

Healthy Choices, Healthy Me!

Formative evaluation results of first grade students participating in a nutrition education program.

Study Design

The evaluation was conducted with 20 first grade teachers who agreed to teach the Healthy Choices, Healthy Me! program from ethnically and socially diverse populations in both Northern and Southern California regions. The final analytical sample consists of 347 first graders at 20 schools who participated in pretests and at least one of the after-program tests (post-test and 2-month follow-up test).

This evaluation project was designed to answer the following questions:

- * To what extent are the teachers and students satisfied with the program?
- * Are the revised components of the program better suited for first grade students?
- * Do students improve their knowledge and food choices after going through the program?

Both quantitative and qualitative data were used to answer these questions. Quantitative data were collected from both students' and teachers' surveys. Teacher surveys were self-administered and WestEd staff proctored the pre-, post-, and 2-month follow-up tests. Qualitative data were collected on the school site through teacher interviews and classroom observations. No comparison group was used for this evaluation and, therefore, no causal inferences can be made about the program. The primary goal of the data collection in first grade classrooms was to assess the efficacy of the program and progress toward achieving student outcomes.

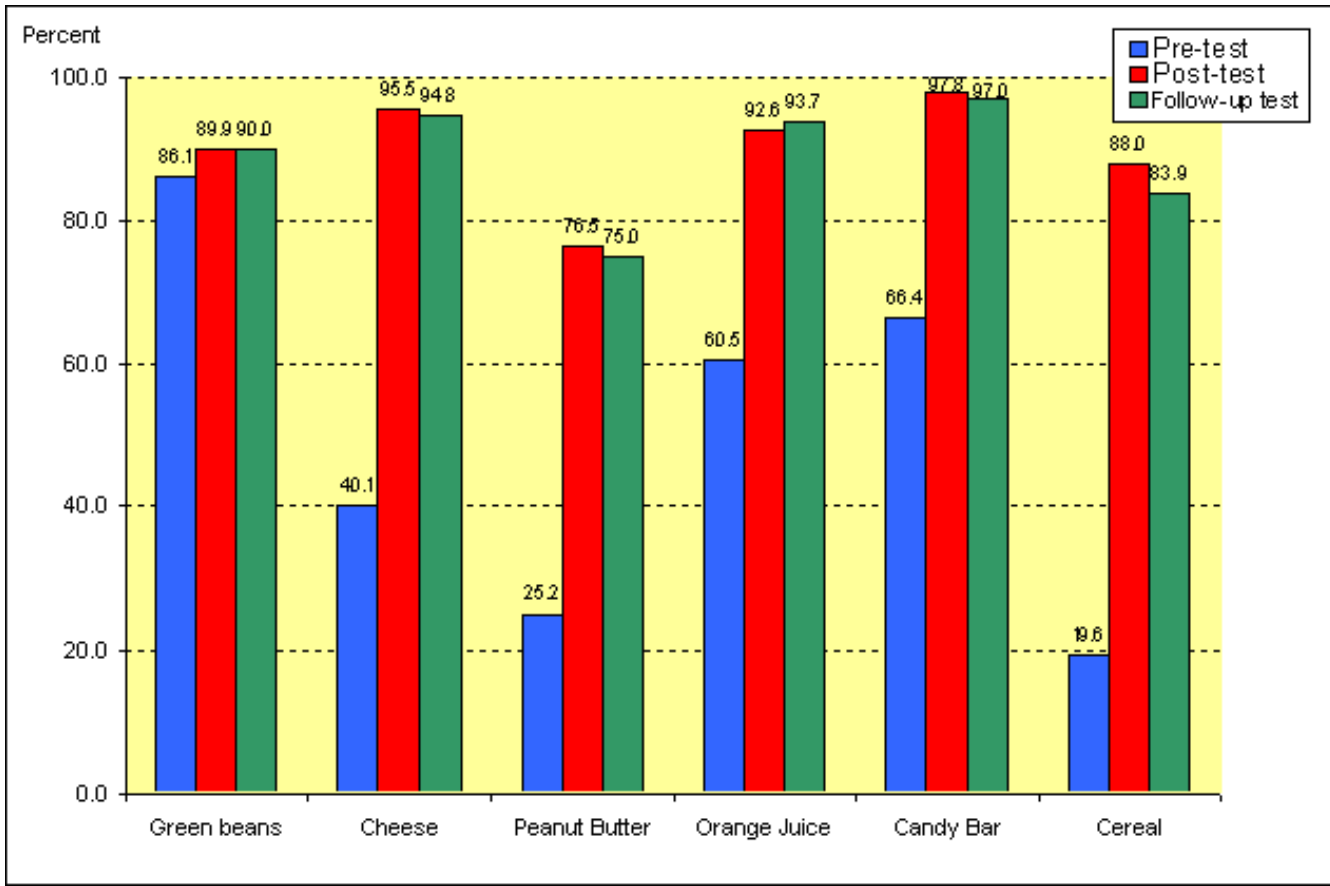
First Grade Student Results

The findings suggest that the Healthy Choices, Healthy Me! program had an impact on gains in knowledge and self-reported eating behaviors among first grade students in participating classrooms. The knowledge questions asked students to classify foods into groups and to identify healthy snacks. The eating-behavior questions focused on whether they ate breakfast, what foods they typically ate for breakfast and whether they helped to choose their snacks. The physical-activity questions asked students about their participation in physical activities and the importance of physical activity. Below are highlights of the evaluation results.

Knowledge

The percentage of first grade students correctly classifying food groups increased significantly for five of the six foods, with the greatest increase for cereal, cheese and peanut butter between pre- and post-test and between pre- and 2-month follow-up tests. (See Figure 1.)

Figure 1. Percent of first grade students correctly classifying foods



All differences significant at $p < 0.05$ for pre/post and pre/2-month follow-up except for green beans.

Source: Dairy Council 2004-05 Data

Notes: Table reports data for 331 first graders who participated in pre- and post-test

Students were asked to identify which of the following are healthy snacks: string cheese, potato chips, banana, chocolate chip cookies, yogurt, and apple pie. There was a significant increase in identification of healthy food items in post-test for all items and 2-month follow-up tests for string cheese and yogurt compared to the pre-test. There was a decrease in selection of the three remaining options, with the largest decrease in apple pie. Students recognized that food preparation transferred food-group foods to the extras group, which is an important life skill. (See Table 2.)

Table 2. Percentage of first graders identifying healthy snacks

	Pre Test (%)	Post Test (%)	Follow-Up (%)
String Cheese	59.9	82.9**	84.0**
Banana	88.5	94.8**	92.2
Yogurt	67.3	85.1**	87.4**

Source: Dairy Council 2004-05 Data

Notes: Table reports data for 269 first graders who participated in all three tests: pre-test, post-test and follow-up test.

** Significant differences from baseline ($p < 0.05$)

Behaviors

As expected, a high percentage of students ate breakfast on the day of the tests and reported eating breakfast on most days. The Healthy Choices, Healthy Me! breakfast lesson teaches students to make healthy breakfast choices by including foods from three of the five food groups. Students who reported eating breakfast on the day of the survey showed that consumption of the food pyramid groups increased for meats, beans and nuts; milk and milk products; breads and grains; and fruits in the post-test and 2-month follow-up test compared to the pre-test. There was significant increases from pre-test to post-test in students reporting eating foods in the “Breads & Grains” (27.9%) and “Meats, Beans & Nuts” (9.7%) groups. (See Table 3.)

Table 3. Breakfast behavior for first graders

	Pre test (%)	Post test (%)	Follow-up (%)
Had breakfast this morning	90.2	89.1	88.0
Eat breakfast			
Never	4.9	3.0	2.6***
Sometimes	14.7	14.8	11.2
Almost every day	16.6	16.4	16.0
Everyday	63.8	66.0	70.2
Food groups eaten this morning			
Meat, beans & nuts	8.2	17.9**	14.9**
Milk & Milk Products	62.1	69.9*	66.9
Vegetables	13.0	10.1	6.0**
Breads & grains	31.6	59.5**	58.7**
Fruits	25.3	30.5	28.3
Extras	20.5	20.5	19.7
Foods from milk products eaten this morning			
Yogurt	11.9	17.1*	24.5**
Milk	49.8	57.5*	52.4
Yogurt smoothie	19.3	19.4	17.5
Chocolate milk	37.6	35.7	32.0
Cheese	13.0	22.3**	16.7
String cheese	11.9	16.7	20.1**

Source: Dairy Council 2004-05 Data

Notes: Table reports data for 269 first graders who participated in all three tests: pre-test, post-test and follow-up.

* Significant differences from baseline ($0.05 < p < 0.10$)

** Significant differences from baseline ($p < 0.05$)

*** Significant differences from baseline on proportions of “Almost every day/every day” and “Never/sometimes” ($0.05 < p < 0.10$)

In addition to healthy eating habits, Healthy Choices, Healthy Me instructs students on the importance of physical activity for good health. Sixty percent (59.9%) of students reported playing hard every day in the post-test and 2-month follow-up tests, compared to 47.6% in the pre-test. Students recognized that it is important to play hard every day and statistically fewer children reported never playing hard at both post-tests.

Teacher Survey Results

Each teacher participating in the Healthy Choices, Healthy Me! first grade curriculum was asked to complete and return a teacher survey following completion of the lessons with their students. The surveys were designed to answer these questions:

- * To what extent are the teachers and students satisfied with the program?
- * What, if any, challenges exist in the implementation and use of the program?

Teachers and students had very positive feedback on the program. All teachers indicated program implementation was easy for them and the teacher guide met their needs. The average amount of preparation time required for most lessons is 15 minutes and all teachers reported that this was an appropriate amount of time. They all felt that the student workbook met their classroom needs, as did the length of the activities. Students enjoyed having their own color workbook to write in and share with parents once the program was complete. Parents reported to teachers that their students were classifying meals at home into the food groups and commenting on the balance of the meals prepared. Teachers indicated that expanded home connections beyond the “Note to Families” would assist in communicating key nutrition concepts to families.

Conclusions

Specific teacher feedback to improve Healthy Choices, Healthy Me! such as stronger family connections and enhancing the physical activity component were recurring comments. These suggestions helped guide program revisions when it was revised to match USDA’s MyPyramid.

The results suggest that the revised Healthy Choices, Healthy Me! program positively affects students’ knowledge and behaviors. Retention of knowledge was high, indicating that the teachers reinforce the information throughout the school year. Teacher program feedback was positive, indicating the revisions amply addressed comments on specific lessons from the original program. Dairy Council of California would like to thank those schools, teachers and students that participated in this project to help make healthy eating a part of every child’s life.

