

JAND Reviewer Instructions: Research Paper / Research Brief

Please use the reporting checklist that accompanies the manuscript submission to ensure that the research has been reported completely and transparently. Please check that each checklist item has been reported satisfactorily. This will help you to determine if the research has been conducted and reported appropriately with sufficient rigor.

Following is an example of reviewer comments for your reference.

Sample Reviewer Comments:

Overall Reviewer Comments:

Examining associations between food security status and diet quality in an understudied population is an interesting topic. However, a stronger justification is needed for the research question, the study methodology needs to be described in greater detail including the statistical analyses, and the introduction and discussion sections would be enhanced by streamlining and stronger organizational flow.

Specific Reviewer Comments:

Research Snapshot

Please format the research question as a question.

The research question, study objectives in the abstract, and study purpose at the end of the introduction are not congruent. Please review and revise for consistency.

Abstract

Lines 32 - 33 – The study objective needs greater clarity.

Lines 44 - 47 – The main outcomes measure section should state the primary outcome measure(s) not be a description of study methodology.

Lines 56 - 59 – Results report on outcomes not included as part of the study objectives.

Lines 60 - 64 – The abstract conclusions go beyond the findings reported in this manuscript and are not consistent with the conclusions in the manuscript text. Please revise.

Introduction

The introduction would benefit from stronger organization and focus. A more convincing case needs to be made for the gap in the literature base that the research question is designed to address.

Several of the references are old and could be replaced with more recent publications.

Lines 80 - 83 – The HEI is being misrepresented as an instrument that makes recommendations. Instead, it is intended to assess degrees of conformance with the Dietary Guidelines for Americans.

The index itself reflects recommendations made in the Guidelines. Please revise this sentence accordingly.

Line 87 – Reference #23 is for the A-HEI not the HEI. Please review and revise.

Materials and Methods

The description of the methodology is missing important details; the methods used need to be described in more detail such as specifics regarding recruitment and enrollment, and how the data were collected.

Lines 135 - 138 – Please clearly define your inclusion and exclusion criteria for participants in your sample. Please provide a justification for selection of your specific study population.

Line 140 – Please add some additional details about participant recruitment and enrollment. What was your recruitment strategy? How many individuals did you recruit? How many of those were eligible? How many agreed to participate and were included in your study sample? Did everyone you approached agree to participate and then were included in your study sample?

Line 143 – Please explain how you arrived at your sample. See item #13a of the STROBE-nut. Consider use of a flow diagram.

Lines 154 - 155 – There are multiple USDA modules to measure food security status. Please indicate which one was used here and whether it was validated for use in this population.

Line 157 – Please specify the time period for which food security was assessed.

Lines 158 - 160 – Since the categories of food security status are derived from the USDA Food security module, it should be cited as the source. Recommend that the categories described in this section should be the ones used in the final analysis. It is somewhat puzzling that this was not done. It is important to specify that households with high or marginal food security were classified as food secure while those with low or very low food security were classified as food insecure.

Lines 171 - 172 – Please clearly state how many ASA24 recalls were administered and clarify whether it was interviewer- or self-administered (method not clear in this sentence).

Line 177 and throughout the paper – HEI-2015 components are being referred to as “subdivisions”. To reflect the current evidence base and how this concept is addressed in the HEI-2015 development and evaluation papers, strongly recommend using the term “component” rather than “subdivision”.

Lines 180 - 185 – Recommend referring to the NCI website for guidance on how to calculate HEI-2015 scores: <https://epi.grants.cancer.gov/hei/tools.html> See especially section on How to Choose an Analysis Method. After consideration of whether one or multiple 24-hour recalls should be used, review your methods in relation to the guidance on the site, reference the site and justify any inconsistencies in method if any.

Line 193 - 195 – Please clarify how you chose the covariates for adjustment based on the data collected. For example, why wasn't education included?

Line 215 – In the Statistical Analysis section, please define all statistics used in the results and tables. Please state at what level statistical significance was set.

Results

Please refer to the numbers section of JAND Information for Authors, authors appear to report too many significant digits (e.g., average age is reported as 27.25 years and should be at most 27.3). This is true throughout the section about percentages and other numbers as well. The number of significant digits reported should be realistic and supported by the original data

Please provide a table summarizing the characteristics of your sample. You should also note what percent were classified per the various food security classifications.

Lines 235 - 240 – Please accurately interpret these scores. The component scores are not measures of actual intake or consumption, rather they quantify how well diets conform to the DGAs. In this way the interpretation should be tied to this language. This correction also needs to be made in the abstract and discussion.

Line 250 and Figure 1 – Per Krebs-Smith SM et al. Update of the Healthy Eating Index: HEI-2015. J Acad Nutr Diet. 2018;18(9):1591-1602, radar plots can be used to visualize HEI-2015 scores. However, the manuscript does not reflect the guidance of the HEI-2015 developers regarding how to display radar plot information. See <https://epi.grants.cancer.gov/hei/interpret-visualize-hei-scores.html> Suggest deleting total HEI-2015 score from plot because it is on a much different scale and denotes a composite of all the other points in the graph. Also suggest, that the order of components be changed per NCI guidance for comparability with other HEI-2015 publications. If pale grey spokes on the wheel were included, it would make the scores easier to read.

Line 267 - 268 – “did not have a statistically significant effect” – Given the cross-sectional study design, this would be more correctly characterized as an association, rather than an effect.

Table 1

Please indicate through use of a superscript footnote what statistical analyses the p values represent.

Tables 2 and 3 – All tables should be self-explanatory. Tables should have a very clear notation as to what variables the analyses were adjusted for.

Discussion

The organization of the discussion needs to be strengthened and some of the statements require citations. The first paragraph should be a brief summary of the overall results, highlighting results that relate to the primary research question. In addition, what sets this study apart from others should be noted early.

Lines 331 - 334 – New results should not be reported in the Discussion section for the first time — they should be stated in the Results section first.

Lines 342 - 344 – This section addresses diet quality, which is one of the present study's major outcomes. It would be better positioned earlier in the Discussion Section, after the summary of results since it discusses similar research.

Lines 350 – 353 – Interesting hypothesis to potentially explain these findings. However, recommend also mentioning the possibility of spurious findings, or confounding not accounted for in these results.

Lines 365 – 368 – Your justification of the methods used to calculate HEI-scores should be framed in terms of the limitation of available methods, while acknowledging the inherent biases in the data. This needs to be clearly and thoroughly discussed.

The Simple method used to analyze the data while possible, is not the recommended analytic method, that considers measurement error. While this method (MCMC) is under development and not currently available, it should be recognized that the current analysis has measurement error that has not been addressed. It isn't only that it doesn't reflect usual intake. See <https://epi.grants.cancer.gov/hei/tools.html> .

Conclusions

Conclusions are overreaching based on research findings. Recommendations for future research could be included.

References

References are not formatted per JAND guidelines. See References section of JAND Information for Authors.

#29 – Is this reference for an abstract? If yes, it does not meet JAND standards for references. Per References section of JAND Information for Authors “Avoid using abstracts or presentations as references”