Reviewer's report

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

Version: 3 Date: 1 June 2007

Reviewer: Andrew BRant

Reviewer's report:

General

This paper is quite well written and informs on a gap in the literature which is the exposures experienced by bakery and pastry apprentices. The data on winter and summer is interesting, as well as the detail on activities and personal exposures.

The authors acknowledge problems with recruitment and sampling but this needs to be done in a clearer maner. In addition I think that its conclusions are rather strong 'apprentices incur substantial exposure' as this is not supported by the exposure levels, and the levels are lower than other papers finding(which the authors extensively review), and are below local exposure standards.

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

1. I think the authors need to make it clearer the number of the base population that the apprentices are taken from so that representativelness can be better evaluated. How many apprentices are there in total, and how many bakeries do they represent. The authors only mention the total population in table 1 is 286, but this is of those that completed the questionaire - how many were asked and how did the reponders differ - if at all?

A similar criticism is of the store sampled. The authors acknowledge that not all stores participated, and that they dont fully represent all apprentice stores. I suspect the authors have very good exposure information but I need confidence in this by knowing the representativeness of the stores. Do the authors have some details of the stores not sampled that can be added to the paper.

The authors could expand on why first years samples were not included

2. Please explain why PM2.5 and PM10 are used and what impact this has on the findings

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

In the discussion the authors have given reasons for the low response rate, such as not being concerned about health, fear of repraisals. This may be true but how is this supported in the study. If it is (reasonable) speculation then this should be made clear. In addition the authors I think have assumed that apprentices from working in poor conditions are less likely to enrol i the study - how do the authors know this, maybe it is the other way around that worse bakeries are more likely to enrol - this needs justification

I think the geometric mean instead of the arithmetic mean should be used for the exposure samples

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Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major
compulsory revisions

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests'