Reviewer's report

Title: Lean mass, muscle strength, and physical function in a diverse population of men: a population-based cross-sectional study

Version: 4 Date: 13 April 2010

Reviewer: German Vicente-Rodriguez

Reviewer's report:

General comment
Overall the paper faces and important and relevant issue. Introduction and discussion are well written but statistics and results are not clear. One of the main concerns is that there is not date on bone fracture. Another one is that data on balance is also not included. To me these are big concerns because the whole message is focus on bone fracture. Strength and functional capacity is interesting per se and also in relation with other health outcomes. Authors should reconsider the focus of the paper.

Abstract
1. The objective seems quite unspecific.
2. Results seem to me to general.
3. In the conclusion the term “minority men” is not clear to me.

Methods
1. Page 5, line 2, please identified the devices used.
2. Page 5, line 3, please specify the calculation for BMI.
3. Page 5, line 13-15, which hand?
4. Page 6, 1st paragraph is not clear to me. Shouldn’t be 8 instead of 7 in line 3?
5. Page 6, line 11. To me when you divide by arms LM the measure you obtain is not specific but relative strength. This should apply for lower extremities and for the whole manuscript. Additionally, to me these indexes are just strength but not physical function.

Statistical methodology
1. To me it is not quite clear the second paragraph.
2. Also, the analysis proposed in lines 19-21 (page 7) is not clear.

Results
1. In general this part is confused and should be more systematically written. Please, clearly state the significant differences; include p values when needed. Also include p values in tables and figures.
2. I do not understand table 2 and the treatment of this data. How do you calculate differences in beta between racial groups? Also when you adjust by
race/ethnicity in the models?

Discussion

1. Please clarify the term “minority men” through the text.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests