Reviewer’s report

Title: Physical Activity is Associated with Reduced Risk of Esophageal Cancer, Particularly Esophageal Adenocarcinoma: A Systematic Review and Meta-Analysis

Version: 2  Date: 10 April 2014

Reviewer: Michael Leitzmann

Reviewer’s report:

Major essential revisions:
One potential concern is that the current analysis principally focusses on EAC and provides virtually no data on ESCC. Could you possibly have missed some studies on physical activity and ESCC risk? Related to this, your literature review was conducted over a year ago and may therefore not be current. For example, a study by Dar et al. on occupational physical activity and ESCC was published in September 2013 and should probably have been included in the meta-analysis.

The abstract states that physical activity may modify the effect of obesity on risk for EAC. However, the manuscript did not address that specific question, so I recommend removing that statement.

The Methods section states that effect estimates were pooled using a fixed effects model if a study reported on more than one physical activity domain. Please ensure that the assumption for that model was not violated (i.e., there was no heterogeneity of effect estimates in the underlying studies).

The results section states that results remained statistically significant on restricting analysis to high-quality studies. However, the upper limit of the 95% confidence interval is 1.0 and therefore lacks formal statistical significance.

Minor essential revisions:
Reference number 34 contains typos in the author list.

The name of the author Huerta et al. is misspelled in the Tables and Figures.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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 interests.