Reviewer's report

**Title:** Nutrition assessment of Vitamin A and Vitamin D in northeast Chinese population based on SPE/UPLC/PDA

**Version:** 0  **Date:** 24 Jan 2018

**Reviewer:** José de Jesus Garduño-García

**Reviewer's report:**

The present paper is well written and is interesting. I have some questions that I would consider if the way the aim is described

1.- the present paper has two different aims. First is to describe a new technique to measure vitamin A and D that can be used instead of gold standard techniques. And the second hand we have the aim to describe the epidemiology of Vitamin A and D status.

If we have to answer the first research question that is validate the method I consider that it has a good intra assay validation however the inter assay validation seems not very clear to me. It says that they measure in serum samples creating standards adding Vitamin D and Vitamin A in different concentration. In my opinion if you want to validate a test you must have to compare to a gold standard measurement. In the way is written I agree that you reach an internal validation of the test but not sure if you can reach an external validation of the test.

I think the second research question is answered properly.

I cannot say if the conclusion of the abstract are correct because the study design is not performed to recommend or not a supplementation with vitamin A or D
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

No conflict of interest related to this paper

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal