

**Compiled Reviewer Comments of the Evaluation of the Fresh Fruit and Vegetable
Program (FFVP)**

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Overall Comments: Overall, I thought this was an excellent report that addressed the questions Congress and other policymakers would have about the FFVP. I was surprised that it did not include an Abstract or Executive Summary—I think those would be valuable additions. Besides a formal Executive Summary, a short (2-page) report in a style suitable for policy and program officials would probably make a popular and useful addition.

The body of the report is well written, making study aims and approach clear. The regression-discontinuity design of the evaluation was appropriate and the analysis was well executed. I think it is important to stress the limits to generalizability of the findings, given the regression discontinuity evaluation methodology. The positive findings for fruit/vegetable intake will likely be widely reported and tend to encourage program expansion. But effects may be different in schools with more affluent students or older students (middle and high school). This caution should be part of the executive summary, so it doesn't just appear at the end of the report under study limitations.

Also worth highlighting is the finding that almost all of the increase in intake was attributable to fruit consumption. For vegetables, there was a much smaller increase, attributable to orange vegetables and “other vegetables, not tomatoes.” FVPP students were more likely to report liking most fruits, but not most vegetables. Dark green vegetable intake did not go up, even though broccoli was served in more than 80 percent of schools. Similarly the FVPP increased student probability of meeting MyPyramid fruit guidelines but not vegetables (page 124). The FVPP aims to not only increase consumption in school but also build preference and intake outside of school. For fruits and some vegetables—I would assume sweeter vegetables, like carrots—increasing consumption and building preference through the snack program seems to be

working. For other vegetables, such as dark green vegetables, there is no measurable effect. Other strategies may be needed to increase consumption of these healthy foods.

Discussion: I'm not sure I agree with the conclusion that FFVP foods add to diet rather than replacing foods. Exhibit 6.34 shows no change in proportion of children consuming excess energy. So it's possible either that the small increase (1/3 cup) in relatively low-calorie foods like fruits and vegetables doesn't add appreciable calories, even if there is no substitution. But it's also possible that it led to small decreases in energy intake from other foods to maintain calorie balance—there really just isn't the ability to detect these small changes. Either way, it seems to be a reassuring finding that the snacks aren't creating a problem of excess energy intake. I'm not sure that comes across in the comments.

Conclusions, page 152: Re: comment that per-student funding is low, schools seemed to be able to provide snacks on the schedule recommended by USDA. Is there any evidence that dosage in participating schools really a problem? Or would expanding the program to other schools provide more benefits? In an era of limited funds, this is important to consider. It would be good to provide information about program funding in relationship to coverage. Page 26 states that "about half of States funded 50-99% of schools that applied. But States only encouraged a subset of schools to apply so this does not necessarily reflect the level of coverage in all high FRPSL schools. It would be useful to know what percentage of high FRPSL elementaries participate in the program and what percentage of all elementaries. This would put program access in context.

Angela Olige

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Overall Comments: In general this was a very comprehensive report but seemed prone to use words that were not geared to the general population (such as child nutrition professionals) who would be instrumental in ensuring application for or success of FFVP. It was difficult at times to comprehend what was really being stated and sometimes points and conclusions were stated over and over to the point of redundancy and not clarity or emphasis.

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Overall Comments: The purpose of this report was to evaluate the effects of the Fresh Fruit and Vegetable Program on children's consumption of fruits and vegetables and the implementation of the program. The report describes a study of children which used two sampling strategies to identify children and schools for the outcome and implementation of the program. In general, the report and studies are well-grounded, reasonable evaluations of the fresh fruit and vegetable programs. The report requires some editing to improve clarity, especially in the methods section and accompanying appendices, and some attention to the study design in the limitations section. Otherwise, other edits needed are minimal to make the report easy to understand and honest within the limitations of the study design.

In the methods section, the authors need to provide a much clearer description of exactly how they sampled the participants in the study. As it is currently written, it is not possible to tell in the methods section any information about recruitment and completion rates of the study. At a minimum, references to tables later in the report need to be made. The methods are also lacking any description of how survey items were developed, tested, or validated for use in this study. The report lacks any description of the survey items and their sources.

Also, the methods section overstates the value of the regression discontinuity method and does not recognize its limitations as a quasi-experimental method. Provide the reader with the tools to evaluate the limits of our findings by describing these limitations here and in the discussion section.

In the results section, attention to providing a common structure across each section is needed. The report describes many different samples, rationales, and findings. Each section should be constructed in the same way and connected to research questions to make it most readable. Also, each section of results should have a summary statement. Results are presented with two

significant digits often. This seems inappropriate; one or zero seems like the appropriate number to use. The attention given to non-significant difference in reported usual consumption by race is inflammatory, and I recommend deleting it. Some tables are presented without accompanying text. There is some reporting of results in the later discussion that is not consistent with data presented in results.