Reviewer's report

**Title:** Suckling A Protein-Restricted Rat Dam Leads To Diminished Albuminuria In Her Male Offspring In Adult Life: A Longitudinal Study

**Version:** 1  **Date:** 5 July 2006

**Reviewer:** Elena Zambrano

**Reviewer's report:**

General
This is a very exciting and well written article that describes the effect of maternal low protein diet in the male rat offspring renal function. It explains possible mechanisms around the kidneys long-lasting protection against future age related diseases, The exposure to maternal protein restriction during lactation would thus prolong life due to the preservation of renal function. The results are interesting and make important contributions to sciens.

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

I have found one major concern and think that it is definitely not publishable unless they clearly state short litter number. Please provide the n number of litters rather than pups.

In addition I would like the authors to give better information on which methods they were supported to perform the renal histology. It is necessary to define pathological lesions in kidney. They explained severe lesions in the results section, never defining between minimal to moderate lesions, I would rather them to describe it in the methods of pathological renal histology.

I found table 1 very hard to understand: where is the Control group? I assume there were no kidney lesions in that particular group, but I would like to have the whole comparison among groups in the table.

In addition, in table 1 the percentage of lesions does not apport anything, I prefer to have the % of animals in the whole group that have minimal or severe kidney lesions, and the % of animals with no lesions at all. This table is qualitative observation (subjective) rather than quantitative.

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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)

Figure 1 shows the body weight in different groups, the symbols are indistinguishable between control and recuperated groups. I strongly suggest to make some changes that help to see both groups.

In the discussion they explained "The higher creatinine clearances at ten months of age in the recuperated (who may have reduced glomerular loads [ref 17-19]) parenthesis never end. In addition they can not assume with certainty their findings with the references cited, they could only suggest some similitudes.

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Discretionary Revisions (which the author can choose to ignore)

Sometimes the authors refer control group, then post natal group and at the end the recuperated group (like in figure legend 2), but in the graph the order is different. Same observation in table 1. they ought to have same order at all times.

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

**Level of interest:** An article of importance in its field
Quality of written English: Acceptable

Statistical review: No

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

Elena Zambrano