



# The Role of Out-of-School Time in Reducing Hunger and Preventing Obesity

by Daniel W. Hatcher, Crystal Weedall FitzSimons, and Jill R. Turley

One in three children in this country is overweight or obese (Ogden, Carroll, Kit, & Flegal, 2012). One in five children lives in food-insecure households that struggle to put food on the table (Bethell, Simpson, Stumbo, Carle, & Gombojav, 2010; Coleman-Jensen, Nord, & Singh, 2013). Both problems affect millions of children. Both can occur in the same child at the same time. Both are linked to poor academic performance, behavior problems, and high rates of school absenteeism (Mustillo et al., 2003).

To address these issues, the Alliance for a Healthier Generation's Healthy Out-of-School Time initiative has been working since 2011 in eight cities to support the adoption of the National Afterschool Association's healthy eating and physical activity (HEPA) standards (Weicha, Gannett, Hall, & Roth, n.d.) by before-school, afterschool, and summer programs. From

Huntington Park, California, to Miami-Dade County, Florida, dedicated out-of-school time (OST) leaders

---

**DANIEL W. HATCHER**, M.P.H., is national Healthy Out-of-School Time advisor for Alliance for a Healthier Generation, where he is responsible for managing and delivering technical assistance for OST sites as they work to achieve the national HEPA standards. Daniel also currently serves as the chair of the Implementation Working Group for the National Healthy Out-of-School Time Coalition. Daniel joined the Alliance in 2008 from Youth Service America.

**CRYSTAL WEEDALL FITZSIMONS** is the director of school and out-of-school time programs for the Food Research and Action Center (FRAC), overseeing FRAC's work to increase the participation of low-income children in the school, afterschool, and summer nutrition programs. She improves access to the programs through legislative, policy, and administrative advocacy and by providing technical assistance to state and local efforts. She has authored or co-authored numerous FRAC reports.

**JILL R. TURLEY** is a registered dietitian who provides strategic nutrition direction and technical assistance for various Alliance initiatives. Previously she was the dietitian for the education sales channel at AdvancePierre Foods. She received her B.S. in human nutrition and M.S. in nutritional sciences from Oklahoma State University, where she won a 2011 Rising Star Alumni Award from her college. She is a member of the Academy of Nutrition and Dietetics and the School Nutrition Association.

are championing health and wellness and finding ways to include young people in the conversation. In addition, a national coalition of organizations including the Boys & Girls Clubs of America, the YMCA of the USA, and the National Recreation and Park Association have been collaborating to empower frontline staff and site directors to advocate for healthy eating and physical activity.

However, the conversation isn't just about obesity prevention. The Food Research Action Center, a national anti-hunger advocacy organization, has been working with these organizations to encourage use of federal nutrition programs to provide snacks and meals to some of the nation's most at-risk youth, with the dual goal of reducing hunger and preventing obesity. The HEPA standards' emphasis on high-quality evidence-based nutrition enrichment further strengthens this bond. This article explains the link between childhood hunger and obesity, describes the importance of high-quality nutrition education, highlights evidence of success from the Healthy Out-of-School Time Initiative, and discusses ways to engage youth in implementing the HEPA standards.

### The Connection Between Obesity and Hunger

Obesity affects children regardless of gender, race, or income, but children in low-income or food insecure households are more likely to be affected (Eisenmann, Gundersen, Lohman, Garasky, & Stewart, 2011; Singh, Siahpush, & Kogan, 2010; Townsend & Melgar-Quinonez, 2003). Low-income families face many challenges including limited access to healthy and affordable foods, limited opportunities for physical activity, easy availability of fast-food restaurants (especially near schools), and heavy exposure to food-related marketing (Kumanyika & Grier, 2006; Larson, Story, & Nelson, 2009; Powell, Slater, & Chaloupka, 2004). Also, people who suffer even moderate food deprivation may overeat when food is available, resulting in weight gain (Smith & Richards, 2008).

An important solution for children experiencing both hunger and obesity is increased access to the meals and snacks provided through federal child nutrition programs (White House Task Force on Childhood Obesity, 2010). In tandem with school breakfast and lunch, meals and snacks provided by OST programs can help reduce

hunger. They can also improve nutrition, because the food provided must meet federal nutrition standards.

### The Importance of Nutrition Education

Nutrition education is an important component in creating a healthy eating environment. Through evidence-based nutrition education, OST programs can teach youth to exchange the high-calorie foods and beverages they choose today for healthier alternatives, both now and in the future.

A good nutrition education curriculum:

- Is evidence-based and reflects sound nutrition science
- Does not support a particular food industry or food sector
- Is delivered by qualified personnel

In addition, OST programs can help youth try out new foods and beverages through taste-testing and hands-on activities. The afterschool meal and snack programs require educational and enrichment activities; most summer food sites also offer programming. OST providers can conduct nutrition education as a standalone program or

weave it into other enrichment activities, such as arts and crafts, math and literacy, or life skills like cooking.

### Success Stories From the Field

As the Alliance for a Healthier Generation works across the country, it collects success stories from sites implementing the HEPA standards. The OST programs profiled below are examples of sites that are using the standards to strengthen

healthy eating and physical activity practices.

**SquashSmarts**, an OST provider in Philadelphia that teaches children to play squash, has seen firsthand how to move easily from theory to realization. Given its emphasis on physical activity, SquashSmarts decided to use the HEPA standards to promote healthy eating. SquashSmarts is also developing its own evidence-based nutrition education program, NUTRIkeys. The curriculum's nine steps combine themed group lessons with individual projects. When youth complete a lesson and project, they receive one of the letters spelling NUTRIkeys. Staff reported that, during the first implementation of the first lesson, "The 99 Healthiest Foods," students discussed the healthfulness of their favorite foods. After they completed a gallery walk displaying the 99 healthi-

Through evidence-based nutrition education, OST programs can teach youth to exchange the high-calorie foods and beverages they choose today for healthier alternatives, both now and in the future.

est foods in a squash court, they enjoyed a quiz game to learn more. For the first project, students researched specific guidelines on any three of the 99 foods. SquashSmarts staff can already see the success of this curriculum; youth asked to play “The 99 Healthiest Foods” again the following day. Further, the students remembered a substantial number of the foods when asked during a team meeting days later.

**Boys & Girls Club of Philadelphia at Wilson Park** is involving youth in family and community engagement. The club elicited ideas from youth for sharing information about healthy eating and fitness. Youth members proposed creating a Facebook page to reach youth and families. They created a “Like” campaign for the club’s Facebook page and suggested using Twitter and Instagram hashtags to grow their community audience. Additionally, the Facebook page has maintained youth engagement; youth involved in the program have continued to post and share information with the community.

**Vietnamese Initiatives in Economic Training (VIET)** in New Orleans made it a priority to supply youth with healthy meals during its six-week summer program. After researching local resources, VIET applied to be a summer food site through the Second Harvest Food Bank, which acts as a sponsor for the federal Summer Food Service Program. Initially, VIET staff were concerned about the amount of paperwork required to apply for the program, but they completed the process with the support of a contact at Second Harvest and qualified for the feeding program. VIET is now able to provide nutritious, healthy meals daily for every camper in its summer program.

**Sacramento START** (Students Today Achieving Results for Tomorrow), an OST provider in Sacramento County, California, is committed to implementing the HEPA standards. Three START sites constructed concrete action plans to support their wellness goals. Youth have cultivated new fruit and vegetable gardens, visited local farms and grocery stores, and developed mini-farmers markets where they learn about local and sustainable healthy foods. Youth and their families now have greater access to fresh produce, and START staff have seen kids’ fruit and vegetable consumption increase during snack and supper times (which are funded by federal child nutrition programs). To sustain these healthy behaviors, Sacramento START implemented a six-week series of nutrition education classes for families. Because of the enthusiastic feedback the program has received from children and families, it plans to apply these exemplary practices in all its sites, benefiting more than 4,000 youth.

## Building Momentum Through Youth Engagement

These success stories reveal tremendous opportunities to engage youth in obesity and hunger prevention. Consider the story of a teenager named Ethan, from Menlo Park, California. Ethan is an alumnus of the Alliance for a Healthier Generation Youth Advisory Board, a group of enthusiastic young people from across the country who are encouraging their peers to eat better and stay active. During his tenure on the Youth Advisory Board, Ethan decided to champion nutrition education and facilitate a healthy-living course called empowerME4Life (Alliance for a Healthier Generation, 2013) with younger students. Ethan also used his interest in technology to create videos that encouraged youth to share the importance of eating fruits and vegetables and of drinking water, 100 percent fruit juice, and low-fat milk.

Organizations seeking to drive the movement toward nutrition education in OST should consider how to find their Ethan and integrate youth leadership into their implementation of the HEPA standards. They might consider the following questions:

- How can we partner with young people to build healthier places and engage youth in making healthy decisions?
- How can we involve youth in program design and implementation?
- What logistical issues should we address, such as providing healthy meals and snacks through the federal children nutrition programs?
- How can we position young people to tell their stories and build momentum?

This work can be challenging, so organizations should seek out collaborators and other networks in their community that promote positive youth development. It’s important to celebrate every small success and focus on continuous improvement. The National Afterschool Association HEPA standards provide a comprehensive framework, and youth engagement provides a powerful mechanism for building healthier communities.

## References

- Alliance for a Healthier Generation. (2013). *EmpowerME4Life*. Retrieved from [https://www.healthier-generation.org/\\_asset/nkt7sr/em4Life\\_2013\\_03.pdf](https://www.healthier-generation.org/_asset/nkt7sr/em4Life_2013_03.pdf)
- Bethell, C., Simpson, L., Stumbo, S., Carle, A. C., & Gombojav, N. (2010). National, state, and local disparities in childhood obesity. *Health Affairs*, 29(3), 347–356.
- Coleman-Jensen, A., Nord, M., & Singh, A. (2013, September). *Household food security in the United States in 2012* (Economic Research Report No. ERR-155). Washington, DC: U.S. Dept. of Agriculture, Economic Research Service.
- Eisenmann, J. C., Gundersen, C., Lohman, B. J., Garasky, S., & Stewart, S. D. (2011). Is food insecurity related to overweight and obesity in children and adolescents? A summary of studies, 1995–2009. *Obesity Reviews*, 12(5), e73–e83.
- Kumanyika, S., & Grier, S. (2006). Targeting interventions for ethnic minority and low-income populations. *Future of Children*, 16(1), 187–207.
- Larson, N. I., Story, M. T., & Nelson, M. C. (2009). Neighborhood environments: Disparities in access to healthy foods in the U.S. *American Journal of Preventive Medicine*, 36(1), 74–81.
- Mustillo, S., Worthman, C., Erkanli, A., Keeler, G., Angold, A., & Costello, E. J. (2003). Obesity and psychiatric disorder: Developmental trajectories. *Pediatrics*, 111(4, Part 1), 851–859.
- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2012). Prevalence of obesity and trends in body mass index among U.S. children and adolescents, 1999–2010. *Journal of the American Medical Association*, 307(5), 483–490.
- Powell, L. M., Slater, S., & Chaloupka, F. J. (2004). The relationship between community physical activity settings and race, ethnicity, and socioeconomic status. *Evidence-Based Preventive Medicine*, 1(2), 135–144.
- Singh, G. K., Siahpush, M., & Kogan, M. D. (2010). Rising social inequalities in US childhood obesity, 2003–2007. *Annals of Epidemiology*, 20(1), 40–52.
- Smith, C., & Richards, R. (2008). Dietary intake, overweight status, and perceptions of food insecurity among homeless Minnesotan youth. *American Journal of Human Biology*, 20(5), 550–563.
- Townsend, M. & Melgar-Quinonez, H. (2003). Hunger, food insecurity, and child obesity. *Food Assistance and Nutrition Research Report*, 38. Washington, DC: U.S. Department of Agriculture, Economic Research Service.
- White House Task Force on Childhood Obesity. (2010, May). *Solving the problem of childhood obesity within a generation* [Report to the President]. Retrieved from [http://www.letsmove.gov/sites/letsmove.gov/files/TaskForce\\_on\\_Childhood\\_Obesity\\_May2010\\_FullReport.pdf](http://www.letsmove.gov/sites/letsmove.gov/files/TaskForce_on_Childhood_Obesity_May2010_FullReport.pdf)
- Wiecha, J., Gannett, E., Hall, G., & Roth, B. (n.d.). [Untitled document on healthy eating and physical activity standards]. Retrieved from <http://naaweb.org/images/HEPAStandards8-4-11final.pdf>