

Smart snacking habits learned by elementary school students

The Situation

There is a significant need to improve American's dietary and physical activity behaviors. This is particularly important among young children as research has shown that eating and activity behaviors during childhood predict these adulthood behaviors (Krebs-Smith et al., 1995, *Am J Health Promotion*, 10: 98-104). At the same time that there is a need for children to learn about healthy eating behaviors, cuts in school funding and an increased emphasis on standardized testing have led to decreased amount of time for health, nutrition, and physical activity instruction.

Our Response

University of Idaho Extension Educators developed a series of nutrition and health classes for elementary-school aged students. In 2011, the educators taught the class, "Snack Attack," focusing on the importance of healthy snacks for children. Children were taught that they need snacks to refuel their bodies between meals, which helps them to be able to learn, to grow, and to play and have fun. Students learned that snacks should be energy-dense and small enough to not diminish hunger for the next meal. The students reviewed MyPyramid for Kids food groups and played games to categorize their favorite snacks into appropriate food groups. The younger students (kindergarten to second grades) participated in activities to reinforce which foods were the healthiest snack choices. They played healthy snack bingo, drew pictures of their favorite healthy snack, and listened to [The Very Hungry Caterpillar](#) by Eric Carle. The older students (third, fourth and fifth grades) worked on scenarios such as choosing healthy snacks for sports practice, creating a healthy



snack vending machine, and writing a shopping list for healthy snacks.

One-hundred-and-one sessions of "Snack Attack" were taught in one Franklin County and eight Bingham County elementary schools and on the Fort Hall Indian Reservation. Over 2,300 students from kindergarten to fifth grade participated. Students represented a variety of ethnicities. Nineteen percent of the students were Hispanic, 14 percent were Native American, 1 percent was Black, and 1 percent was Asian.

Program Outcomes

Third-, fourth-, and fifth-grade students (n=907) completed a ten-question quiz before the program and immediately after the program. A McNemar's test was used to determine if pre-test and post-test scores were significantly different. The table on the following page shows the results.

Question	% correct Pre-test	% correct Post-test
Do kids need snacks? **	86	95
Should snacks be as large as meals?	97	97
Is a sandwich a healthy snack? **	77	87
Are potato chips a healthy snack? **	85	89
Is milk a healthy snack? **	92	96
Is soda a healthy snack? **	91	94
Are carrots a healthy snack? **	85	91
Are crackers a healthy snack? **	65	77
Is a candy bar a healthy snack? **	91	93
Is an apple a healthy snack? **	92	96

* p<0.05, ** p<0.01

Additionally, in seven of the schools, children were asked at the end of class to write what MyPyramid snacks they would eat. Ninety-one percent of the 710 students that responded were able to list an appropriate snack.

The Future

These Extension Educators will continue to teach health and nutrition classes to children in school and in out-of-school settings such as 4-H/youth development, scouts, and other activities. They will continue to evaluate students' increase in knowledge and intended behaviors and will seek to find additional evaluation instruments to document the impact of school nutrition programming.

FOR MORE INFORMATION

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