Reviewer's report

Title: Development and tracking of central patterns of subcutaneous fat of rural South African children aged 5 to 15 years: Ellisras Longitudinal Study

Version: 1 Date: 17 June 2009

Reviewer: Renate Horejsi

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To Authors
Development and tracking of central patterns of subcutaneous fat of rural South African children aged 5 to 15 years: Ellisras Longitudinal Study
Kotsedi D Monyeki, Han.C G Kemper and Phuti P J Makgae

The consequent monitoring and measuring body fat over eight years in nearly 2000 children results in a valuable data base, that should not be put aside. The data should be used and calculated by an expert statistician. The manuscript should be rewritten. The research question finding “tracks” indicating overweight in childhood should be the red line throughout the work. Draw few, but imposing figures, that show the significant differences in skinfold thicknesses between the groups.

The proposed points from the publisher are mostly not fulfilled. We read it as an accumulation of statements, no research question is asked and no answer is given.

This study has analogies with the “Amsterdam Growth and Health Study” and Prof Kemper is one of the authors. We propose, that Prof. Kemper as the corresponding author should rewrite the manuscript according to the international standards. Not meaningful results should be omitted (Figures 2 and Tables?). It might be more interesting to oppose tracks of the overweight children to the lean and present these data in a figure.

Ad 1.) the manuscript describes an extremely extensive and time consuming measuring of subcutaneous fat patterns in children for more than 8 years. The purpose of the study is not yet defined.

Ad 2.) the method for measuring subcutaneous body fat is not the best, but for such a long longitudinal field study other devices might be too expensive or not available. The chapter “Methods” should be professionally condensed. Please don’t write about the employment of the parents.

Ad 3.) the presented data are not clear, the main result is not deducable. There are too many figures and tables without a clear statement. Draw one ore two figures with a clear distinction of the normal and overweight children. Make only two tables where significantly different results are shown.
Ad 4.) to a certain extent the manuscript is an imitation of an article “The Amsterdam Growth and Health Study” – F.J.v.Lenthe, H.C.Kemper et al- but big parts in the presented manuscript are written in an unclear and diffuse way.

Ad 5.) Discussion and conclusions do not support the data and even the introduction does not fit to the other chapters.

Ad 6.) This study has evidently many limitations (the caliper method measures a double skin fold, other simple parameters such as height and weight are not shown etc.) but the limitations are not even mentioned.

Ad 7.) The authors have a broad reference list but some new articles published later than 2003 are missing.

Ad 8.) The reader expects from title and abstract a distinct description of the changes of subcutaneous adipose tissue thicknesses during childhood in lean and overweight children. In the chapters “Results” and “Discussion” the “tracking of subcutaneous fat variables” is not clearly confirmed.

Ad 9.) The writing is not acceptable, too much diffuse sentences without important information.

We propose, that the data should be qualified by a statistician.

The paper should be rewritten by an expert and submitted again.