Reviewer’s report

Title: Tracking and prevalence of cardiovascular disease risk factors across socio-economic classes: A longitudinal substudy of The European Youth Heart Study

Version: 1 Date: 12 September 2005

Reviewer: Hanno Ulmer

Reviewer’s report:

General
This is an interesting and well written paper investigating prevalence and tracking of CVD risk factors in school children across socio-economic classes.

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

The classification regarding socio-economic status was based on the job of the mother. How were the children classified in case their mother has been working as a housewife?

To account for dropouts, a weighting approach was used. JWR Twisk used General Estimating Equation technique to overcome this problem. Did the author try this approach as well? If yes, were the results comparable? Please justify the selected estimation method used for the regression analyses and the procedure to handle dropouts.

A weakness of the paper are the unclear definitions of low PF and overweight. Please specify these definitions in the paper. Are there really no accepted cut-offs for PF so that it is necessary to use the first quartile?

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

regarding participants, 384 children returned to EYHS-II this is in fact 50% of children invited, it would be more honest to give this percentage (50%) rather than 65.2%

. and , are used as decimal points, I think . should be used throughout the paper

Table 1 is difficult to read, definitions for at-risk prevalence and means of PF and BMI should be given in the footnotes. In contrast p-values should be included into the table (for instance by using an additional row) rather than in the footnotes.

Stability coefficients should also be labelled as 'tracking coefficients' since this term is more widely used.

Please give definitions for low PF and overweight also in footnotes of table 4 and 5. I think it would help to give absolut frequencies in table 5 as well for instance such as 10/100 10%. This would give necessary information about sub-group samples sizes.
Discretionary Revisions (which the author can choose to ignore)

Tracking in body mass index was considerable higher than tracking in physical fitness. Although this (high tracking/stability in body mass index) is now well known it could be further emphasized in the discussion section.

What next?: Accept after minor essential 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