25(OH)D and PTH in winter (r=-0.208, 95% CI -0.39;-0.009, p=0.04). No correlations were found between 25(OH)D and CTX, OC, ionized calcium, total calcium, albumin, phosphorus, alkaline phosphatase or creatinine.”

6. Page 15. I believe the authors meant to say that “The lack of a more accurate... was the main limitation of the study”

7. Page 15. Again, it is “ethnic distribution”, and not ethnical distribution.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
'I declare that I have no competing interests'