

Title of Intervention: Garden-Enhanced Nutrition Curriculum

Intervention Strategies: Group Education, Supportive Relationships

Purpose of the Intervention: To increase knowledge of and preference for vegetables

Population: 9 and 10 year old children

Setting: Schools in California; school-based

Partners: None mentioned

Intervention Description:

- Group Education: Nine nutrition lessons were developed: plant parts, nutrients, Food Guide Pyramid, serving sizes, food labels, physical activity, goal setting, consumerism and snack preparation. The nine lessons were taught every other week for 17 weeks. A gardening component was incorporated into each lesson. Gardening components included indoor seed planting, worm bottles, outdoor seed planting, weed identification, bug boxes, garden fertilization, seed dispersal, butterflies and crop harvest. The garden activities were designed to complement the nutrition lessons and provide students an opportunity to plant and harvest their own vegetable gardens. Several vegetables were planted in the garden.
- Supportive Relationships: Newsletters were sent home to students' families on the weeks between lessons to reinforce concepts taught in class and encourage family discussion.

Theory: Social Cognitive Theory

Resources Required:

- Staff/Volunteers: Not mentioned
- Training: Not mentioned
- Technology: Not mentioned
- Space: Classroom, garden
- Budget: Not mentioned
- Intervention: Gardening supplies, nutrition lesson plans, newsletters
- Evaluation: Questionnaire, survey

Evaluation:

- Design: Quasi-experimental
- Methods and Measures:
 - Nutrition knowledge questionnaire
 - Vegetable preference survey

Outcomes:

- Short Term Impact: Students who received nutrition education had significantly higher nutrition knowledge scores and greater vegetable preferences compared to the control group.
- Long Term Impact: Not measured

Maintenance: Not mentioned

Lessons Learned: Educators should be encouraged to include vegetable gardens as part of their students' learning experience. Administrators of future school garden projects should be encouraged to include a wider variety of fruits and vegetables in their garden programs.

Citation(s):

Morris, J. L. and S. Zidenberg-Cherr (2002). "Garden-enhanced nutrition curriculum improves fourth-grade school children's knowledge of nutrition and preferences for some vegetables." J Am Diet Assoc 102(1): 91-3.