



## RESEARCH BRIEF

# Summary of Findings from the Health and Wellness Project: Obesity Prevention in Preschool

Alex Zepeda, MPH

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In 2013, LAUP received a Kaiser Permanente Community Grant to implement the Health and Wellness Project, which focused on obesity prevention for children in our preschool programs. The Health and Wellness Project sought to teach preschool children about the benefits of healthy food choices and physical activity by offering training and workshops to those who influence children's lives the most: administrators, teachers and parents. The evaluation of the Health and Wellness Project found that the preschools and teachers were already implementing some of the best policies and practices. Also, most parents reported that their children often or always enjoyed being active and ate a variety of healthy foods. Still, all target groups were able to benefit from the Health and Wellness Project. The following findings emerged:

- Preschool providers implemented new policies and increased practices that promote healthy eating and increase physical activity among children
- Teachers and parents gained confidence in their knowledge about nutrition and physical activity
- Children consumed healthier foods and beverages and decreased the amount of time they spend watching TV, on the computer, and/or playing video games

## Overview

About a quarter of 2-5-year-olds and a third of school-age children are overweight or obese in the United States (Ogden, Carroll, Curtin, Lamb & Flegal, 2010). Children who are overweight or obese as preschoolers are five times as likely as normal-weight children to be overweight or obese as adults (Whitaker, Wright, Pepe, Seidel & Dietz, 1997). Obesity in children leads to higher incidents of diabetes, heart disease and other chronic conditions that will follow them into adulthood (Pulgaron, 2013). Starting in 2009, LAUP made efforts to address childhood obesity with RENEW LA County by working with preschool providers to promote healthy choices for four-year-old children. In order to continue these efforts, LAUP implemented the Health and Wellness Project in 20 preschools within the LAUP network during the 2013 calendar year. The Research and Evaluation Unit at LAUP conducted an evaluation of the Health and Wellness Project and this brief provides a general overview of the findings.

The Health and Wellness Project primarily provided trainings and support to the 20 participating preschools as they implemented policies and practices that would encourage healthy behaviors. The following training sessions were held: two trainings for administrators focused on health and wellness policy development; three trainings for teachers on policy implementation—specifically, on health and wellness practices in the classroom; a series of workshops for teachers with topics such as Using the Lakeshore™ 'Be Choosy Be Healthy Activity Kit' In The Classroom, Starting A Preschool Garden, and Increasing Children's Physical Activity With An Obstacle Course; and 40 workshops (two at each preschool) for parents on the benefits of good food choices and physical activity for their children. As part of the administrator trainings, the preschools selected policies to work on and developed policy action plans. The Health and Wellness Specialist provided individual support and guidance to the preschools in implementing their action plans.

Teachers were given two resources: the 'Be Choosy Be Healthy Activity Kit' and a toolkit. The activity kit contained tools and activities that promote healthy nutrition and physical activity, including music CDs, cards with games and activities, and hands-on materials that get preschool-age children moving and thinking about food and physical activity (e.g., parachute, scarves, fruit and vegetable beanbags, etc.). The toolkit contained a wealth of information and resources on the development of healthy behaviors in early childhood (e.g., selecting nutritious foods, ideas for increasing physical activity, useful phone numbers and websites). In addition, written material in the toolkit was provided in Spanish for copying and distribution to parents.

## **By the end of the project, 44% more providers had a formal health and wellness policy in place.**

A formal policy demonstrates that the preschool recognizes the importance of a healthy lifestyle and supports an environment that encourages healthy lifestyle choices. This increase indicates that several providers previously without policies successfully developed one as part of their policy action plans.

## **Administrators reported implementing eight new policies and/or implementing specific policies and practices more frequently.**

Significantly more providers reported that their staff served as role models when it came to food and physical activity. All staff encouraged healthy relationships with food and modeled self-regulation and moderation during school hours, and teachers actively participated with children in physical activities more often. Also, more preschools reported providing parents information, specifically culturally appropriate strategies to encourage parents to incorporate a variety of healthy foods and beverages at home and details on the effects of healthy food and beverage choices on brain development. More preschools provided age-appropriate and culturally sensitive learning materials and activities in the preschool environment to teach children about the benefits of healthy food and beverages. Providers also changed their instructional time to include building connections with moving and learning and to create a balance between physical and sedentary activities more often.

## **Teachers showed an increase in confidence about their knowledge of nutrition and physical activity.**

At the start of the project most teachers “agreed” with seven statements having to do with their knowledge about nutrition and physical activity. These statements included knowledge about recommendations for offering water to children, the types of foods that enhance children’s brain development, strategies for incorporating a variety of fruits and vegetables into children’s meals and snacks, strategies for incorporating physical activity within routines, and the importance of a preschool’s health and wellness policy. By the end of the project most teachers “strongly agreed” with the statements. However, teachers did show a gap in knowledge when it came to the recommended daily amount of time preschoolers should be active. Less than half of teachers (43%) knew that 120 minutes was the recommended amount of time.

## **Parents made several gains in knowledge about nutrition and physical activity.**

At the start of the project most parents “agreed” with six statements about nutrition and physical activity. These statements included knowledge about which food and beverages are healthier for their children, how food affects children’s mood, ability to learn and focus and brain development, being able to offer their child more healthy foods, and encouraging their child to be more physically active. At the post-survey most parents “strongly agreed” with the statements, indicating an increase in confidence. However, most parents, like the teachers, did not know the recommended daily amount of time that young children should be active.

## **Children made healthier food and beverage choices by the end of their participation in the project.**

Parents were asked about their child’s food and beverage consumption in different ways. First, parents were asked how often their child consumed general categories of foods and beverages on a pre and post-survey. According to parents, children drank soda and juice less often and ate vegetables more often by the end of their participation.

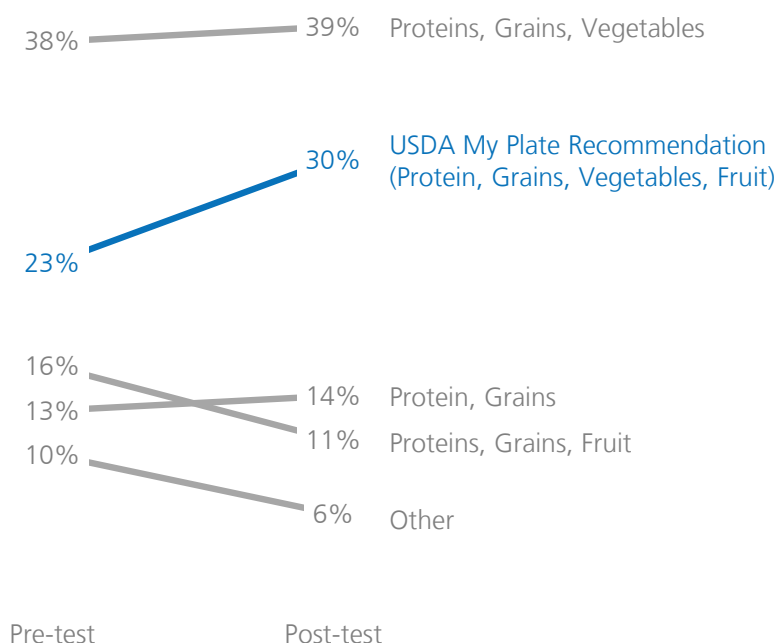
In addition, parents were asked to identify specific foods and beverages their child consumed in the last week. On the post-survey significantly more children consumed healthier options such as whole wheat tortillas, broccoli, carrots, green salad, soy milk, cheese, yogurt and turkey. Fewer children ate unhealthy foods including French fries and candy. However, the number of children who drank fruit-flavored drinks and soft drinks/soda was about the same as those who drank the recommended amounts of low-fat milk and non-fat milk combined. Significantly more children drank reduced-fat milk instead of the recommended low-fat and non-fat milk (USDA, n.d).

Further analysis showed that the variety of vegetables children consumed, on average, increased from four to five out of the eleven different types of vegetables listed. In addition, trends in the types of foods and beverages consumed over the course of a week were analyzed to identify changes from pre to post-survey. By the post-survey children, on average, consumed more of the healthiest foods and beverages such as whole grains, fruits, vegetables, lean protein and dairy products.

### More children consumed a diet that conforms to the USDA My Plate guidelines.

Parents were asked about what their children ate for dinner the night before. The guidelines consist of a meal that includes vegetables, fruit, grains and protein. The percentage of parents who reported that their child's dinner matched the USDA My Plate recommendations rose from 23% to 30%. This increase is statistically significant when the USDA My Plate was compared to all the other plates as a group.

**The percentage of children eating a dinner matching USDA recommendations rose. Other plates either increased by a very small percent or decreased.**



### Children decreased screen time, leaving more time for physical activity.

Parents were asked how much time their child spent watching TV, on the computer and/or playing video games at both time points. By the end of their participation, 28% of children spent less time doing these sedentary activities. In addition, 85% of children met the recommendation of two hours or less of screen time a day. This leaves sufficient time for children to be physically active. In fact, the majority of parents (96%) reported that their child enjoyed being physically active "often" or "always."

### More children participated in organized activities and have parents as role models for physical activity.

Parents were asked how they encourage their child to be physically active. Most parents indicated that they took their child to the park and gave them toys such as a ball or tricycle that encourage movement. Significantly more parents enrolled their children in organized group activities or classes (e.g. soccer team, karate, dance class, baseball practice) and became active themselves. Having active parents serving as role models encourages children to continue to be physically active.

## Recommendations

The Health and Wellness Project was successful in its efforts to increase knowledge, policies and practices that encourage healthy nutrition and physical activity among the children in the preschool programs. There are some areas the program staff and preschool providers can continue to work on to improve outcomes.

- Trainings and workshops should emphasize the importance of daily physical activity for the recommended 120 minutes for preschool-age children.
- Parents should be encouraged to monitor their children's food and beverage choices at home – offering more nonfat and low-fat milk and limiting reduced fat milk and sugary drinks.
- Findings should be shared with the preschools that participated in the project to encourage sites to continue implementing policies and practices that increase children's and parents' understanding of the benefits of nutrition and physical activity.

## References

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## Appendix

### Methodology

The purpose of the evaluation was to measure the impact of the Health and Wellness Project on preschool policies, practices and knowledge of the teachers, knowledge of parents of the children attending the preschools, and the children's nutrition and physical activity choices. Pre and post-quantitative data was collected from the three target populations: 1) the administrators using the Nutrition and Physical Activity Checklist (n=20), 2) the teachers using the Teacher Survey (n=22), and 3) the parents and children using the Parent Survey (n=458).