Reviewer's report

**Title:** Exposure Assessment of Dietary Cadmium: Findings from Shanghainese over 35 years, China

**Version:** 1  **Date:** 5 February 2013

**Reviewer:** Julien Caudeville

**Reviewer's report:**

Minor Essential Revisions

1. “This might indicate the improvement in reducing cadmium contamination”. It is difficult to compare temporal evolution with 2 different spatial scales (a city Vs a country)
2. Could you please clarify how you calculate the mean water cadmium exposure with censored data.
3. Please remove multiple spaces/ add necessary space (a lot) ans strange symbol used as a coma.
4. Try to keep only one temporal aggregation about intake exposure (day, week or month).
5. You are talking about population over 35 years but in the figure 2.A the youngest person is 39.
6. Provide a histogram of the different intake contribution. Don’t give all the contribution in the result part.
7. Provide a table with statistical concentration analysis results of the different food items.
8. Provide a table with statistical distributions parameters used in the probabilistic analysis.
9. Could you please justify why you use a non parametric test (Mann-Whitney U test).
10. Could you please explain how you dealt with censored data.
11. Some results look strange:” The tobacco cadmium exposure was 3.93±8.99 µg/ day.” Could you change the presentation of this result (negative value is not possible).
12. Figures 1: They are not legible.
13. Please indicate letter A to E in figure 1.
14. Figure 1 in the text refers to the real figure 2.
15. Figures 2: please provide the R² values on the figures.
16. Is the body weight not a sensitive parameter in the sensitivity analysis?
17. I think it’s also not necessary to provide so many decimal for each value…
Follow the classical rule of scientific result presentation.

18-More risk will be found with youngest age classes (especially for [2-7]). It is difficult to conclude: “The findings indicate that the population was not at greater risk”.

Major Compulsory Revisions

19-Innovation should be more described. The paper is too short and should be more developed on the discussion of the different methodology result (point estimation and probabilistic estimation)

20-Please, explain the novelty of this study and the improvement of the assessment regarding Gao et al. (2000).

21- What is the representativeness of the study group with regard to the general Shangainese population over 35 years? Why didn’t you use a statistical adjustment with sociodemographic or socioeconomic data?

22-Some additional parameters should be also integrated in the questionnaire for a better characterization of the individual exposure (as proximity to an industrial site, homegrown consumption…).

23-Conclusions: Please make a summary of what has been done, the strength to combine both approaches and the weaknesses to work on those limited data. Open the conclusion with longer term perspectives.

Discretionary Revisions

24-Write one or two sentences on the difference between external and internal dose characterization.

25-Heavy metal: prefer ‘trace metal’ term.

Level of interest: An article whose findings are important to those with closely related research interests

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