Author’s response to reviews

Title: Determinants of serum levels of organochlorine compounds in Swedish pregnant women: a cross-sectional study

Authors:
Anders Glynn (anders.glynn@slv.se)
Marie Aune (marie.aune@slv.se)
Per Ola Darnerud (poda@slv.se)
Sven Cnattingius (sven.cnattingius@mep.ki.se)
Rickard Bjerselius (ribj@slv.se)
Wulf Becker (wulf.becker@slv.se)
Sanna Lignell (sanna.lignell@slv.se)

Version: 2 Date: 17 January 2007

Author’s response to reviews:

Dear Editors,

Here is the revised manuscript 2026881856114056. The following changes have been made after the comments from the reviewers and editors:

Birger Heinzow:
The term breast feeding during infancy is somewhat peculiar: breast-fed during infancy page 17 line 4 may have or use present time.
The term breast feeding during infancy has been removed. Now only the terms breast-fed during infancy or nursed during infancy is used in the ms. Hopefully this makes the text more clear.

Please add to the data in table 2 the 95th percentile values, to provide only the mean is of limited value; most readers will be interested in the distribution, at minimum expressed by the 95th percentile!
This has been done.

One of the most interesting observation are the results for PCB 28 and 52, the upper values are extremely high (i.e ~ 600 ng/g lipid, maximum) and indicate massive exposure, which I doubt. Is it possible that analytical reasons are behind this unexplained result?
A few lines about how we checked the samples with high levels have been added in the Discussion on page 14.

Exposure via air is most unlikely to cause such a high body burden! If correct actually the present air contamination must in a range of : 1 - 10 ug/m^3, assuming a half-life of 200 days for the congener !! Please comment or provide discussion on plausability of these levels.
We have added a short discussion about the possibilities of high levels of these congeners in the Discussion on page 15.

Niklas Johansson:
Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached). The method part contains results (e.g. numbers of analyses below LOQ)
We think it is necessary to explain in the Methods part why we did not perform regression analysis on the compounds with many observations below the LOQ. That is the reason why this information is still present in the Methods part.

...and the introductory 11/2 paragraphs of the "Discussion" should preferably be moved to "Results".
The first part of the Discussion on page 13 has been revised in order to avoid including text belonging to the Results part.

Background. It is a bit confusing to read that the number of PCB congeners and chlorinated pesticides reported is lower than actually presented in the manuscript. It is of course a matter of what information the authors indicate. I would like to suggest a more comprehensive description of the material presented.
We have revised the Abstract, Background (end of page 4) and Methods (page 9) to make it clearer that several of the compounds that we analysed had many observations below LOQ, which made it impossible to study associations with personal characteristics.

Methods. The description of the procedure for interviews and questionnaires is much to vague and should be expanded considerably.
We have expanded the description in this section on page 6 and 7.

I also miss a more general discussion of the limitations of the methods used.
A section discussing the limitations of questionnaire data has been included in the Discussion on page 14.

Results. It is obvious to me that the authors have collected a most valuable set of information. I am not certain that they have been able to extract all important information from the data set. Let me take an example: the Authors report that "A few women had high levels of CB 28, CB 52 and CB 101. We hypothesize that exposure to PCBs from building materials in home or working environments could contribute to this observation" This should be an easy task to explore further and the information could be of significant importance for the identification and quantification of current (PCB)sources other than food. It might be that the authors have decided to make this expansion in a separate article. If so this remark could be neglected.
We have been able to get information about the year of construction of homes that some of the women were living in at the time of blood sampling. This information in given in the Discussion on page 15. The discussion about the possibilities of exposure to PCBs from building materials have also been expanded.

Discretionary Revisions (which the author can choose to ignore)
Background. In general the chapter is very brief. It is stated that "Influences of dietary habits during the teenage years were studied since levels in food were higher in the 1970s-80s than in the mid-late 1990s ...". It could preferably be expanded to explain that the temporal trends show the same direction but that there are profound differences between compounds with regard to the magnitude of the change. It could also be mentioned that the correlation between organochlorine levels in humans and age has been demonstrated in several previous studies.
We have not expanded the Background. Regarding the temporal trends and correlation between age and organochlorine compound levels we think it is enough to refer to some of the studies showing this, both in the Background and Discussion.

Editors:
In addition to the reviewers' comments, there are also some general formatting issues that you need to take care of before your article can be published. The entire paper should be double spaced.
Done.

The word 'organochlorines' in the title should be substituted by 'organochlorine compounds' or some similar term. The text should be revised in the same way.
Done.

We prefer that a title is not phrased as a conclusion, but rather as a hypothesis (e.g., '(Possible) influence of ... on...: a cross-sectional study').
The title has been changed.

The abstract should be no more than the PubMed 350 word limit.
Done.

In the entire paper layout, please start a new paragraph with an indent or a line space, not both, likewise use double line breaks only between sections.
Done.

At the bottom of page 8, (>20%) should be after 'many cases'.
Done.

Numbering of equations is needed only when more than one.
Numbering has been removed.

It seems that compounds were excluded, but results are still provided, please explain.
We have hopefully made the text clearer on this point. See answer to Niklas Johansson.
The Discussion repeats some of the findings and could easily be better focused. Likewise, the conclusions should be abbreviated to a few sentences and not introduce new issues (such as the EFSA opinion). The Discussion and Conclusion have been revised.

In the list of abbreviations, please add DDD and NFA.
Done.

In the reference list, please list all authors, and include complete page numbers. Refs 23 and 25 should be adjusted (bolded title and italicized report name), in refs 35 and 36, remove bold, remove second 'WHO'.
Done.

Please use the Word ‘table object’ for tables, so that columns and rows of data are visibly distinct.
Done.

The table title is above the 15 word limit in Tables 3, 5 and 6. Please make sure that the table legend and footnote will allow the reader to understand the results without referring to the text (e.g., to identify the number of subjects). Please see instructions and previously published papers for illustration.
Done.