Reviewer's report

Title: Body mass index and incident coronary heart disease in women: a population-based prospective study

Version: 1 Date: 18 September 2012

Reviewer: Robyn Gallagher

Reviewer's report:

Thank you for the opportunity to review this important and well-written manuscript. The study is very timely as the obesity paradox in relation to cardiovascular disease outcomes is hotly debated. This population level study indicates strongly a dose-effect of BMI on coronary heart disease incidence and deaths. The study focusses entirely on women, and provides an important impetus for population level interventions to address obesity and prevent weight gain given the substantial gains which could be made in women’s mortality.

- Major Compulsory Revisions
  Nil

- Minor Essential Revisions
  Only one discrepancy occurs in the paper. While I agree that the effect of BMI occurs across many risk factors including alcohol consumption, it is quite noticeable that non-drinkers have a higher incidence of CHD than non-drinkers, the only risk factor to do so. I think this is worthy of comment. The use of actual numbers in the supplementary figures made this difficult to check against as the reader had to convert the numbers to percentages anyway to make sense (S2). Generally, in the tables the use of raw numbers is not helpful and should be converted or accompanied by percentages (Table 1, Figure S1, Table S2).

- Discretionary Revisions
  Nil

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests