P116 Let's Grow Healthy: Evaluating the Effectiveness of Garden Enhanced Nutrition Education in Elementary School Children

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Objective: School gardens can provide a learning environment that enhances the students' knowledge and acceptance of healthy foods. The garden-enhanced nutrition education program, "Let's Grow Healthy", was developed to promote nutrition education in Los Angeles area public schools. The program consists of hands-on interactive gardening classes and nutrition curriculum.

Study Design, Settings, Participants: The project took place in two elementary schools where each class from second to fifth grade was selected to participate in the program. For six weeks, 210 children participated in the program on a weekly basis. In order to assess the change in gardening and nutrition knowledge, a pretest and posttest were given to the participants.

Outcome Measures and Analysis: The surveys were coded and analyzed in order to compare the difference between t-test mean value scores between pretest and posttest.

Results: Significant improvement was demonstrated in second, third, and fifth grade classes with the most change seen in fifth grade, as 92% of students at posttest, correctly identified the food groups in MyPlate with 44% of students improving ($t = -6.1$, $p = .021$).

Conclusions and Implications: The results support the hypothesis as it shows that gardening classes can increase and improve children's gardening and nutrition knowledge. This reinforces the importance of a school garden where children can learn more about healthy food. We hope for Let's Grow Healthy to expand to more schools, so children can benefit from this experience and improve their nutrition knowledge.

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Objective: The garden enhanced nutrition education program, "Let's Grow Healthy," was developed to promote nutrition education in Los Angeles area public schools. The program consists of hands-on interactive gardening classes and nutrition curriculum.

Theory, Prior Research, Rationale: School gardens can provide a learning environment that enhances the

students' knowledge and acceptance of healthy foods. Previous research has shown that children who plant and harvest their own fruits and vegetables are more likely to eat them (Morris, 2001).

Description: For six weeks, elementary school children grades K-5 will be engaged in a weekly 45 minutes class at the school garden. The lessons will include topics like components of soil, edible parts of the plant, MyPlate, servings of fruits and vegetables, and garden maintenance. The classes will be interactive with hands-on activities at the garden.

Evaluation: In order to assess the change in gardening and nutrition knowledge, a pretest and posttest are given to the participants.

Conclusions and Implications: Gardening classes can increase and improve children's gardening and nutrition knowledge. This reinforces the importance of a school garden where children can learn more about healthy food.

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P118 Longitudinal Associations Between Family Breakfast Frequency During Adolescence and Their Dietary Behavior and Attitude at Young Adulthood

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Objective: This study focused on family breakfast frequency during adolescence, and examined its longitudinal associations with dietary behavior and attitude at young adulthood.

Study Design, Setting, Participants: Data for this longitudinal study were collected as part of "Sakado Shokuiku Study" in Saitama prefecture, Japan. Subjects completed a self-administered questionnaire twice, first in the 8th grade (Time 1; at school in 2009) and then at the age of 20 (Time 2: by mail in 2015-16). Valid matched data of Times 1 and 2 included 59 males and 67 females.

Outcome Measures and Analysis: Subjects were divided into two groups based on family breakfast frequency per week at Time 1: 4 times or more vs. 3 times or less. Differences of dietary behavior and attitude at Time 2 by the two groups were tested with Mann-Whitney U test using IBM SPSS Statistics 24.0.

Results: More than 80% of subjects were students, still live in Sakado-city, live with family, but none of them was married. A total of 23 males (39.0%) and 12 females (12.9%) had family breakfast 4 times or more at Time 1. Both males and females in this group were more likely to perceive the importance of family meals, and only females reported higher family dinner

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