Reviewer's report

Title: The impact of overweight and obesity on health-related quality of life in childhood - results from an intervention study

Version: 1 Date: 7 October 2008

Reviewer: Ludwig Fahrmeir

Reviewer's report:

Major Compulsory Revision:
Statistical analysis relies on classical two-samples and paired samples tests as well as correlation coefficients to test hypotheses relevant for the substantive research questions of the paper. The basic assumptions of these tests are that the samples are i.i.d., that is (more or less) homogeneous with respect to age and sex (and possibly other confounders). On page 3, at the beginning of the section Statistical Analysis, the authors state that they controlled for age and sex through an analysis of variance, without showing results. I would like to see more details of this analysis of variance.

Discretionary Revision:
The sample sizes are comparable moderate so that the power/significance of statistical results is also moderate in some cases. I think it would therefore be reasonable to provide some additional explorative results, for example comparing box plots instead of only providing t- and p-values in Tables 2 and 3, or showing scatter plots for BMI scores versus quality of life scores. This could help to support (or to generate) hypotheses and, at the same time, show the empirical distribution of the data.

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.