Author's response to reviews

Title: Evaluation of a pilot healthy eating intervention in restaurants and food stores of a rural community: a randomized community trial

Authors:

ANA MARTINEZ-DONATE (martinezdona@wisc.edu)
A. JOSIE RIGGALL (AJgolemb@gmail.com)
AMY M. MEINEN (AMEinen@wisc.edu)
KRISTEN MALECKI (KMalecki@wisc.edu)
ANNE L. ESCARON (AEscaron@mednet.ucla.edu)
BEV HALL (Bev.Hall@co.waupaca.wi.us)
ANNE MENZIES (Anne.Menzies@thedacare.org)
GARY GARSKE (GArsk@co.portage.wi.us)
F. JAVIER NIETO (FJnieto@wisc.edu)
SUSAN NITZKE (NNitzke@nutrisci.wisc.edu)

Version: 2
Date: 14 January 2015

Author's response to reviews: see over
January 14, 2015

Dear Dr. Byrd-Bredbenner

Thank you for the opportunity to revise and resubmit our manuscript “Evaluation Of A Healthy Eating Intervention In Restaurants And Food Stores Of A Rural Community: A Randomized Community Trial.” We appreciate the comments and questions from the reviewers. We have addressed all of them as described in the point-by-point response found below these lines.

We think that as a result of these revisions, we have improved the quality of the manuscript and its contribution to the field. Please, let us know if you have any questions and thank you again for your willingness to review this revised version of our manuscript.

Sincerely,

Ana P. Martínez-Donate, PhD
Associate Professor

POINT BY POINT RESPONSE TO REVIEWERS’ COMMENTS

Reviewer 1

1. How were your tools pilot tested?

Response: This study was a pilot study and, as such, the measurement instruments and procedures were applied without previous psychometric testing, with the exception of the Nutrition Environment Measurement Survey (NEMS). The NEMS instruments had been tried by our team in a related study that assessed the nutrition environment in restaurants and food stores throughout Wisconsin. Other measures were only informally tested within our team. The data from this pilot study will inform refinement of measures and procedures in a future larger study. A note explaining the lack of prior testing of the measures has been added to the limitations section (Page 18, Lines 3-6). We have also revised slightly the title of the manuscript to make it clear this was a pilot intervention.

2. What is the reliability or validity information regarding these tools?


3. Line 24 Page 4 What does NPA stand for? It is first defined on Page 5 line 8.
Response: NPA stands for Nutrition and Physical Activity. We have spelled out this acronym (Page 4, Line 24).

4. Page 15 People do not go out to “eat healthy” (consider in discussion)

Response: We appreciate and agree with this comment. In response, we have considered this possible explanation for the lack of effects on attitudes and behaviors in our discussion (Page 16, Lines 13-16).

5. Given table 4 how do you explain the changes in the control group... perception of F/V choices and low-calorie choices? See note below regarding additional limitation.

Response: We believe these changes may reflect a general trend in local restaurants to increase F&V and low-calorie choices. The formative research that informed our intervention revealed restaurant owners/operators perceived a slow trend in this direction in response to increasing customer demand for these food options (Escaron et al. Developing and Implementing “Waupaca Eating Smart”: A Restaurant and Supermarket Intervention to Promote Healthy Eating Through Changes in the Food Environment”. Health Promotion Practice, conditionally accepted). Alternatively, the changes may reflect seasonal variations in restaurant offerings. We have added a comment to the discussion to explain these changes (Page 16, Lines 2-8).

6. There is another potential limitation given how close these communities are. Might there be some contamination between intervention and control sites? Which community was the smaller 6000 resident community? They would likely travel to the larger 26,000 resident community for meals and shopping occasionally.

Response: The driving distance between the two communities is 29 miles. The smaller city was the intervention community. The short distance and differences makes it likely for residents of the smaller city to travel to the larger one for meals and shopping. However, we believe this issue should not affect the validity of our results, given that the samples were drawn from the restaurants and stores in each city, we measured and adjusted for whether participants lived in the city or not, and questions were referred to their most recent experience dining or shopping in the outlet where they were recruited. We have added language to our limitations section to clarify this issue (Page 17, Lines 21-26 and Page 18, Lines 1-2).

7. Another potential limitation that should be addressed in future studies: Did the intervention change what the participants would have ordered? Or, are you really just getting participants who would've ordered healthy anyway? How should this be assessed? Tracking restaurant sales or food sales when this method can be refined will be another effective method.

Response: The sampling procedures were designed to produce two comparable cross-sectional samples of restaurant and store customers. After controlling for sociodemographics and contextual factors (e.g. time of the meal, whether it was a special occasion, etc.), results of regression models tested the counterfactual that differences in healthiness of meals/foods ordered/purchased were due to the
intervention. We agree with the reviewer that the methods are nonetheless limited and future studies should strive to collect sales data and enhanced measures of food orders and purchases. In our limitations, we already acknowledged the lack of restaurant or food sales and we have now added a sentence calling for enhanced methods to determine intervention impact on food orders and purchases (Page 18, Lines 10-13).

8. Table 2- one column should be added for both restaurants and stores for pre-assessment indicating how many of these strategies were selected to commence the intervention. It was indicated in the methods that they only had to pick three. The text does indicate none of these strategies were in place pre-assessment, but which strategies did they select for their intervention?

Response: We have added a third column for each type of outlet (restaurant and stores) indicating how many restaurants selected the strategies listed in Table 2 prior to launching of the intervention. We have also added these results to the Results section (Page 10, Lines 5-8 and Lines 14-16).

9. Table 3-it’s not completely clear what all of your variables mean. What is this percent community resident? Percent lunchtime? Percent weekday? Percent celebrating? Even when I go back and read the methods these still aren’t clear. Why only show the post-data?

Response: The table does show both pre and post data, but we thank the reviewer for letting us know the meaning of these variables was not clearly explained. We have changed the wording in Table 3 and added more complete footnotes to better explain these variables. We have also tried to explain this more clearly in the methods section (Page 9, Lines 5-9).

10. Figures on page 26 - A footnote should also be added regarding scale scoring. The text indicates 1 month prior to 10 month post—so a similar footnote should be added.

Response: I detailed legend with this information is provided in Page 23, Lines 32-38.

Reviewer 2

1. Please spell out POP on page 13, line 13.

Response: This acronym has been spelled out (Page 13, Line 24).