Reviewer's report

Title: Volume, patterns, and types of sedentary behavior and cardio-metabolic health in children and adolescents: a cross-sectional study

Version: 1  Date: 10 November 2010

Reviewer: Fatma Huffman

Reviewer's report:

This investigation of cardio-metabolic health as a function of physical activity patterns in children from NHANES was novel in its approach. There are several suggested minor revisions in the methodology that aid in its understanding. The objectives and variables are well-described. More detail is needed concerning the logistic regression models. The authors should list the control variables used in the full and reduced models rather than referring to them with the general term ‘confounders’. The supplemental analysis (beyond the objectives) needs to be detailed. It is not sufficient to say “We also examined the association between objectively measured MVPA and CRS. The finding that MVPA was strongly and independently associated with cardio-metabolic risk factors ……” The test and parameters should be specified. Finally, more of a distinction should be made as to which variables were provided from NHANES and which variables were constructed by the investigators.

Implications for public health is another area where minor revisions are necessary. The sentence regarding the interrelationships among volume and patterns of sedentary behavior and CRS is incomprehensible and speculator. Since an association of children’s physical activity patterns and cardio-metabolic health was not found, a public health implication of this behavior cannot be determined.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.