Reviewer's report

Title: Consumption of whole grains and cereal fiber and total and cause-specific mortality: prospective analysis of 367,442 individuals

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Reviewer: Dagfinn Aune

Reviewer's report:

This is a large study of whole grain intake and all-cause and cause-specific mortality including 46067 deaths among 367442 participants from the NIH-AARP Diet and Health Study. The study is well conducted and the results are important from a public health point of view. Some of the findings with regard to specific causes of death (respiratory disease, infections) are novel as well.

I have some comments that should be addressed.

Major compulsory revisions

Whole grain foods were defined as those containing at least 25% whole grains and/or bran. The amount of whole grain intakes provided in Table 2 – do they refer only to the whole grain part of each product or to the whole product (including also the non-whole grain parts)? Please clarify

It would have been interesting to know whether specific types of whole grain foods/products were associated with mortality and cause-specific mortality. Could the authors analyze and report results for the most important contributors to whole grain intake, e.g. whole grain cereals, whole grain breads/rolls, brown rice, cooked cereal similar to that provided in Table 2?

Could the authors also add results for whole grains and coronary heart disease and stroke (and stroke subtypes) mortality in addition to the overall result for cardiovascular disease in table 2?

The inverse association between whole grain intake and respiratory disease and infections are quite novel. In the EPIC study cereal fiber intake was also inversely associated with digestive disease (non-cancer) deaths as well, while Jacobs et al reported results for whole grains and a number of different specific causes of death (Am J Clin Nutr 2007;85:1606 –14, Table 2 and Table 6). Could the authors also add results for digestive disease deaths and perhaps others causes of death as reported by Jacobs et al? It would also be interesting if the authors could add results for whole grains and all other remaining causes of deaths than those reported in Table 2? As the study is quite large it may be one of the few with sufficient power to investigate less common causes of death which could be of interest from a hypothesis-generating viewpoint.

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