Children learn about health as they “Eat the Alphabet”

The Situation
Recent research from Ohio State University (Lorson, et al.) indicates that children are not getting the recommended number of fruits and vegetables. The food intake of over 6500 children between two and eighteen years old was analyzed. On average, the children consumed one cup of fruit, which is 77 percent of the MyPyramid fruit recommendation. Forty percent of the fruit intake was in the form of juice. The children consumed an average of one cup of vegetables per day, which is 55 percent of the MyPyramid vegetable recommendation. The leading source of vegetables was French fries. Other research also indicates a disparity between dietary recommendations and actual intake of fruits and vegetables among children.

Our Response
University of Idaho extension educators developed and presented a program “Eat the Alphabet from A to Z” to teach elementary-age children the importance of and ways to increase fruit and vegetable intake. Students learned that fruits and vegetables are good for their bodies and help them look their best as well. They brainstormed the names of fruits and vegetables from each letter of the alphabet and learned about uncommon fruits and vegetables. Students were encouraged to eat a variety of fruits and vegetables from each letter of the alphabet. They played theme-related games and did a word search, maze, and secret code. Students also learned tips to include the recommended 3½ cups fruits and vegetables per day recommended by MyPyramid for Kids.

Ninety-seven sessions of “Eat the Alphabet from A to Z” were taught in one Franklin County and seven Bingham County elementary schools and on the Fort Hall Indian Reservation. Almost 2400 students from kindergarten to fifth grade participated. Students represented a variety of ethnicities. Over 18 percent of the students were Hispanic, 14.7 percent were Native American, 1.2 percent was Black, and 0.7 percent was Asian.

Program Outcomes
Third-, fourth-, and fifth-grade students (n=933 completed a short quiz before the program and immediately after the program. On Question 1, the students were asked if there are fruits and vegetables starting with each letter of the alphabet. Question 2 asked the students to name a fruit or vegetable starting with the letters A, F, P, and X. For Question 3, the students were asked how many servings of fruits and vegetables they should eat every day. Results of the survey are shown in Figure 1.

The pre- and post-quiz questions were compared using a Chi-square test. Significantly more students answered that there were fruits and vegetables that started with each letter of the alphabet after (n=857, 93%) the class than before (n=485, 52%) the class (p = 0.000059). Significantly more students were able to name a fruit of vegetable that started with four different letters after (n=736, 80%) the class than before (n=35, 4%) (p = 0.031). Significantly more students were able to correctly answer the number of recommended daily servings of fruits and vegetables after (n=819, 90%) the class than before (n=243, 26%) (p=0.000298).
Additionally, students were asked in the post-quiz if they had learned something new about fruits and vegetables. Ninety-six percent (n=884) of the children said they did learn something new.

The Future
University of Idaho extension educators will continue school enrichment nutrition education programs to educate, encourage, and motivate children to eat a variety of healthy foods. Various educational methods such as group discussion, hands-on activities, games, and theme-based children’s literature will continue to be used.