Reviewer’s report

Title: Increasing blood pressure and its associated factors in Canadian children and adolescents from Canadian Health Measures Survey

Version: 2 Date: 31 January 2012

Reviewer: Michael Kostapanos

Reviewer’s report:

Minor essential revision:
1] Page 2, paragraph 3: age/se. Authors mean age/sex?
2] Page 4, line 5: Once ‘blood pressure’ has been abbreviated authors should use the abbreviation thereafter. Please replace ‘Blood pressure’ in the beginning of the sentence with ‘BP’.
3] Page 4, last line: ‘with increasing levels f’. Please correct.
4] Page 12, paragraph 1. ‘Moderate physical activity’. Once the physical activity has been abbreviated, please use the abbreviation thereafter. Please replace ‘physical activity’ with ‘PA’.
5] I am puzzled about the effect of physical activity on SBPZ and DBPZ in adolescent boys. In the Results section it is stated that moderate physical activity is associated with increases in both variables, but in the Abstract with decreases. Please correct.
6] Page 13, paragraph 2: ‘2-3 percent’. Please replace with ‘2-3%’.
7] Table 3. Please use ‘p’ for significance instead of ‘#’.

Discretionary revision:
1] I suggest that authors should clearly state in the Text or Tables the variables included in multivariate regression analysis models, the R2 changes for each variable and the R2 for the model.
2] Page 13, last paragraph. In the Discussion section it is assumed that obesity-induced elevated BP in early life may be associated with sympathetic overactivity. It would be interesting to know about the heart rate in this population.

Michael S. Kostapanos, MD

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.