Reviewer's report

Title: Reduced diversity and increased virulence-gene carriage in intestinal enterobacteria of coeliac children

Version: 1 Date: 15 June 2008

Reviewer: Christel Neut

Reviewer's report:

The presented work consists of research of virulence factors of E. coli isolates from children suffering from coeliac disease. Virulent strains can be implicated in the physiopathological conditions.

Different points need to be clarified (major compulsory revisions):

- The methods used enables the authors to outnumber enterobacteria, why no quantitative results are shown? A higher amount of enterobacteria may exist in CD children which would further increase the role of E. coli in pathological conditions.

- Five colonies are subcultured for each sample. How is the diversity of distribution of the virulence genes in these five subcultures. Are identical clones present frequently. How are they treated further? The table 1 mentionned 17 clones in active CD patients. How can we relate this number to the 50 colonies subcultured from 10 samples. When more than 3 clones can be identified per sample, the number of subcultured colonies should be increased.

- Why the number of clones belonging the the B2 and D group is identical to the A and B1 identical in the three groups (table 1)?

- The results in the figures 1 and 2 should be expressed in number of clones and not percentages. So we can be able to better compare the diversity.

Only after clarification of the methodology, the discussion can be evaluated.

Minor revisions: spelling mistakes need to be removed.

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

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