School-Based Family Workshops to Reduce Childhood Obesity



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Background

- Data from National Health and Nutrition Examination Survey found that in 2015-2016, the prevalence of obesity was 39.8% in adults and 18.5% in youth. (Hales et al., 2017).
- Overall prevalence of obesity is higher among black and Hispanic adults than among white and Asian adults. The same pattern is seen in children. (Hales et. Al., 2017)
- Experimental studies have shown that there is a positive association between parents' nutrition knowledge and their children's intake of nutritious foods. (Campbell et al., 2013; Katz et al., 2011)
- Community intervention programs that include gardening are likely to increase the family's exposure to produce and result in higher fruit and vegetable intake (Castro et al., 2013)
- The school-based parent education program (A Taste of Good Health) was designed to influence the healthful behavior of parent participants and their families residing in a large urban setting with a high percentage of Latinos (Besnilian, 2013).

Purpose and Goal

- **Purpose:** The purpose of this project was to evaluate how a parent nutritioneducation workshop (A Taste of Good Health) would affect health behaviors among Latino families. Additionally, the purpose of this program is to provide gardening training and opportunity within each site.
- Goal: To counter childhood obesity and encourage healthy change for the whole family through nutrition knowledge, promotion of fruits and vegetables, and participation in gardening activities.
- Opportunity for undergraduate students: Focus groups are being identified within each site and reviewed.

Implementation Sites

Most of the implementation sites are located in Canoga Park. According to the 2010 Census, the total population is of 50,231 individuals and 40.1% (n=20,160) of the population is Hispanic

- CDI Early Learning Center
- Hart Street Elementary
- Cantara Elementary
- Calahan Elementary



- Canoga Park High School
- Canoga Park Elementary School
- New Academy Canoga Park
- Columbus Middle School



Methods and Procedures

- A mixed-methods and pre-experimental design (i.e., pretest, posttest design without a comparison/control group) was used to collect data. Parents at each site were informed about the workshops through flyers posted at the sites.
- Participants completed a 100-item questionnaire that assessed current dietary practices, demographics, and nutrition and physical activity knowledge at their first and final session.
- Gardening Workshops: Upon establishment of a garden and irrigation system at each site, each gardening lesson followed practices endorsed by "Vegetable Gardening: Handbook for Beginners." All information was delivered in Spanish.
- Nutrition Education Workshops: Each week consisted of a 2-hour class broken down into 15 minutes for physical activity, 30 minutes for a slide presentation, 30 minutes for a healthy hands-on cooking demonstration, and the rest of time was on discussion and questions. All information was delivered in Spanish.
- The themes for the classes were as follows:
 - **Week 1:** *MyPlate, Hydration, and Exercise*
 - Week 2: Food Labels, Fiber, and Calcium
 - Week 3: Carbohydrates, Protein, and Fat
 - Week 4: Cholesterol and Diabetes
 - Week 5: Shopping Tips and Holiday Eating
- Currently focus groups are being conducted to obtain qualitative data.

Results

Results from the pretest and posttest, gardening and focus groups are still in progress.

- Discussion and feedback from the parents revealed that:
- Parents had started making simple changes in their diet to improve their health including: switching from whole milk to 1% milk; trying whole-grains instead of refined; incorporating lesson dishes to home.
- Post-gardening lessons, parents practiced different approaches when shopping at the supermarket (i.e. read labels before purchasing packaged foods, including more fresh produce in their meal preparation).
- Participants were likely to discuss the class topics with their family and friends.

Conclusions

- Focus group data is still being collected with program participants currently in progress. Quantitative data has shown that parents were able to increase their knowledge in nutrition and physical activity through these programs.
- This school-based project has shown that schools are an ideal location for interventions since parents are already on site as part of their routine. At the school level, parents have become more involved in gardening and consequently, communication.
- Preliminary results show that interventions that focus on the family as a unit and parents being addressed as "agents of change" appear most efficient.
- Offering nutrition classes in participants' native language is effective for enhancing class engagement and understanding of the material.

| Institution Information | | |
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| Name of Institution: | California State University, Northridge | |
| State | California | |
| Tuition Cost | Undergraduate \$6,888 Out of State: additional \$396 per unit | Graduate \$8,322 Out of State: additional \$396 per unit |
| Enrollment and Demographics | As of Fall, 2018: 35,839 Undergraduate Students; 5,480 Graduate Students Latino/a (50.8%); White (22.1%); Asian American (10.4%); African American (4.6%); Unknown (4.5%); International (4.3%); Mult-Race (3.1%); American Indian (0.1%); Pacific Islander (0.1%) | |
| Disciplines Covered by the Project | Bachelor's: Food Science, Nutrition and Dietetics Master's: Human Nutrition, Public Health In association with the Marilyn Magaram Center, students gain access to gardening and food service equipment. | |

Professional Development and Experience

- Valuable experiences resulting from the participation in the project:
 Students gained mentorship and leadership experience, exercising their bilingual competency and cultural sensitivity, through the organization and conduction of nutrition education and gardening workshops.
- Career goals: Several students within the Nutrition and Dietetics field of study desire to pursue a Registered Dietitian status. This research allowed students to practice delivering nutrition education and community outreach.
- Stage in the Student's Education: Graduate students in this project were in the process of completing their Master's degree and undergraduate students help in collection of focus group data.
- **Mentoring:** Student assistants had the opportunity to become workshop leaders after their experience and trainings. The Pathways Program provided students with mentoring trainings and a mentor to guide them in Dietetic Internship applications.



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