Schools Integrate Healthy Eating and Physical Activity Concepts into Language Arts

Results from Healthy Reading Mini-Grants (2004-2006)

Who Was Involved?
Eleven schools throughout Michigan were awarded a Healthy Reading mini-grant for 2004-2005; 22 classrooms and 462 students participated. Teachers in 18 classrooms continued their mini-grant project the following year (2005-2006) and reached 396 students.

What Did They Do?
This mini-grant involved five activities:

- Team Nutrition staff provided a training for teachers, someone from the foodservice department, and Michigan State University Extension (MSUE) partners to help them understand how to integrate nutrition concepts into classroom instruction (and reach parents too!) using the resources provided. Partnering with MSUE worked well. Most (55%) teachers had not teamed with someone from their county extension office before and indicated that MSUE staff were great to work with, did an excellent job with students, were great resources, and their support was appreciated.

- Teachers partnered with an MSUE county staff member to offer nutrition education using the Pyramids Between the Pages curriculum (five lessons including tasting and handout for parents).

- Teachers were provided with sets of books having nutrition or physical activity themes to use in classroom instruction.


- Teachers were reimbursed for supplies to create a bulletin board to promote healthy eating and/or physical activity.

It Works!
The year before this project started, teachers provided an average of 9.6 hours of nutrition education to their students. The first year of the project they offered 24.8 hours and 18.3 for those that continued the second year. Common ways that teachers integrated healthy eating and physical activity messages into other subjects were to read books aloud to their students (often during snack time) and discuss healthy choices. Other ways that individual teachers integrated nutrition into core subjects:

- Used books as part of a social studies lesson to teach about foods around the world.
- Used a healthy food (orange slices) to teach fractions.
- Concentrated on fruits/vegetables during a science unit.

“A project made me more aware of how easily you can integrate nutrition into other areas. Resources sparked additional ideas and projects. I plan on using these materials in the years to come.”
(Saginaw Teacher)
Benefits for TEACHERS. Comfort level to teach nutrition concepts to students increased for 93% of the teachers that participated. Nutrition knowledge increased “quite a bit” for 40% of the teachers and “a little” for another 40%. Barriers lessened: lack of resources was less of an issue for 60% of the teachers, competition with other subjects decreased for 47%, and 33% replied that the barrier of “not enough time” decreased.

Schools offered ways for STUDENTS to experience healthy eating. One class started eating breakfast in their room, another went to the cafeteria to discuss school lunch choices related to healthy eating and a third added a fruit and vegetable bar in the cafeteria. One teacher commented that she was a positive role model by choosing healthy foods. 47% of the teachers provided more opportunities for students to be physically active in the classroom (compared to the year before) and were very creative at accomplishing that.

STUDENTS have more opportunities to eat healthy and be physically active. Teachers reported that students increased overall knowledge about the importance of good nutrition, made healthier choices for breakfast and snack and knew why it was important to do so. Children were more open to new or different foods and realized the importance of healthy eating.

Behaviors of PARENTS changed too. 156 parents/guardians from nine of the schools completed a survey to identify changes in nutrition-related knowledge and behaviors of their children (that were in participating classrooms). Almost half (46%) said their child asked them to do physically active things with them and 40% reported they were “more active as a family”. Forty percent of the parents indicated their children requested that they have more fruits and veggies available and 50% were doing so. Parents also indicated their children made positive changes since the start of the year including: eating healthier snacks (52%), being more active (49%), trying new foods (49%) and eating more fruits and vegetables (41%). The snacks parents sent to school with their children were healthier.

TEACHERS sustained the program. Nine of the eleven schools continued to integrate nutrition into Language Arts during the year following their initial mini-grant; all of them used the Bookbag during that second year and 100% planned to use it for a third year. Teachers also continued to use the book sets and partner with their MSUE county staff person to teach the Pyramids Between the Pages lessons. During the second year of the project, teachers noticed some changes in student behaviors including an increased willingness to taste new foods in the classroom including fruits and vegetables and whole-grain foods and interest in reading books with health themes.

Family Bookbags Were a Hit!

- Parents spent an average of 45 minutes looking at or reading the materials in the bookbag — an increase in the usual amount of reading time for 42% of them.
- 98% of the 147 parents that filled out the evaluation that was tucked into the bag indicated that they read the children’s books, 82% looked over the recipe cards and 75% looked at the tips sheet. Their children (according to parents) learned something new from the books and the most common responses related to the importance of healthy eating and that physical activity was “good for you.”

“I have always taught nutrition concepts but I learned to be more tuned in to the literature connection.”
(Participating Teacher)

“I think the bookbag is a great resource for many families to learn new and healthier ways of eating and taking care of their bodies.”
(A Parent)

“We went on power walks to increase our thinking power.”
(Traverse City Teacher)