Students Pick a Better Snack; Increase Fresh Fruit and Vegetable Consumption

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BACKGROUND

Children are hesitant to try unfamiliar foods. The Pick a Better Snack (PABS) nutrition education program is a series of nutrition education lessons given during the school day once monthly over the school year to promote fruits and vegetables as snacks.

Participants included 2nd and 3rd grade students at four elementary schools participating in the Fresh Fruit and Vegetable Program in Clark County School District, Las Vegas, Nevada, during the 2017-2018 school year.

Eight monthly lessons were provided to the students in the intervention classrooms at each school by a community based instructor, along with a monthly take home packet including fruit/vegetable fact sheets, parent newsletters in Spanish and English, and bingo cards to reinforce the lessons. In addition, a cooking demonstration was provided by a trained chef/registered dietitian. Each school also had a comparison group that did not receive the lessons.

OBJECTIVE

The goal of the quasi-experimental evaluation study was to determine to what extent the PABS lessons increased participating students’ knowledge of nutrition, improved their favorable attitudes towards eating fresh fruits and vegetables, and improved their recognition and identification of the five MyPlate food groups compared to students who did not receive the lessons.

EVALUATION METHODS

Participants

• 380 students in 2nd and 3rd grade intervention classrooms
• 99 students in 2nd and 3rd grade comparison classrooms

Pretest and Posttest Surveys

• Nutrition knowledge (4 items; α = .48)
• Attitudes towards fruits and vegetables (15 items; α = .77)
• MyPlate food group knowledge (4 items; α = .45)

RESULTS

A two-level hierarchical linear model, in which classrooms (randomly assigned to intervention or control conditions) were nested within schools, was used to test the effect of the PABS intervention on the posttest measures—nutrition knowledge, MyPlate knowledge, and attitudes towards fruits and vegetables—while controlling for pretest scores.

The intervention group did not have higher increases in nutrition knowledge than the comparison group. However, the intervention group had higher increases in favorable attitudes towards fruits and vegetables than the comparison group (Figure 1), and higher increases in MyPlate knowledge than the comparison group (Figure 2).

CONCLUSIONS AND IMPLICATIONS

Results demonstrate the effectiveness of PABS to increase students’ knowledge of MyPlate and increase favorable attitudes towards fruits and vegetables. Although all students in these Fresh Fruit and Vegetable Program schools received fruit and vegetables as snacks in their classrooms, students that participated in the PABS program showed greater improvements in attitudes, nutrition knowledge, and recognition of MyPlate and associated food groups as compared to comparison group students who did not receive these lessons. These results indicate that nutrition skills and positive attitudes, such as willingness to try new fruits and vegetables are enhanced when fruit and vegetable tastings are paired with the Pick A Better Snack nutrition lessons in the classroom.