Reviewer's report

Title: The Cutoff Values of Visceral Fat Area and Waist Circumference for Identifying Subjects at Risk for Metabolic Syndrome in Elderly Korean: Ansan Geriatric (AGE) Cohort Study

Version: 1 Date: 12 August 2009

Reviewer: Edward Boyko

Reviewer's report:

Minor Essential Revisions
1. Ref 7 is incomplete

Major Compulsory Revisions
2. The rationale for the two waves of subject recruitment is not clear. It seems like the aim was to enroll a random sample. But no explanation is provided about how subjects were initially enumerated and samples, or what the subjects were initially being screened for, and whether there were initial inclusion and exclusion criteria. A reference is provided, but a brief description of these methods must be included in this paper so that the reader does not have to obtain a copy of the previous publication for this information. Also the initial sample size is 2767 but the sample size for this analysis is 651. The reasons for these exclusions should be provided ideally in a flow-diagram Figure included in the paper.

3. The 100 cm squared cut-point in reference 15 for Japanese should not be cited as this standard has been shown to be inaccurate by reference 8 and the following publication on optimal cut-points in Japanese “Oka R, Kobayashi J, Yagi K, Tanii H, Miyamoto S, Asano A, Hagishita T, Mori M, Moriuchi T, Kobayashi M, Katsuda S, Kawashiri MA, Nohara A, Takeda Y, Mabuchi H, Yamagishi M. Reassessment of the cutoff values of waist circumference and visceral fat area for identifying Japanese subjects at risk for the metabolic syndrome. Diabetes Res Clin Pract. 2008 Mar;79(3):474-81. Epub 2007 Nov 26.” Reference 15 should be removed from this paper to avoid disseminating inaccurate information about suitable cut-points for Japanese regarding metabolic syndrome. Also, the IDF recognizes that the cut-point of 100 cm squared is not appropriate and incorporates cut-points more in keeping with ref 8 and the Oka paper as can be seen at the following URL: http://www.idf.org/webdata/docs/MetS_def_update2006.pdf

4. The methodology for the Framingham risk score calculations should be explained in more detail in the Methods and Results. First mention of it comes in the Discussion without any explanation of how this value was derived in this population.

5. Ref 21 should also be removed from the paper as the senior author ET Poehlman was convicted of scientific misconduct and served one year in prison for his misdeeds, see “Kintisch E. Scientific misconduct. Researcher faces prison
for fraud in NIH grant applications and papers. Science. 2005 Mar 25;307(5717):1851.” He has retracted many of his publications for data falsification as can be seen by searching on his name on Pubmed.

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

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 interests.