

Researchers and community partners create gardens to promote physically active time in preschools

School garden teaches preschoolers to be active and healthy

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“Good habits formed at youth make all the difference.” Aristotle understood the importance of good habits centuries ago.

Early childhood is a vulnerable time, and significant health disparities exist, particularly among children in the Latino community. The trajectory toward obesity is established very early in life. Understanding the causes of obesity-related health disparities and developing early interventions to promote healthy habits is the inspiration behind a new research project to be led by Dr. Rebecca Lee from Center for Health Promotion and Disease Prevention in the ASU College of Nursing & Health Innovation. Like other minority groups, the Latino community has been underrepresented in research, and preschool is the place where children are the least physically active throughout their day.

Dr. Lee and her colleagues, Drs. Meg Bruening, Noe Crespo, Flavio Marsiglia, Gabe Shaibi, and Mike Todd along with community partner Kim Pollins of Booker T. Washington Child Development Center and Drs. Paul Estabrooks and Jennie Hill from University of Nebraska Medical Center and Dr. Teresia O’Connor from the Baylor College of Medicine Children’s Nutrition Research Center will use community based participatory research strategies to test a practical and sustainable intervention for children, parents, caregivers, teachers and community partners.

“Working in a transdisciplinary team that includes community representatives has inspired innovative strategies like changing the preschool environment, adding technical support, and updating curriculum—key for developing sustainable strategies to improve health in kids and families,” stated Dr. Lee.

Sustainability via Active Garden Education (SAGE) is a garden based physical activity and nutrition intervention for preschool aged children. SAGE transforms preschools by installing gardens, training teachers, and helping meet national education and health guidelines for young children. The SAGE curriculum uses the garden as a metaphor for child development. Children interact in their school garden, acting out the role of the farmer, tending the plants, and singing songs and playing games to learn about physical activity and nutrition. “The SAGE project will enhance children’s five senses through learning & exploration,” commented Ms. Pollins.

Children learn that plants need the right amount of water, fertilizer and sunshine to have energy to produce fruits and vegetables -- just like children need the right amount of water, balanced nutrition and sunshine to have energy to play actively. Lessons about the garden create a fun learning environment that encourages physical activity. The SAGE curriculum focuses on increasing physical activity, and reducing sedentary time, as well as teaching kids about a variety of fruits and vegetables and recognizing the sensations of hunger and fullness. SAGE changes the preschool environment and connects parents via newsletters and text messages about applying the lessons at home and in community settings like parks, community gardens and farmers’ markets.

“The SAGE approach extends a lot of the previous community or educational gardening work as an analogy for strong nutrition and physical activity for Latino Families, and we are hoping it is a sustainable and effective health promotion model that can work for Latino families across the country.” Dr. Estabrooks added.

The National Institute on Minority Health and Health Disparities at NIH awarded over \$2.5M to support this research.

SAGE will be offered through partnerships with early care and education centers in Phoenix, Arizona. Additional partners are encouraged to participate in the SAGE program and may contact the ASU Center for Health Promotion and Disease Prevention at chpdp@asu.edu for more information.