Reviewer's report

Title: Characterization of Street Food consumption in Palermo: possible effects on health

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Reviewer: Sanae Inagami

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The revised and improved manuscript explores associations between health outcomes and the presence of street vendors that addresses a gap in the field.

The authors have addressed weaknesses that I have previously identified with the exception of Figure 2. What I meant by stratification was to look at differences within professions, not between professions, in order to eliminate SES as a factor. SO were there health differences within the managers those who had higher SF scores. Figure 2 is inherently interesting in itself…but may not necessarily fit into the overall story.

My primary issue with the article now is the primary “story” that the authors wish to convey as I believe that the primary story may be lost amongst some of the secondary findings.

The authors consider co-morbid conditions…but the diseases were in fact analyzed as outcomes, not as comorbidity control variables. When looking at a lot of health outcomes without a specific hypothesis as to how it may relate to SF intake…the question becomes one of data-mining…and the association seen may be due to chance (though statistically significant). I would stick with health outcomes known to be associated with diet; I think the argument may be stronger. I was distracted in understanding how GI diseases would be relevant…maybe the manuscript could focus on BMI, hypertension…known outcomes of diet.

The Results are much more streamlined…but may benefit from subheadings…such as Demographics; Food preference; Health and foods etc. which may direct the reader in understanding the direction of the main findings.

The Discussion still needs tightening.

1. Lead the Discussion with the punch line of your findings first. “The SF group had a significantly higher BMI than the RES group. We observed…These results parallel…” (Delete the first 2 sentences of this paragraph. )

2. No no no, don’t weaken this finding with “However…despite”. Would be interesting to see some facts about SF score…what the mean, median, range was…what does the mean mean…Does a score of 50 mean, the number of food items or number of times one ate out in the past year?? “Multivariate analysis showed that for a beta coefficient SF score of 0.064 =0.2 kg of weight.” It is MY
opinion that this is NOT insignificant or a limited influence. I think there is an interpretation issue here that is INCORRECT. 0.064x: what is the difference between a SF score of 0 and 10 or 10 and 50. Calculate weight with an SF score of 0 and SF score of 10 and SF score of 100…Or the difference between standard deviation of -1 and +1. An SF score of 100 implies an increase of 20 kg???

3. AFTER the punch line of your main findings…then begin with a new paragraph…addressing selection bias. And don’t belabor the point with 20 lines… “…selection bias. Subjects frequenting SF and restaurants may differ intrinsically…We were unable to collect data on SES of subjects.” Do not try to defend an obvious weakness any further. I don’t understand the argument regardless.

4. Then address further strengths of study…the gap that is filled in the literature…return to first 2 paragraphs of Discussion.

5. Place generalizability in Limitations. “Due to sampling strategy…limited generalizability. Prevalence of HTN and type 2 diabetes was lower than in general population. Studies have shown that those with diagnosed hypertension and diabetes tend to eat better than those without diagnosed disease. (REF) The study subjects were younger than the general population who have been documented to have poor eating habits… Secondly, our data is self reported and subject to recall and measurement bias (REFERENCE). That’s all authors need to say. Italians hold greater trust in health care system…and we are hopeful???(reference or exclude). We have addressed selection bias earlier.

6. Conclusion: Lead with the punch line again…SF consumption may be associated with…and is a diverse nutritional habit at all SES strata…This study outlines a possible approach for defining and recognizing…etc…(This is good)…our results are exploratory and not meant to be definitive in nature. Further studies…

**Level of interest:** An article whose findings are important to those with closely related research interests

**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:**

No competing interests.