Reviewer’s report

**Title:** Food patterns and dietary quality in West-African immigrants in Madrid: Comparing quality indexes

**Version:** 2  **Date:** 24 September 2008

**Reviewer:** Helen Smiciklas-Wright

**Reviewer’s report:**

General: The authors make a good case for the analysis of dietary patterns and the relevance of patterns to a particular population, the Bubi population in Madrid. The cluster method for data analysis was thoroughly described. The following are specific points for consideration by authors: The first points are major revisions

1. **Background:** A major addition to the background should be some presentation of diets of the Bubi population prior to their emigration to Madrid. This is necessary for later discussions of the sample characteristics by dietary pattern in this study and comparisons with other studies.

2. **Discussion:** The discussion needs to be much more interpretative and focused on the goals of this study. Let me make a few suggestions.

   2a. **Food pattern study methods.** The material in this section could be added, as appropriate into background, methods, and results. It detracts from the discussion.

   2b. **Dietary Quality indexes.** The title of the paper is a comparison of the indexes. There is some discussion of this on page 13 but the presentation is almost more of a repeat of the results than a synthesis of data implications. The conclusion is that more than one dietary index may be appropriate but that does not give much guidance. How would the interpretation of the data differ across the Indexes in this study and what would be the implications for dietary guidance? Let me repeat, the title suggests that this is a critical purpose of this paper.

   2c. **Sociodemographic and health profile:** It was difficult to follow the comparisons with other studies. A clearer discussion of the healthy immigrant effect, its relevance to this study and others could pull this
together. As indicated earlier, more information about the Bubi would be helpful here.

2d. Limitations of the study. On page 14, the authors write "...the protective effects of healthy dietary patterns is usually modest, according to a review (51). While some discussion follows, a stronger discussion will need to argue that point. Otherwise the case for pattern analysis is weak.

2e. Diet quality differences between patterns. On page 9, the authors write that differences between mean nutrient intakes were quite small. The data on tables 4 and 5 suggest otherwise.

The following are minor essential revisions:

3. Page 9: The phrase "the second dietary cluster was termed "western" for lack of a better word." is not appropriate.

4. Table 4. Add "FAO" to first column heading.

5. Table 5. The diets appear to be amazingly adequate. It would valuable to compare these findings with other studies.

6. able 6. Please note maximum scores for AHEI and AMDS.

NEXT STEP: Unable to decide until the authors have responded to major compulsory revisions.

INTEREST: Findings are important to those with closely related research interests.

WRITTEN ENGLISH: Acceptable

STATISTICAL REVIEW: The manuscript does not need to be seen by a statistician.

DECLARATION OF COMPETING INTERESTS: I declare that I have no competing interests.

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.