Reviewer's report

Title: Socioeconomic factors associated to dietary patterns in the five brazilian macro-regions.

Version: 1 Date: 2 February 2011

Reviewer: Rachel Millstein

Reviewer's report:

-Major compulsory revisions:
Abstract: add to the methods that you ran a regression.
Methods, 2nd paragraph: justify the use of Eigenvalues greater than 1.25.
Methods, 5th paragraph: clarify how you are defining income groups. For instance, what exactly does "1 to 2 minimum wages" mean? Is this a multiplicative factor?
Results. Table 1: clarify the minimum wage categories, and also, the dollar value is different from that reported in the text- make consistent.
Table 2 and 3: It would be helpful to include the names of the patterns.
Discussion, paragraph 5: please elaborate or remove. As it is, it doesn't add to your discussion.
Discussion: why are adolescents more associated with traditional patterns? Your explanation does not seem sufficient- what else might be working to make this association so strong?
Discussion, 2nd to last paragraph: these are big limitations of this study. Please elaborate. The last sentence of this paragraph does not make sense or help your argument. How could you test if food eaten away from home is "significantly different"? You need either more data or to suggest more tests for how to assess the validity of your results and their implications for practice or policy.
Overall, the paragraphs are too short- either combine them or write more, to make them more substantial.

-Minor essential revisions:
Overall, use "education," not "schooling."
Be consistent and use "% of variance" explained, not "variability."
Abstract, results- change "loads" to "loadings."
Introduction, 2nd paragraph: add an S to make it "local populations"
Intro, 3rd paragraph: HBS allows whom to estimate?
Intro, 4th paragraph- this is not a paragraph- too short. May put into methods instead.
Intro, 5th paragraph: be consistent with using HBS as the abbreviation. Also end that paragraph with a period.

Methods, 1st paragraph: you have already defined PSU, just use that abbreviation.

Methods: 1st paragraph: define POF. Add an "e" to "local," as it should be: "locale."

Methods/Identification of food patterns: 3rd paragraph: Clarify how you used Cronbach's alpha. Were values of greater than 0.6 considered "good" or "acceptable"?

Results, 1st paragraph: define KMO.

Table 1: add an "s" to PSU.

Table 4: don't need "..." following "continued" in the table titles on each page.

Tables 2-4: you could include the pattern names (also noted this in the previous section).

-Discretionary revisions:

none

Note: the statistics appear to be appropriate.

**Level of interest:** An article of limited interest

**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.