Author's response to reviews

Title: Association of Nativity with Sugar-Sweetened Beverage and Fast-Food Meal Consumption among Mexican-origin Women in Texas Border Colonias

Authors:

Joseph R Sharkey (jrsharkey@srph.tamhsc.edu)
Cassandra M Johnson (cassandj@live.unc.edu)
Wesley R Dean (wdean@srph.tamhsc.edu)

Version: 2 Date: 8 September 2011

Author's response to reviews: see over
Response to Reviewers

We thank the reviewers for taking their time to review our manuscript and providing insightful comments and suggestions for improving our article. We will address the comments by reviewer.

Reviewer: Sohyun Park

Minor Essential Revisions:

1. Background: On the bottom of the second paragraph on page 2: Define abbreviation for sugar-sweetened beverage and fast food here. It reads as “... sugar-sweetened beverages (SSB) and fast food (FF) [17, 20-23]. Prior work also...” Use these abbreviations throughout the paper rather than redefining these in other sections.

   RESPONSE: Changes made as suggested.

2. Methods: Under Participants: Use abbreviation for sugar-sweetened beverages and fast food meals. It reads as “...excluded from analysis for missing data on daily consumption of SSB and/or weekly frequency of FFM.” Use these abbreviations throughout the paper rather than redefining these in other sections.

   RESPONSE: Changes made as suggested.

3. Discussion: Possible reasons for observing 3 key findings are not clearly addressed. Please consider to add this information. For example, why being born in Mexico was independently associated with FFM, but not with SSB. Also, this is a cross-sectional study. Please add a limitation related to the nature of cross-sectional study.

   RESPONSE: We added possible reasons at the end of the first paragraph of the discussion. We also added the cross-sectional nature of the study to the limitations.

4. Conclusions: The first paragraph in the Conclusions section should move to the Discussion section. Conclusions should start with a sentence with key findings that this study provides.

   RESPONSE: Paragraph moved as suggested and a couple of sentences on findings added.
5. Table 1: It is not clear what these percents mean. Please consider presenting row percents.

**RESPONSE:** The percents in Table 1 represent percent of U.S.-born or Mexico-born women with each of the characteristics. Because the number of women born in Mexico is much larger than women born in the U.S., changing to row percents (e.g., percent of women with education <7th who were born in U.S. vs. Mexico) will present a distorted picture of prevalence of characteristics within each nativity group. Therefore, we prefer to keep Table 1 as is. We added “in proportions” to the first line of the Results section in the hopes that it is now clear that we are comparing the percentage of U.S.- or Mexico-born women with specific characteristics.

**Reviewer:** Jen-Jung Pan

**Major comments:**

1. Recommend the authors comment on the observed differences of body mass index (BMI) between US-born and Mexico-Born women in Table 1. According to the study, US-born women consumed significantly more SSB and FFM than Mexico-born counterparts. SSB and FFM consumptions have been shown to correlate with overweight and obesity in many studies. In the current study, there was a trend for a higher obesity rate in US-born than Mexico-born women, which is consistent with the observed higher SSB/FFM intakes. Nevertheless, significantly more Mexico-born women were being overweight than the US-born counterparts (p < .001). In addition, there was a trend for more US-born women being in normal weight who consumed more SSB/FFM than Mexico-born counterparts. The authors may want to comment on this paradox.

**RESPONSE:** The focus of this paper is on consumption of SSB and FFM, and not on correlates of overweight or obesity. We did not report a trend in BMI, and only found a significant difference between U.S.-born and Mexico-born women in being overweight. We did mention in the results that obesity (in bivariate correlations) was negatively correlated with FFM, and not associated with SSB. In adjusted linear regression models, body mass did not show a statistically significant correlation with either SSB or FFM and was eliminated from the final model.

**Minor comments:**

1. As the authors mentioned, self-report of SSB and FFM consumption may underreport actual frequency and amount consumed. Recall bias is often associated with self-report measures. In their questionnaire, it is unclear
about the duration of diet history inquired. The longer the duration is, the more likely for recall bias to occur.

RESPONSE: There was no time frame provided to the respondents. They were asked to reply as to their “usual” consumption of SSB or FFM. We also identified self-report and lack of time frame as a study limitation.

2. Body weight is determined by multiple factors such as diet, physical activities, and even genetics. What is the ethnic background of the US-born subjects? Are both of their parents Mexican-origin? I believe it is an important question to ask.

RESPONSE: The ethnic background of all participants was Mexican-origin, regardless of whether they were born in the U.S. or in Mexico. We asked the participants to provide ethnic self-identification (see Table 1), but we did not ask detailed questions that would determine whether U.S.-born were 2\textsuperscript{nd} or 3\textsuperscript{rd} generation. We did mention lack of determination of length of residence in the U.S. as a limitation. We did include other well-known correlates of body weight, such as socio-economic status, nutrition program participation, etc.

3. In the reference article (#64) and in the current study, door-to-door recruitment of participants was conducted. It is unclear about what time when the recruitment occurred. People working on hourly wages might not be at home when the recruitment occurred. This may introduce selection bias into the study. The authors need to clarify this question.

RESPONSE: Recruitment was conducted during daylight hours (8:30am-6:00pm) on weekdays and weekend days. While we did not collect data on whether people were not at home, post-project conversations with \textit{promotora}-researchers indicated that women were home during the time they made contact. In fact, more than 26% of the recruited sample worked full-time outside the home for wages (Table 1). Thus, we do not feel that this introduced selection bias.