



An Evaluation of the USDA Fresh Fruit and Vegetable Program in Wisconsin Schools: Parent and Teacher Surveys

Brandon Lauersdorf (Psychology), Beth Lutz (Education), and Kathryn Glodowski (Psychology)
 Faculty Collaborators: Lori Bica (Psychology) and Eric Jamelske (Economics)

Introduction

In November 2005, Wisconsin was selected to participate as an expansion state in the existing U.S. Department of Agriculture (USDA) Fresh Fruit and Vegetable Program, which was created for the purpose of improving nutrition and reducing the prevalence of childhood overweight and obesity. With this program beginning in March 2006, 25 schools in Wisconsin received funding to be able to provide daily fresh fruit and vegetable snacks to students for the remainder of the 2005-06 school year and the 2006-07 school year. Although this program did not provide funding for nutrition education and such education was not required of participating schools, some sites did incorporate into their curriculum various educational components designed to promote fresh fruits and vegetables as a healthy food alternative. Some of the schools had parental involvement in these activities.

We are conducting an evaluation of student outcomes associated with the USDA Fresh Fruit and Vegetable Program in Wisconsin schools. In conjunction with the last round of student surveys (March, 2007), we used survey instruments to collect data from parents and teachers of elementary school students participating in the program. This study focuses on quantitative and qualitative responses from teachers and parents as indicators of program effectiveness.

Method

Participants

Participants included 256 parents of 5th grade students attending elementary schools that were participating in the Fresh Fruit and Vegetable Program. Response rate for parents was 23%. Participants also included 38 5th grade teachers from program elementary schools. Response rate for teachers was 73%.

Measures

Parent Survey. The parent survey contained 11 items that measured parents' familiarity with and involvement in the program, perceptions of their child's interest in the program, and their child's eating patterns at home following involvement with the program, including whether their child asks them to buy and serve fruits and vegetables.

Teacher Survey. The teacher survey contained 8 items that measured teachers' involvement in and satisfaction with the program, perceptions of their students' interest in the program, level of parent involvement, and nutrition education activities conducted in the classroom.

Procedure

We mailed teacher surveys, along with stamped return envelopes, to the site coordinator at each of the program elementary schools. The coordinators disseminated the surveys to 5th grade teachers, who then mailed them back to the research team. The majority of parent surveys were mailed directly to the home, along with stamped return envelopes. Two schools sent the surveys home with students, had parents return them to school, then mailed the surveys to the research team.

Acknowledgements

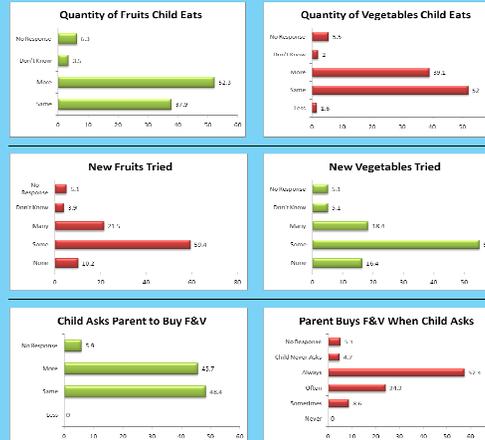
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We would also like to thank the students, staff, and parents from our 35 participating schools and the numerous UW-Eau Claire students who assisted with data entry.

Results

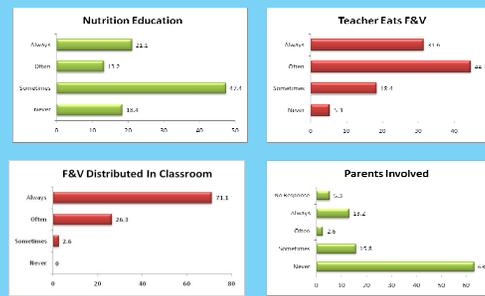
Parent Surveys

The majority of parents were familiar with the Fresh Fruit and Vegetable program (93%), and 94.5% of these parents reported liking the program. A subset of parents (19.2%) reported being involved with the program in their child's class or school. In terms of parents' perception of their children, 89.9% thought their child liked the program and 80.1% thought their child would be disappointed if the program ended. As can be seen in the graphs below, parents reported that the Fresh Fruit and Vegetable Program made a difference in their child's willingness to try new fruit and vegetables, overall consumption at home, and requests to buy and serve these foods.



Teacher Surveys

The majority of teachers (97.4%) were familiar with the program and 100% reported liking the program. All of the teachers (100%) thought their students liked the program and 97.4% thought their students would be disappointed if the program ended. As can be seen in the graphs below, there was variability in terms of how often the fruits and vegetables were given out in the classroom, how often the teachers ate these foods, whether nutrition education activities were used in conjunction with the program, and level of parent involvement.



Discussion

Parents and teachers who took part in this study liked the Fresh Fruit and Vegetable Program and perceived the student participants to like it as well. Large numbers of parents indicated that their children were trying new fruits and vegetables and eating more of these foods overall since the program began. Almost half of all parents indicated that their child was asking them to buy more fruits and vegetables since the program began. Interestingly, while the majority of parents reported buying and serving these foods when asked to do so, there were a number of parents who did not consistently act on their child's requests. We recognize that this could be due to the high costs of fresh fruits and vegetables relative to other foods.

Parental involvement in the program was much lower than desired, as the majority of parents reported having no involvement whatsoever. Teacher involvement was also lower than desired. Many teachers did not always try the fruits and vegetables, with some of the teachers reporting that they never ate the foods. Furthermore, the majority of teachers did not regularly incorporate nutrition education activities into the classroom. Certainly, teachers face challenges when it comes to covering the required academic curriculum and may not have had the time to incorporate additional information about nutrition into their classes.

For the Fresh Fruit and Vegetable Program to be effective, we feel that it must impact children's attitudes and behavior both in school and beyond. Commitment and support of school personnel are important factors when it comes to program success, as is parental involvement. Levels of parent-teacher involvement reported in this study are likely to be contributing factors to the very limited changes in attitudes that emerged from student survey data collected after one year of program implementation. One can acquire a better understanding of the rather lackluster findings from our evaluation of the Fresh Fruit and Vegetable Program by considering the research on youth programming in such areas as sex education and drug abuse prevention. Researchers have found that the most effective programs are those that focus not only on the individual, but rather combine some sort of social competence training with a communitywide intervention aimed at youth, as well as their parents, teachers, and peers (Chou et al., 1998; Dielman, 1994; Leventhal & Keeshan, 1993; Siegel & Biener, 2000). For example, results from research designed to evaluate drug abuse prevention programs that are information-based and/or designed to help adolescents develop interests and participate in alternative activities that will make drug use less likely show that these programs are largely ineffective (Ennett, Tobler, Ringwall, & Flewelling, 1994). Overall, most experts agree that efforts designed simply to change the individual without transforming the environment in which the individual lives are not likely to succeed.

References

- Chou, C., Montgomery, S., Pentz, M., Rohrbach, L., Johnson, C., Flay, B., & MacKinnon, D. (1998). Effects of a community-based prevention program in decreasing drug use in high-risk adolescents. *American Journal of Public Health, 88*, 944-948.
- Dielman, T. (1994). School-based research on the prevention of adolescent alcohol use and misuse: Methodological issues and advances. *Journal of Research on Adolescence, 4*, 271-293.
- Leventhal, H., & Keeshan, P. (1993). Promoting healthy alternatives to substance abuse. In S. Millstein, A. Petersen, & E. Nightingale (Eds.), *Promoting the health of adolescents: New directions for the twenty-first century*, pp. 260-284. New York: Oxford University Press.
- Siegel, M., & Biener, L. (2000). The impact of an antismoking media campaign on progression to established smoking: Results of a longitudinal study. *American Journal of Public Health, 90*, 380-386.
- Ennett, S., Tobler, N., Ringwall, C., & Flewelling, R. (1994). How effective is drug abuse resistance education? A meta-analysis of Project DARE outcome evaluations. *American Journal of Public Health, 84*, 1394-1401.