

Mathematica received written feedback from two sets of peer reviewers on the draft report titled A Feasibility Assessment of Alternative Approaches for Reevaluating the Thrifty Food Plan. Below we summarize the comments received by the peer reviewers into thematic groupings. We then provide responses to each group of comments, including Mathematica's rationale for not incorporating a small number of suggested revisions. Additional responses to individual comments are provided in the tracked changes version of the report corresponding to this delivery.

Comments that apply to the overall report

Defining criteria for assessment

Reviewer 2 provided a handful of comments regarding the need to clarify the criteria used for assessing the feasibility of each alternative approach. See specific comments italicized below.

- *Adequate sample size seems like a technical requirement for any type of data analysis. Recommend that the term "technically feasible" be more clearly defined earlier in the report. Here it seems like the report is saying that adequate sample size is not a technical requirement.*
- *See earlier comments about clarifying what "technical feasibility" means in the context of this report. Edits to address those comments can be carried throughout the report including in this section.*
- *What about error or uncertainty in the outputs from each approach? Did the assessment consider error or uncertainty? If so, recommend specifying this here and throughout the report when discussing the tradeoffs of the alternative approaches.*
- *As noted in an earlier comment, the level of uncertainty or error in the estimates produced is also of policy relevance. Did you consider evaluating the approaches based on the uncertainty/error implicit in their estimates? Recommend adding in a discussion of this in this section and to the report more generally.*

[Mathematica Response]. To address this feedback, Mathematica added additional text to the executive summary and introduction of the report to define each of the criteria used to inform the feasibility assessment. As recommended by the reviewer, we carried these edits throughout the report chapters. Although we did not consider "error" or "uncertainty" as independent criteria for the assessment, we did consider these elements to an extent in our estimation of the levels of barriers associated with implementing each approach. We clarified this in our definition of this criterion. In addition, we clarified in our conclusions elsewhere in the report the extent to which our estimates exhibit large variability or may be subject to bias due to underreporting of food acquisitions, sensitivity to analytic decisions regarding how to associate menu items to FNDDS food codes, among other factors.

Clarifications regarding panelists' preferred approaches and assumptions

Throughout the report, reviewer 2 provided a handful of comments requesting further explanation regarding why the expert panelists preferred certain approaches or held certain assumptions regarding the alternative approaches. See illustrative comments italicized below.

- *Recommend explaining here why the panelists preferred the purchase-based approach.*
- *It's not clear how these factors impact the cost of the TFP. Recommend that the text following this quote from the panel explain why the panel would think that these factors may impact the TFP cost.*

- *It's not clear why the panel thought that households would purchase more food than would be required to support a healthy diet at home. Recommend that the report clarify why the panel thought this*

[Mathematica Response] When possible, we added additional clarification regarding the panelists' preferences for certain approaches where requested. At times, however, we chose to remove reference to the expert panelists' assumptions when they were not directly related to the implementation of the approach. For instance, we chose to omit the second paragraph cited from the first Alternative Approaches report that described the various advantages to the purchase-based approach discussed by the expert panelists, as these were not directly necessary for understanding the conceptualization of this approach or how the approach was implemented. In general, we were limited in our ability to speak to why the panel held strong assumptions regarding household purchase behavior.

Clarifying language around HEI scores and "healthy" diets

Reviewer 2 provided several helpful suggestions throughout the report regarding the need to clarify how "healthy" diets were operationalized in the context of the alternative approaches. This reviewer also offered suggested revisions to specific sentences and section headings to reinforce how HEI scores were used throughout the implementation of these approaches. See illustrative comments italicized below.

- *In footnote 3, the text indicates HEI is used to assess the "quality" of foods purchased. A more accurate description of HEI is that it is used to evaluate how well a set of foods aligns with the Dietary Guidelines for Americans, as described in a previous footnote. Recommend that the footnote more clearly explain what HEI is used for.*
- *The section outlines how each household's food purchases were scored relative to the Dietary Guidelines for Americans, as quantitatively measured by the HEI. To better match the content of this section, it would be clearer to have a subheading such as "Scoring household food purchases according to their conformance with the Dietary Guidelines for Americans". Healthy can be defined in different ways, but scoring a diet against the DGA via the HEI is one way to do that and this fact can be reflected better in this section. Recommend revising the subheading accordingly.*
- *Earlier, the text explains that households purchasing healthy diets were identified, not that those purchasing sufficiently healthy diets were identified. The language around how exactly households are classified in terms of purchasing a healthy diet should be clarified and made consistent throughout the report. It seems like both purchase-based approaches use the HEI to evaluate the degree to which FAH purchases are in conformance with the DGA. Recommend more consistently and clearly explaining this throughout the report.*
- *See earlier comments about how to describe the "healthfulness" of food purchases. Recommend revising the phrase to read as "few households achieved the target level of healthfulness in their food purchases".*

[Mathematica Response] We accepted all suggested revisions to specific sentences or subheadings throughout the report. In addition, we updated the footnote in Chapter 3 to clarify that throughout the report we use the term "healthy" diet to refer to food purchases that met or exceed the threshold identified by the expert panelists as being in sufficient conformance with the Dietary Guidelines as well as in the sections of Chapter 4 and 5 where we discuss our approach to identifying healthy diets.

Justification for using 2015-2016 data and clarification regarding data sources

Both sets of peer reviewers asked for clarification regarding the use of 2015-2016 input data and raised the need for greater clarification regarding the source of price data used in each of the alternative approaches. See illustrative comments italicized below.

- *It would be helpful to explain why 2015-2016 data were used in the analysis. Were they the most recent available?*
- *Recommend authors explain why this year of the data, which doesn't directly compare to the 2012-2013 FoodAPS data, was chosen.*
- *Why were 2015-2016 USDA nutrition databases used? Were these the most recent available at the time of the project?"*
- *Please provide clarification on the source of the price data provided by CNPP.*
- *Is the price file provided by CNPP the same as the Purchase to Plate National Average Prices (PP-NAP)? If so, please include a reference to these public data. If not, why not use these data?*
- *What source was used for average food prices? That is a key detail worth reporting here, even if in a footnote or just very briefly. Recommend adding additional details here.*
- *Section 7.3: Throughout this section, where do the price data come from? It is insufficient to simply state that CNPP compiled the price data. From where? If they are from the Purchase to Plate Price Tool and scanner data, please cite the data sources.*
- *Since you are using 2015-2016 PPC, FPED, and FPID data, should HEI-2015 have been calculated rather than HEI-2020?*
- *Recommend report explain why NHANES was the preferred data set for the econometric approach. Presumably there are other consumption datasets that could be used for the exercise, so it can be explained why NHANES was selected over others.*

[Mathematica Response] We added additional text to the introduction to clarify the decision to use data sources that are in alignment with those used in the 2021 TFP reevaluation to facilitate comparisons across approaches. Elsewhere in the report, we reinforced the decision to use data corresponding to the prior reevaluation for this purpose, given that one of the assessment criteria was related to substantive differences from the current approach.

Formatting

The first set of reviewers identified a handful of formatting issues in the draft report. See illustrative comments italicized below.

- *Section 6: Pages 42-46 seem to have been replicated in error.*
- *Appendix A: It isn't clear why the sections in Appendix A are lettered starting with D. Additionally, under Section D, the numbering starts at 12. Under Section E, the numbering starts at 6. Under Section F, it starts at 5.*
- *Appendix B: Please double check the footnote references in Appendix Exhibit B.1. Why does a number have two 'a' references?*
- *Appendix E: Please ensure that rows are not split between pages. For example, in Appendix Exhibit E.4, the row corresponding to Mixed Dishes – Meat-Poultry-Seafood – higher nutrient density – higher cost.*

[Mathematica Response] Where needed, we corrected these formatting issues and identified the underlining cause. However, there were a couple instances, including comments regarding Appendix A and B, in which we either could not verify the issue identified by the peer reviewer and/or determined that the current formatting was correct. For instance, the "letter a" references in Appendix B tables correspond

to table notes embedded in cells within the tables. Because the tables are quite large, we suspect the reviewers did not notice these in-table references during their review.

Minor language revisions

Throughout the report, reviewers requested minor language revisions or corrections to typos. See illustrative comments italicized below.

- *Line 5. Did you mean "associated costs" rather than "expenses?"*
- *Suggest adding in here that USDA conducted the FoodAPS survey. It is important to know who sponsored the survey.*
- *The word 'detail' is missing from the first paragraph. "...described in greater detail in the..."*
- *Duplicate "findings" in this sentence. Revision recommended.*
- *Is calories a typo in this table? Clarification recommended.*
- *Please define the term SR for readers unfamiliar with the USDA databases.*
- *What is the difference between food item, recipe item and ingredient in Exhibit 9?*
- *Section 5.5: At the bottom of page 32, the sentence reads "...slightly more than 25 percent of weekly menus did not include enough calories..." Should this be 75?*
- *The phrase "none of the menus achieved the minimum amount of starchy vegetables or refined grains...." might be unclear to some readers. Refined grains are a moderation component in the HEI.*
- *Appendix D.1: Typo in the first paragraph – "with or without."*
- *Appendix D.1: Typo in the final line – "the term on the right allocates a small amount..." Delete 'of'.*

[Mathematica Response] In all instances, we accepted the suggested revisions or corrected the errors identified by the peer reviewers.

Comments that apply to the purchase-based approach sections

Definition of analytic sample

There were several comments regarding the definition of the analytic sample for the purchase-based approach. These comments included questions regarding whether alternative data sources had been considered as a starting point, suggestions for clarifying the specific sample of households included from the Circana Consumer Network Panel, and questions regarding how exclusion criteria were applied. See illustrative comments italicized below.

- *Did the panel consider using purchase records for SNAP households as a starting point for the purchase analysis?*
- *It is worth noting that the Circana Consumer Network is an unbalanced panel. That is, there are static households that participated in 2015, 2016, or both years.*
- *Was the sample restricted to the full static panel (61k)? Or the random-weight static panel (15k)? Moreover, throughout Section 4 and the corresponding Exhibits, it is unclear when and where weights were applied (if at all).*

- *Suggest moving footnote 10 text to primary text as this is an important limitation to this analysis.*
- *This first sentence seems to indicate that items not linkable to the PPC were excluded from the HEI analysis, but then this paragraph explains that a special approach is used to deal with random-weight items which are included in the 8% not linkable. So what percentage of items were actually included in the analysis after dealing with the random-weight items? 95%? Clarification needed at the end of the paragraph.*
- *Before I can assess the validity of the results of Exhibit 6, I need to know whether the sample was restricted to the random-weight panel. If not, a fair share of food-at-home purchases are missing because respondents did not report them*
- *Since only a subset of the static panel reports random-weight products, I hope that the appropriate sample and projection factors were used (15k). This needs to be clarified in the report. If the full static panel was used, there is a substantial omission of random-weight products (given that most respondents did not have to report them) and I am very concerned about the implications for HEI estimates.*

[Mathematica Response] We have added additional details to Chapter 4 describing the Circana Consumer Network panel data that were used in the analysis. Specifically, we used the full static panel for our analyses, rather than restricting to the random-weight static panel. We explain how this choice was intended to maximize available sample sizes (which were nonetheless inadequate). However, we also explore how this analytic choice may contribute to the calorie results presented in the report, which indicate that households did not purchase an adequate number of calories to cover their dietary requirements for one week, which may be due in part to households in our sample not reporting all of their food purchases. We also provide additional details regarding the proportion of our sample (88 percent) that coincides with the random-weight panel subset. We also added additional information regarding potential underreporting bias that could impact our estimates. We extend these considerations into the conclusion of this chapter in terms of what this might mean for future implementation.

Although the reviewer makes a valid point regarding potential bias introduced by not restricting the initial sample to the random-weight static panel, this source of bias speaks to the broader assumptions made by the expert panelists regarding the feasibility of this approach. Specifically, it is entirely possible, as evidenced by our findings, for households that do not report random weight products to nonetheless achieve high enough HEI scores to be included in the final sample. The costs associated with those products accurately (to the extent possible) reflect what households spent to acquire those items, however, this does not mean that those items were intended to fully cover the nutritional needs of the reference family for one week—an issue we addressed in the draft version of the report.

Reasons why calories purchased may be lower than required to support a healthy diet in conformance with the DGA.

The first set of reviewers offered several credible alternative hypotheses for why the distribution of calories from food-at-home purchases were lower than what is required to support a healthy diet for the reference family. See illustrative comments italicized below.

- *In addition to purchasing food away from home, SNAP households supplement purchased foods with "free" foods from food pantries, friends, and families, etc. An analysis of SNAP households in the FoodAPS survey showed that 30% of food acquisition events were free (and a mix of FAH-type foods and FAFH meals from friends, family, school meals, food pantries, over a 7-day period). Eight percent of SNAP household acquisitions were from free school meals.*
- *Another explanation for the lower-than-expected average energy values is underreporting in FoodAPS, a known limitation. There is evidence to suggest that there is underreporting at the event and item level, particularly during the latter days of the household's reporting period. Additionally, larger households reported fewer food*

acquisitions on a per-person basis than did smaller households. See Yan and Maitland 2016; Maitland and Li 2016; Hu et al. 2017; and Hu et al. 2020. A discussion of this limitation and potential implications may be warranted.

- Some SNAP households purchase a large share of their monthly food needs when they receive their SNAP benefits. Acquisitions aren't necessarily smoothed over the month. <https://www.ers.usda.gov/amber-waves/2014/november/snap-households-must-balance-multiple-priorities-to-achieve-a-healthy-diet>
- Another explanation for the lower-than-expected calorie purchases may also again be underreporting. Both FoodAPS and the Consumer Network rely on respondent self-reporting.

[Mathematica Response] We appreciate the reviewers' well-considered alternative hypotheses for the findings presented in the report. We have updated our discussion of these findings to incorporate these alternative hypotheses.

Food waste

The second reviewer raised several clarifications regarding the references to food waste presented in the purchase-based approach chapter:

- It's not clear why food waste is being discussed in the context of this report. Does the current approach - the optimization model - account for food waste? Do the other approaches proposed here account for food waste, that is, are the approaches consistent with respect to accounting for food waste? Recommend that the report clarify about the necessity of accounting for food waste in the TFP cost and how feasible it is to account for it in each of the approaches.
- Any food purchase data naturally includes the cost of food eaten and wasted. But whether households considered waste in their purchase decisions is not something these data can tell us. Recommend adding a reference for this claim because its not evidently clear if all households take into consideration the amount of food they waste when they make purchase decisions.

[Mathematica Response] In response to these comments, we clarified that the current optimization model-based approach requires a food waste adjustment. We subsequently clarified that the expert panelists assumed that under the purchase-based approach, such an adjustment would be unnecessary. We did not, however, comment further on why the expert panelists presumed that households would take into account food waste when making purchasing decisions.

Translating transactions into weekly food purchases

The first pair of reviewers raised the need to add more details regarding how the transaction data were collapsed.

- My first inclination would have been to implement the first approach suggested in footnote 12 rather than to collapse transactions into daily, weekly, and monthly transactions. While this may reduce variance, I imagine it would reduce variance in both directions. There is some literature to suggest that some households will do big stock-up trips and supplement food shopping with smaller trips in between (particularly SNAP households when they receive their benefits). A weekly average would smooth these patterns over time.
- When collapsing the data, how was a week defined? Did it include the full weekend? I would hope the weekend wasn't split (M-S rather than S-S).

[Mathematica Response] We added clarification regarding how weeks were defined (Thursday-Wednesday). We did not make revisions based on the reviewers' first comment regarding their preference

for an alternative approach to collapsing observations. As noted in the report, we implemented a defensible approach which was described in our implementation plan and offered an alternative approach for consideration in the future. Our sensitivity analyses demonstrate the robustness of our findings to decisions regarding how these transactions were transformed. In particular, while averaging is one approach for smoothing variation in shopping trips over time, as we discussed in the draft report, combining transactions by month is another defensible means for smoothing variation. We do not expect that averaging transactions would meaningfully improve sample sizes, and as noted in the report, we expect that the reduction in variation would likely reduce the number of households that would be included in subsequent analytic steps.

Comments that apply to the menu-based approach sections

Clarifications regarding data processing

The reviewers requested additional clarification regarding several elements of the data processing steps that were undertaken to transform the raw menu data into an analysis data set. See illustrative comments italicized below.

- *Section 5.4: Suggest including the refuse/cooking yield factor in addition to the 5% adjustment factor in Exhibit 8.*
- *I'm not following the example provided for the recipe not scaled for the reference family. If a recipe made 8 servings and the serving size is 1 cup, the recipe yielded 8 cups?*
- *Perhaps beyond the scope of the current report, but it would be interesting to know the form assumed for each food category in Exhibit 12. For example, for vegetables, what percent was fresh, fresh-cut, frozen, canned, and dried? Was there any effort to determine if a cheaper substitute could be made in a recipe (e.g., canned vs. fresh) without impacting the nutrient profile of the meal?*
- *One nutritionist submitted 72 recipes and one nutritionist submitted 18 recipes for 5 weeks of meals? This is a big difference; what accounts for this variation?*

[Mathematica Response] In places where reviewers noted confusion or asked for greater consideration regarding variation between the two sets of menus developed by the nutritionists, we added text to the report to clarify or offer hypotheses for the discrepancies. We chose not to update Exhibit 8, as this figure is intended to present a higher-level depiction of the steps involved in processing the data. Similarly, while we concur with the peer reviewers that it would be interesting to examine how the form assumed for each food category influences results, this was outside of the scope of the current report and planned analyses.

Nutritionists' deviation from provided guidance

Both sets of reviewers identified places where the results suggest that the nutritionists failed to fully meet the provided guidance for generating menus. Reviewers requested additional explanation for deviations between the menus and the guidance throughout Chapter 5. See illustrative comments italicized below.

- *Why did the constructed menus not have enough calories? It seems like the caloric requirements are laid out in the guidance provided to nutritionists and that the nutritionists, one of whom used meal planning software, would easily be able to ensure enough calories for the average person for each menu. Does it have something*

to do with the way the food data was scaled by FNS? Recommend that the low calorie results be explained here or earlier in this section.

- *Appendix A suggests that the nutritionists were instructed to meet the nutritional needs of the family of four. The guidance says "Design the menus to meet the nutritional needs of a reference family of four, comprising a man and a woman ages 20 to 50 and two children—one between the ages of 6 and 8 and one between the ages of 9 and 11." Recommend adding more explanation for why this didn't happen - especially with respect to calories needed.*
- *Was this because the nutritionist failed to follow the guidance, the guidance was not specific enough, or something else? Recommend adding context here to prevent confusion about why the data was not specific enough at the outset.*
- *Recommended better distinguishing between the work they had to do for this project and what they do on a typical basis. Because it sounds like there was some type of mismatch but its not clear what exactly that mismatch was or why it occurred.*

[Mathematica Response] In response to this feedback, we added additional text throughout the key findings and conclusion section as well as revisions to existing text that was imprecise. In general, we expect that given the number of factors the nutritionists were asked to consider, it was not feasible for them in practice to ensure alignment to all criteria simultaneously. We also expect that decisions related to scaling menu items and associating items with FNDDS food codes may have impacted alignment to the guidance, which speaks to the barriers in implementing this approach. These factors are discussed throughout the report chapter.

Budget-Friendliness of Menus

Related to deviations from the provided guidance, the reviewers also recommended providing a deeper discussion regarding why the menu-based approach resulted in a substantially higher TFP costs.

- *Since the TFP is implicitly about creating a food budget that is low cost it is important to explain in the conclusion section that even though the nutritionists were instructed to create budget-friendly menus, these menus are far from that target at least relative to the 2021 TFP. Clarification recommended explaining why the menus created are so far off from a budget friendly cost.*
- *See earlier comments about the need to explain why the cost estimate in this approach was so much higher than the TFP 2021 estimate. Here recommend explaining that maybe the problem was in how the nutritionists were instructed to create a budget friendly menu. Also it could be possible that with a larger sample of nutritionists one might be able to construct lower cost menus. Recommend explaining this possibility here.*

[Mathematica Response] Although the draft report did include some language regarding the menu-based approach yielding substantially higher costs estimates than the TFP, 2021 value, in response to these comments we have added additional discussion for why this might be and also how in future larger-scale implementation less expensive menus may be developed to the discussion of key findings presented at the end of the chapter.

Use of AI to reduce barriers to implementation

Reviewer 2 raised the possibility of using AI to overcome some of the barriers to implementation with this approach. See specific comments italicized below.

- *Given all the barriers to implementation (i.e. nutritionists not knowing prices) it doesn't seem like this is feasible under cost neutrality. Recommend that Footnote B better explain how the menu-based approach is feasible under cost neutrality. Also here, recommend making it clearer that new technology, including AI for example, can be a solution to the challenges described.*

- *There is some research on how AI might be able to fill this gap, for example: <https://www.nature.com/articles/s41598-024-65438-x>. Recommend that in addition to the conjectures here about cost or development also acknowledge that AI would be a promising way to overcome the challenges of iteration, time costs, and significant investments.*
- *See earlier comment about the use of AI.*
- *Are there other ways to go about using the menu-based approach (see earlier comments)? Recommend discussing whether or not the approach could be modified or improved so that it is a more viable option.*

[Mathematica Response] We added text to the Executive Summary, Menu-based Chapter, and Conclusion of the report to highlight how advancements in new technologies, including AI, as well as the development of custom menu-planning software could help to reduce the barriers to implementation. Although generative AI remains a promising new technology, we suspect that substantial investment and further development of this technology is required before AI proves a reliable solution to the barriers identified in the report.

Econometric-based approach

Analytic approach to constructing market basket for reference family

Reviewer 2 raised an important clarification regarding differences in the units of analysis between the various alternative approaches. Specifically, the reviewer noted:

- *In the purchase-based approach it was described as critical that the food purchase data be for a household that was identical to the reference family of four. But in this economic-based approach that requirement seems to be relaxed. Recommend report explain why the requirement is relaxed for this approach.*
- *In the econometric-based approach identification of the reference family of four is not required, but it is required in the purchased-based approach. It's not clear why in the purchased-based approach the sample must be restricted to households that are identical to the reference family of four. In the purchased-based approach would it not be possible to use data from all households and scale results using demographic information, using some econometric adjustment? Recommend explaining if/how this might be possible here and in the purchased-based approach section.*

[Mathematica Response] In response to these comments, we added a new paragraph to Chapter 6 of the report noting that the econometric-based approach follows closely the procedures used in the TFP, 2021. Although we agree with the reviewer's perspective that the purchase-based approach could be modified to use data from all households and scale results using some econometric-based adjustment, this is a substantive deviation in the approach as conceptualized by the expert panelists. We have added language to the conclusion chapter to address how adjustments to the purchase-based approach could make improve its viability in general, despite the fact that even with these adjustments, we do not perceive this approach to be feasible under cost neutrality as discussed throughout the report.

Table notes and other minor clarifications regarding analysis results

The reviewers identified several places in the econometric-based approach tables where greater clarification or additional table notes would be beneficial. See specific comments italicized below.

- *Reviewer 1b said "Section 7.5: The meaning of the word "subsistence" in Exhibit 15 might be unclear to some readers."*
- *Section 7.5: How does one interpret the negative expenditure values in Exhibit 15?"*

- *Section 7.5: Exhibit 17 should include a note indicating what the selected demand system is.*
- *Section 7.7: The exhibits should include notes indicating what the demand system approach is.*
- *Section 7.7: It is not clear whether Exhibit 18 is the aggregate of the 45 modeling categories (Appendix Exhibit C.1) or the 95 categories (Appendix Exhibit C.2).*
- *Section 8.5: Exhibit 23 and 24 should include a note indicating the selected SPF model.*

[Mathematica Response] We revised and updated table notes to address each of these comments.

Other clarifications and revisions

Reviewers also identified several places where the chapters could be more explicit regarding conclusions or where language could be updated to be more precise and accessible to broader audiences. See specific comments italicized below.

- *Reviewer 1a said "Section 7.8: Consider being more explicit in the conclusions that the demand system-based approach can accommodate cost neutrality requirements."*
- *Non-technical readers may not understand what this means [concave and corner solution]. Suggest revising this explanation so that it is understandable to a broader audience.*
- *Recommend that report clarify here how diet variety and convenience impact the TFP cost.*
- *Reviewer 1a said "Section 8.4: If I understand correctly, Equation 8 is estimated using HEI-2020 scores and total quantities for each TFP categories by NHANES WWEIA respondents – which are individuals. Yet "the distribution of the (u_i) ^ indicates the range of levels of efficiency among households in the data." How does one go from the individual to the household? "*

[Mathematica Response] We revised the conclusion to be more explicit regarding how cost neutrality requirements could be incorporated in the demand system-based approach. We also omitted language flagged by the reviewers as not being accessible to a broader audience as in both instances the inclusion of these technical terms was unnecessary. We also clarified references to variety and convenience to avoid implying that these concepts impact the TFP cost. With respect to Section 8.4, we changed the text to read "respondent" or "consumer" rather than "household."

Comments where revisions were not incorporated.

In a small number of cases, Mathematica chose not to incorporate revisions based on peer review comments. This section identifies each of these instances and provides our rationale for not making changes to the report.

- *Considering acknowledge the report's conformance to the tenets of Gold Standard Science*

[Mathematica Response] Although we believe that the report broadly conforms with the tenets of Gold Standard Science, this executive order is in reference to work conducted by federal agencies and their staff and does not cover contractors. Since this Executive Order was signed after the development of this draft report was initiated, we determined that it would not be appropriate to include such an acknowledgement.

- *Consider providing more detail on the extent of free events and items.*

[Mathematica Response] The report chapter already acknowledges that a small number of observations in the FoodAPS analysis included free items. We did not believe further analysis would enhance the discussion, given that this is not a focal element of our conclusions.

- *It would be nice to see the distribution of HEI-2020 scores from the Consumer Network, similar to Exhibit 2. How far away was the top-tercile cutoff from the mean?*

[Mathematica Response] As noted in the chapter, the focal sample of interest for these analyses were reference family households with HEI scores of 80 or above, which corresponds to the expert panelists' preferred implementation for the purchase-based approach. We presented the other findings in the FoodAPS analysis chapter solely because sample sizes prevented us continuing forward with the preferred analytic sample definition. However, because subsequent analysis was possible with the preferred analytic sample in the Consumer Network analyses, we chose not to incorporate additional analyses that were secondary to the main goals of the feasibility assessment.

- *How can this approach be technically feasible but not produce meaningful cost estimates or market basket? The next sentence indicates that the problem arises from the models inability to accurately/precisely estimate an HEI score. That sounds like a technical issue, as written. As noted in an earlier comment recommend that the report clarify here (and elsewhere) what it means for something to be "technically feasible" in the context of this report.*

[Mathematica Response] We believe the reviewer misread the bolded statement indicating that the approach was "not technically feasible." We made some minor revisions to the structure of this sentence to mitigate future misreadings but otherwise made no changes to the conclusions. We concur that this approach is not technically feasible.