Author's response to reviews

Title: Dietary Intake and Phthalates Body Burden in Boys and Girls

Authors:

Qing Shen (qing.shen@ki.se)
Huijing Shi (hjshi@fudan.edu.cn)
Yunhui Zhang (yhzhang@shmu.edu.cn)
Yang Cao (yang.cao@ki.se)

Version: 3  Date: 10 October 2014

Author's response to reviews: see over
Dear Editor and Reviewer,

Thank you very much for your review work. We really appreciate your professional comments of great importance. According to your suggestions, we have supplemented several explanations and descriptions to integrate our article. The detailed point-by-point responses are listed below.

**Comment 1:** Introduction needs to be more complete in describing broad array of effects of childhood phthalate exposures, especially asthma, obesity, insulin resistance and elevated blood pressure (Spanier, Trasande, others).

**Response:** Thanks for reminding. There are truly lots of adverse health outcomes among children by exposure to phthalates. To enrich the description, we then included the suggested effects in the BACKGROUND to complete the introduction for health effects of phthalates and supplied the relevant references. (line 50, page 3)

**Comment 2:** Dietary sources have been analyzed and reviewed recently, and the exposures should be discussed in the introduction, and results compared with the observed in the discussion (see 2013 and 2014 articles in Env Health, Env Research).

**Response:** We have included more references to consolidate the description and comparison about the dietary sources in both introduction part and discussion part, such as Colacino, 2010, Trasande, 2013, Serrano, 2014, etc. More exposure sources have been discussed across entire article, see the Background: “For example, high concentrations of phthalates …….. while the metabolites of DEP was related to vegetable consumption” (line 54-56 page 3) and the Discussion part: “Those tainted soft drinks could ……..” (line 143, page 7), “As Serrano et al. discussed…….” (line 145, page 7), “Results in our study indicated that DBP and DEHP were ……..” (line 157, page 7), “The general conjecture of the way how food is tainted…” (line 162, page 7), etc.

**Comment 3:** English language stylistic correction is needed.

**Response:** A thorough language check and correction have been completed for coherence and precision across the entire article by a native English speaker.

**Comment 4:** Greater explication of FFQ is needed.

**Response:** According to Li (2006) from the national institute for nutrition and food safety, Food Frequency Questionnaire (FFQ) is a validated method to assess the relationship between food consumption and health in Chinese population. We added an explication “The questionnaire included four major food categories (primary plant food, primary animal food, processed plant food and processed animal food) and 25 subgroups of food items, especially the frequently consumed food items that the Chinese children commonly consumed. Other dietary information of whether having the frequently-reported types of food containing estrogen during critical growth periods was also included…” from line 75 in page 4.

**Comment 5:** Sum of DEHP metabolites is molar sum? or concentration total?

**Response:** Sum of MEHP, MEHHP and MEOHP (ΣMEHP) refer to the concentration total in this article. To clarify this, we added one sentence in METHODS part saying that “Concentrations of MEHP,
MEHHP and MEOHP were summed up as total concentration ΣMEHP in μg/L since they shared the same parental phthalate of DEHP.” (METHODS, line 90 page 4)

In this revised version, we have modified those unclear parts carefully with the help of your comments and suggestions. And we hope the revised manuscript could be acceptable for you. If there are any other modifications we could make, please do not hesitate to contact us.

Thank you!

Sincerely,

Yang Cao