Reviewer's report

Title: Exposure of bakers and pastry apprentices to airborne flour dust

Version: 3  Date: 11 June 2007

Reviewer: Denyse Gautrin

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General
This is a large investigation to study exposure to airborne dust conducted among 286 apprentice bakers and pastry makers in Nancy in North Eastern France. The study involved the collaboration of several small craft bakeries and pastries.

This work is an original contribution since dust concentrations in bakeries and pastries where apprentices work have not been published in such details. The results are clearly presented and the number of participants for each step of the study is adequately indicated. The authors provided a good description of the tasks performed by apprentices and of daily frequency of activities involving manipulation of flour. There are limitations in comparisons of results from the present study on exposure measurements with findings published in the literature, these are discussed satisfactorily by the authors.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The title of the manuscript is somewhat misleading giving the impression that specific aeroallergens typically found in bakeries were measured, in fact, as mentioned in the abstract, the dust particulate fractions PM10 and PM2.5 exposures were measured.

2. In the methods section, 1st paragraph, it is not clear if all participants (questionnaire only and exposure measurement study) were asked to sign a consent form when they volunteered to participate in the study.

3. The text is well written and the tables are clearly presented (note that the order of tables needs to be set). Some editing, however, is needed to improve the manuscript.

4. I found a discrepancy between the description of results page 7, second paragraph and data in Table 3 on daily frequency for the task ‘flour weighing for pastry production’. According to the table, more time is spent for this activity by First year students compared to older students; while the text suggests the contrary.

5. To facilitate the reading of the description of Table 5, I suggest that the same sequence should be followed in the text and table for the PM size and for the time of the year. When summer and winter results are compared, it should be made clear if the two types of apprentices were grouped.

6. It should be indicated in the Methods section why both medians and arithmetic means are reported in the Results.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. The tables need to be presented in sequence according to their Number

2. In the first paragraph of the discussion, it is not clear if the authors are referring to their results or to those published in the literature, it should be specified. If results are from this study, they should be part of the results section.

Discretionary Revisions (which the author can choose to ignore)
What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

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