



Expanding **minds** and Opportunities

Leveraging

the Power of Afterschool and Summer Learning for Student Success

This article is an excerpt from the groundbreaking book, ***Expanding Minds and Opportunities: Leveraging the Power of Afterschool and Summer Learning for Student Success***. This landmark compendium, edited by Terry K. Peterson, PhD, is composed of nearly 70 research studies, reports, essays, and commentaries by more than 100 researchers, educators, community leaders, policy makers, and practitioners.

Collectively, these writings boldly state that there is now a solid base of research and best practices clearly showing that quality afterschool and summer learning programs—including 21st Century Community Learning Centers—make a positive difference for students, families, schools, and communities.

Together, the collection of articles demonstrates the power of quality expanded learning opportunities to:

- **promote student success and college and career readiness;**
- **build youth assets such as character, resilience, and wellness;**
- **foster partnerships that maximize resources and build community ties; and**
- **engage families in their children's learning in meaningful ways.**

For information on how to order the full book, download sections and individual articles, or explore the topic areas, visit www.expandinglearning.org/expandingminds.

About the Expanded Learning and Afterschool Project

The Expanded Learning and Afterschool Project is a 50-state initiative harnessing the power of networks and leaders to help schools and communities leverage the time beyond school to accelerate student achievement. A partnership of funders led by the C.S. Mott Foundation support the Expanded Learning and Afterschool Project. More information about the book and the project, as well as additional resources, can be found at www.expandinglearning.org.

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Creating Healthier Environments: Strategies and Examples for Afterschool and Summer Programs, Including 21st Century Community Learning Centers

Afterschool and summer programs, especially those supported by the federal 21st Century Community Learning Centers initiative, can play an important role in improving the health and nutritional well-being of our nation's children. Too many children are not at a healthy weight—one-third of school children in our country are overweight or obese (Ogden, Carrol, Kit, & Flegal, (2012). Too many also experience food insecurity—one-fifth of all children live in households that are struggling to put food on the table (Coleman-Jensen, Nord, Andrews, & Carlson, (2011).

As will be discussed below, obesity and hunger have a negative impact on student achievement. There are, however, accessible and affordable strategies to address these problems that are well suited to the design of afterschool and summer programs. Implementing these strategies helps support the broader goal of many afterschool and summer programs, especially those supported by the 21st Century Community Learning Centers initiative, to improve student achievement among children attending high-poverty schools.

The negative impact of obesity and hunger on student achievement is well documented. Children who are overweight or obese have poorer academic performance, more behavioral problems, and higher rates of school absenteeism (Bethell, Simpson, Stumbo, Carle, & Gombojav, 2010; Krukowski et al., 2009; Taras & Potts-Datema, 2005; BeLue, Francis, & Colaco, 2009; Geier et al., 2007; Mustillo et al., 2003). Children experiencing hunger have lower math scores and are more likely to repeat a grade (Alaimo, Olson, & Frongillo, 2001). They are more likely to be hyperactive, absent, and tardy, and more likely to display behavioral and attention problems more frequently than other children (Murphy et al., 1998).

Some of the children attending 21st Century Community Learning Centers programs and similar programs are likely to be experiencing both obesity and food insecurity (that is, the inability to afford and/or access enough nutritious food for a healthful life). Obesity negatively affects both males and females, as well as all racial and age groups, but low-income children and food-insecure children may be at even greater risk (Eisenmann, Gundersen, Lohman, Garasky, & Stewart, 2011; Singh, Saipush, & Kogan, 2010; Townsend & Melgar-Quinonez, 2003). Child obesity is linked to limited access to healthy and affordable foods, limited opportunities for physical activity, greater availability of fast food restaurants (especially near schools), and greater exposure to food-related marketing (Larson, Story, & Nelson, 2009; Powell, Slater, & Chaloupka, 2004; Kumanyika & Grier, 2006). Those who are food insecure and suffer periods of even moderate deprivation may also overeat when food does become available, resulting in chronic ups and downs in food intake that can contribute to weight gain (Smith & Richards, 2008).

Strategies to Reduce Hunger and Combat Obesity

The key strategies that afterschool and summer programs can use to combat obesity are to serve healthy meals and snacks, improve the nutritional and physical environment, offer nutrition education, and provide physical activity. Similarly, the key strategy to reducing hunger is to provide children with the nutritious meals and snacks that their bodies desperately need, using the federal funding that is available through the afterschool and summer nutrition programs. These strategies, discussed below, ensure that children can continue learning throughout the afternoon or for the duration of a summer program. These strategies also provide an additional sustainable funding source for local 21st Century Community Learning Centers programs and ease the financial burden on struggling families' resources so that their food dollars can stretch further.

- **Serving healthy meals and snacks.** *Nutrition research suggests the importance of afterschool and summer programs for obesity prevention. For example, children of mothers working nontraditional hours are at greater risk of becoming overweight and experiencing obesity (Miller & Han, 2008). This supports the need to provide afterschool snacks and suppers to children, especially those from working families. During the summertime, children are more vulnerable to rapid gains in body mass index (BMI), as well as food insecurity, because many of them do not have access to the good nutrition provided by school meal programs available during the school year (von Hippel, Powell, Downey, & Rowland, 2007; Nord & Romig, 2006).*

The key strategies that afterschool and summer programs can use to combat obesity are to serve healthy meals and snacks, improve the nutritional and physical environment, offer nutrition education, and provide physical activity.

Afterschool and summer programs should therefore serve meals and snacks that include low-fat milk, fruits and vegetables, lean proteins, and whole grains, and they should make water freely available during the program. Federal dollars are accessible to 21st Century Community Learning Centers and other afterschool and summer learning programs to enable them to serve nutritious meals and snacks to children. Specifically, the Afterschool Meal and Snack Programs¹ and the Summer Nutrition Programs² provide funding to purchase food, freeing up resources that can be redirected to support staffing or program activities. Research reveals that on days when school-age children eat federally funded supper at an afterschool program, they have a higher daily intake of fruits, vegetables, milk, and key nutrients such as calcium, vitamin A, and folate, compared to days that they do not (Plante & Bruening, 2004).

- **Improving the nutritional and physical environment.** *Afterschool and summer programs should take a comprehensive approach to creating healthier out-of-school-time environments. For example, the Alhambra Unified School District in California provides monthly staff trainings on fruits and vegetables. This training is supported by weekly meetings of cooking clubs that provide staff with hands-on learning opportunities. The district also encourages staff wellness by sponsoring activities, including health screenings at professional development trainings for out-of-school-time staff, onsite fitness activities (such as Zumba, walking clubs, yoga, etc.), and promoting physical activity opportunities in the community (for example, staff participation in 5K races, free passes to fitness centers).*

Staff wellness programs not only support employees individually, they benefit students as well and contribute to overall program success. Potential benefits include increased employee retention, improved employee morale, the presence of more healthy adult role models for students, and a more positive community image for program sites.

- **Offering nutrition education and/or physical activity.** *Afterschool and summer programs can offer evidence-based nutrition education classes that are delivered by qualified personnel. Black's Mill Elementary School in Dawsonville, Georgia, for example, implemented an eight-session healthy living curriculum called empowerME4Life to teach children how to eat better and move more. The site has developed a partnership with its local American Taekwondo Association. A representative from the association comes to the site to lead physical activity. Another program of note is that of the Genesee Intermediate School District in Michigan, which offers regular nutrition education and also coordinates a school garden program. In addition to eating a healthy snack after school, children take fresh produce back to their homes.*

1. The Child and Adult Care Food Program provides funding to serve meals and/or snacks at 21st CCLCs and other afterschool programs that are located in areas where at least half of the children are qualified to receive free or reduced-price school meals. Programs that are school-sponsored also can receive federal funding for snacks through the National School Lunch Program.

2. The Summer Food Service Program and the National School Lunch Program provide funding to serve meals and snacks during the summer to children at 21st CCLCs or other sites that are located in areas where at least half of the children are eligible to receive free or reduced-price school meals, that serve primarily low-income children, or that serve primarily migrant children.

Looking Ahead: Healthy Out-of-School Time

One of the most exciting recent developments in efforts to improve nutrition and health in afterschool and summer programs is the promulgation of a set of *Standards for Healthy Eating and Physical Activity*³ by the Healthy Out-of-School Time (HOST) Coalition, a national coalition of leading organizations in the fields of out-of-school time and health and nutrition. The Alliance for a Healthier Generation and the Food Research Action Center provided expertise and guidance to the coalition.

Evidence-based standards have now been crafted for afterschool programs around physical activity, nutrition, and nutrition education. These new program models and standards, coupled with additional funding for programs such as the federal afterschool meal program, have given communities new tools in the quest to keep our kids healthy for life.

The vision for this coalition is to foster health and well-being practices in afterschool programs nationwide, using science-based standards for healthy eating, physical activity, screen time, and social supports for these behaviors including staff, family and child engagement. The evidence-based standards developed by the HOST Coalition, and adopted by the National Afterschool Association, provide an important roadmap for afterschool and summer programs, especially 21st Century Community Learning Centers programs, to address the health and nutritional needs of the children they serve.

Over the past 15 years, funding from the 21st Century Community Learning Centers initiative and other afterschool sources has created a new space and extra time for caring adults to work with children and youth. It has created what some have called a “new neighborhood” of supports for our children. At the same time this new space has grown across America, concerns have grown about children’s health, particularly obesity and hunger. Afterschool and summer programs have risen to this challenge by developing new program approaches that focus on healthy activities and nutrition. Evidence-based standards have now been crafted for afterschool programs around physical activity, nutrition, and nutrition education. These new program models and standards, coupled with additional funding for programs such as the federal afterschool meal program, have given communities new tools in the quest to keep our kids healthy for life. Those tools are now being used in thousands of communities across America. Yet, too many afterschool and summer programs are still not taking full advantage of these new tools and resources that are increasingly available to them to support healthier lifestyles. They could and should actively seek out those in their communities who have an

interest in improving children’s health and the resources to do so. Conversely, others who are concerned about children’s health should assertively reach out to these programs to expand and improve them with healthy eating and healthy activities components. The health of our children—and the health of nation’s future—are at stake.

3. <http://www.naaweb.org/downloads/resources/HEPAStandards8-4-11final.pdf>

For More Information

Alliance for a Healthier Generation, www.healthiergeneration.org, resources for schools, out-of-school time programs, communities, families, doctors and industry on ways to work together to address one of the nation's leading public health threats - childhood obesity.

EmpowerME4Life, www.healthiergeneration.org/teens, a healthy living curriculum from the Alliance for a Healthier Generation - equipping kids with new attitudes, skills and knowledge about eating better and moving more - for life.

Food Research and Action Center, www.frac.org, information on how to participate in the afterschool and summer nutrition programs.

National Institute on Out-of-School Time HOST Coalition, <http://www.niost.org/HOST-Program/>, resources for Healthy Out-of-School Time.

Afterschool Nutrition in Washington, DC: An Overview of the District's Accomplishments and Opportunities for Growth, http://www.dchunger.org/pdf/afterschool_issue_brief.pdf, an in-depth analysis of the Afterschool Meal Program operated by the District of Columbia Public School's Office of Food and Nutrition Services.

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REFERENCES

Alaimo, K., Olson, C. M., Frongillo, E. A., Jr. (2001). Food insufficiency and American school-aged children's cognitive, academic and psychosocial development. *Pediatrics*, 108, 44-53.

BeLue, R., Francis, L. A., & Colaco, B. (2009). Mental health problems and overweight in a nationally representative sample of adolescents: effects of race and ethnicity. *Pediatrics*, 123, 697-702.

Bethell, C., Simpson, L., Stumbo, S., Carle, A. C., & Gombojav, N. (2010). National, state, and local disparities in childhood obesity. *Health Affairs*, 29, 347-356.

Coleman-Jensen, A., Nord, M., Andrews, M., & Carlson, S. (2011). *Household food security in the United States in 2010* (ERR-125). Retrieved from <http://www.ers.usda.gov/publications/err-economic-research-report/err125.aspx>

- 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*(Suppl.), e73–e83.
- Geier, A. B., Foster, G. D., Womble, L. G., McLaughlin, J., Borradaile, K. E., Nachmani, J., Sherman, S., Kumanyika, S., & Shults, J. (2007). The relationship between relative weight and school attendance among elementary schoolchildren. *Obesity*, *15*, 2157–2161.
- Krukowski, R. A., Smith West, D., Philyaw Perez, A., Bursac, Z., Phillips, M. M., & Raczynski, J. M. (2009). Overweight children, weight-based teasing and academic performance. *International Journal of Pediatric Obesity*, *4*, 274–280.
- 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*, 74–81.
- Miller, D. P., & Han, W. J. (2008). Maternal nonstandard work schedules and adolescent overweight. *American Journal of Public Health*, *98*, 1495–1502.
- Murphy, J. M., Wehler, C. A., Pagano, M. E., Little, M., Kleinman, R. F., Jellinek, M. S. (1998). Relationship between hunger and psychosocial functioning in low income American children. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*, 163–170.
- 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.
- Nord, M., & Romig, K. (2006). Hunger in the summer: Seasonal food insecurity and the National School Lunch and Summer Food Service programs. *Journal of Children and Poverty*, *12*, 141–158.
- Ogden, C. L., Carroll, M. D., Kit, B. K., & Flegal, K. M. (2012). Prevalence of obesity and trends in body mass index among US children and adolescents, 1999–2010. *Journal of the American Medical Association*, *307*, 483–490.
- Plante, M. L. K., & Bruening, K. S. (2004). Supper meal improves diets of children at nutritional risk [Poster session abstract]. *Journal of the American Dietetic Association*, *104*(Suppl. 2), 42.
- 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*, 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*, 550–563.
- Taras, H., & Potts-Datema, W. (2005). Obesity and student performance at school. *Journal of School Health*, *75*, 291–295.
- 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.
- von Hippel, P. T., Powell, B., Downey, D. B., & Rowland, N. J. (2007). The effect of school on overweight in childhood: gain in body mass index during the school year and during summer vacation. *American Journal of Public Health*, *97*, 696–702.
- Wiecha, J., Gannett, E., Hall, G., & Roth, B. (n.d.). (*Standards for health eating and physical activity*). Retrieved from National Afterschool Association website: <http://www.naaweb.org/downloads/resources/HEPAStandards8-4-11final.pdf>