Reviewer's report

Title: Cycling and bone health: a systematic review.

Version: 7 Date: 13 August 2012

Reviewer: Kirsti Uusi-Rasi

Reviewer's report:

The authors have done good work. However, I still have some minor remarks

Minor essential revisions

As I said in the first round, I would like to see the grade of evidence connected to the quality assessment of the studies, or strength of evidence. There are several instructions for rating the primary studies using a three-grade system (A, B, C), evaluating each type of study design (i.e., randomized controlled trial, cohort, cross-sectional...). Grade A studies have the least bias and their results are considered valid within the limits of interpretation for that study design. Grade B studies are susceptible to some bias, but not sufficient to invalidate the results. Grade C studies have significant bias that may invalidate the results. Although most studies in this review are cross-sectional in design, all cross-sectional evidence is not equally strong. The authors could add the column “Strength of evidence” into the table 1, or at least they should take into account this point in the discussion.

Page 8: Please add the numbers of references after the claims to help the readers to find which four papers were contradictory to the Nichols et al. and Barry et al., who have reported negative effects on vertebral BMD, etc..

Nikander et al. has been added into the table 1, however, the paper is neglected in the text, and missing from the References.

Table 1

The authors have listed the papers by the year of publication. Easier for the reader would be to classify the papers by the type of research (e.g. cross-sectional, longitudinal, intervention) or in alphabetical order.

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

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

Declaration of competing interests:

I declare that I have no competing interest.