

## POSITION STATEMENT:

## Curbing Summertime Weight Gain Among America's Youth

(FEBRUARY 2017) Amy Bohnert, PhD, Loyola University, Chicago, IL; Nicole Zarrett, PhD, University of South Carolina, Columbia, SC; Michael W. Beets, PhD, University of South Carolina, Columbia, SC; Georgia Hall, PhD, National Institute on Out-of-School Time, Wellesley Centers for Women, Wellesley, MA; Joanna Buscemi, PhD, DePaul University, Chicago, IL; Amy Heard, Loyola University, Chicago, IL; and Russell Pate, PhD, University of South Carolina, Columbia, SC

The Society of Behavioral Medicine recommends school officials, community leaders, and legislators adopt policies that enhance youth summer programming to minimize the amount of weight children gain over the summer. Policies should encourage school-community partnerships, family outreach, joint use of facilities, and adherence to healthy eating and physical activity standards. Policies supporting high-quality, affordable summertime programming that leverages existing school and community resources could cost-effectively reverse the obesity epidemic among America's youth.



The Society of Behavioral Medicine recommends adoption of school district, state, and federal policies that minimize weight gain among youth over the summertime, particularly for low-income, minority, school-age youth who appear to be at greatest risk. Policies should facilitate (1) partnerships between school districts and community organizations to provide affordable summertime programming; (2) strategic efforts by schools and communities to encourage families to enroll in and attend summertime programming, via the creation of community-wide summertime offerings offices; (3) adoption of joint use/shared use agreements to promote use of indoor and outdoor school facilities to provide affordable programming during the summer months; and (4) implementation of strategies that help summer programs achieve the Healthy Eating and Physical Activity (HEPA) standards, which have been endorsed by the Healthy Out-of-School Time (HOST) coalition. Research is needed to elucidate key mechanisms by which involvement in structured programming may reduce weight gain over the summer months.

### SUMMERTIME WEIGHT GAIN

Efforts to ameliorate childhood obesity must target periods of time when youth are most vulnerable. School-age youth gain weight at an accelerated rate during summer months compared to the rest of the calendar year.<sup>1-3</sup> School-year investments that address obesity are lost and often worsen beyond pre-intervention levels over the summer months.<sup>4-7</sup>

Accumulating evidence suggests providing youth with structured programming during the summer months—in the form of camps, community programming, and summer school summer learning and enrichment programs—may be a compelling solution to address accelerated weight gain during summer.<sup>8-13</sup> More research is needed, particularly among school-age youth, to understand how and why involvement in structured summertime programming reduces weight gain.<sup>14-16</sup>

### HEALTHY EATING AND PHYSICAL ACTIVITY STANDARDS

HEPA standards were endorsed in 2011 by the HOST coalition, which includes organizations such as the National Afterschool Association, American Camp Association, National Summer Learning Association, and the National Recreation and Parks Association. HEPA standards provide guidelines for after-school and summer programs to ensure youth meet the U.S. Department of Health and Human Services 2008 national recommendations regarding physical activity and nutrition.<sup>17</sup>

Research on HEPA standards suggests they are not often being met due to barriers in infrastructure (e.g., limited budgets, lack of adequate recreational spaces, added expense of fruit and vegetables) and staffing (e.g., motivation, limited training, high rates of turnover).<sup>16, 18-21</sup> Given these challenges, program officials and staff need more guidance and training on how to cost-effectively implement strategies to achieve HEPA standards.

## POLICY RECOMMENDATIONS

The implementation of four policies will prioritize summertime as a key context in which youth weight gain is addressed.

- \* **Enhance existing offerings of high-quality, structured summertime programs by leveraging partnerships between school districts and community organizations to offer affordable summertime programming.** The American Recovery and Reinvestment Act of 2009 provided a \$10 billion increase in Title I funds that included the development of new summer activities.<sup>22</sup> With only 14 million youth annually enrolled in summer programming, there are far too few families participating in summer programming, with many families indicating they cannot afford to enroll their children. Additional funds and new partnerships could be leveraged to subsidize programming fees generated via targeted education taxes. More work needs to be done to garner support for such measures.<sup>23</sup>
- \* **Schools and communities need to work together to create a summertime offerings office.** Too often parents are unaware of various options for summertime programming. Having coordinators who work out of a community-school summertime offerings office would reinforce the importance of summertime programming and would provide logistical support to assist families in identifying summer programming that meets their needs.
- \* **Adopt joint use/shared use agreements between schools and communities** to allow for the provision of affordable summertime programming utilizing existing indoor and outdoor school facilities during the summer months.
- \* **Summertime programs need more support and incentives to implement strategies to help them achieve HEPA standards** endorsed by the National Afterschool Association.<sup>24</sup> Summer programs need additional training and would benefit from financial support provided via the private or public sector to take on achieving HEPA standards. In particular, strategies that incentivize programs to achieve these standards may be useful in establishing new practices at the program level.

## ENDORSEMENT



## ACKNOWLEDGEMENTS

The authors wish to gratefully acknowledge the expert review provided by the Society of Behavioral Medicine's Health Policy Committee, Health Policy Council, and Obesity and Eating Disorders Special Interest Group.

## REFERENCES

- 1 Moreno JP, Johnston CA, Woehler D. Changes in weight over the school year and summer vacation: Results of a 5-year longitudinal study. *J Sch Health*. 2013;83(7):473-477. doi:10.1111/josh.12054.
- 2 Von Hippel PT, Powell B, Downey DB, Rowland NJ. The effect of school on overweight in childhood: Gain in body mass index during the school year and during summer vacation. *Am J Public Health*. 2007;97(4):696-702. doi:10.2105/AJPH.2005.080754.
- 3 Von Hippel PT, Workman J. From kindergarten through second grade, U.S. children's obesity prevalence grows only during summer vacations. *Obesity*. 2016;24(11):2296-2300. doi:10.1002/oby.21613.
- 4 Carrel AL, Clark RR, Peterson S, Eickhoff J, Allen DB. School-based fitness changes are lost during the summer vacation. *Arch Pediatr Adolesc Med*. 2007;161(6):561. doi:10.1001/archpedi.161.6.561.
- 5 Gillis L, McDowell M, Bar-Or O. Relationship between summer vacation weight gain and lack of success in a pediatric weight control program. *Eat Behav*. 2005;6(2):137-143. doi:10.1016/j.eatbeh.2004.08.002.
- 6 Gutin B, Yin Z, Johnson M, Barbeau P. Preliminary findings of the effect of a 3-year after-school physical activity intervention on fitness and body fat: The Medical College of Georgia FitKid Project. *Int J Pediatr Obes*. 2008;3(sup1):3-9. doi:10.1080/17477160801896457.
- 7 Yin Z, Moore JB, Johnson MH, Vernon MM, Gutin B. The impact of a 3-year after-school obesity prevention program in elementary school children. *Child Obes*. 2012;8(1):60-70. doi:10.1089/chi.2011.0085.
- 8 Bohnert AM, Ward AK, Burdette KA, Sifton RL, Dugas LR. Active summers matter: Evaluation of a community-based summertime program targeting obesogenic behaviors of low-income, ethnic minority girls. *New Dir Youth Dev*. 2014;2014(143):133-150. doi:10.1002/yd.20107.
- 9 Mahoney JL. Adolescent summer care arrangements and risk for obesity the following school year. *J Adolesc*. 2011;34(4):737-749. doi:10.1016/j.adolescence.2010.08.010.
- 10 Parente ME, Sheppard A, Mahoney JL. Parental knowledge as a mediator of the relation between adolescent summer care arrangement configurations and adjustment the following school year. *Appl Dev Sci*. 2012;16(2):84-97. doi:10.1080/10888691.2012.667341.
- 11 Park K-S, Lee M-G. Effects of summer school participation and psychosocial outcomes on changes in body composition and physical fitness during summer break. *J Exerc Nutr Biochem*. 2015;19(2):81-90. doi:10.5717/jenb.2015.15052005.
- 12 Tovar A, Lividini K, Economos CD, Folta S, Goldberg J, Must A. School's out: What are urban children doing? The Summer Activity Study of Somerville Youth (SASSY). *BMC Pediatr*. 2010;10(1):16. doi:10.1186/1471-2431-10-16.
- 13 U.S. Department of Health and Human Services. *Physical Activity Guidelines for Americans Midcourse Report: Strategies to Increase Physical Activity among Youth*. Washington, DC: US Department of Health and Human Services; 2012.
- 14 Tilley F, Beets MW, Jones S, Turner-McGrievy G. Evaluation of compliance to national nutrition policies in summer day camps. *Public Health Nutr*. 2015;18(9):1620-1625. doi:10.1017/S1368980014001190.
- 15 Bohnert AM, Zarrett N, Heard AM. The role of summertime in child obesity: Risks and opportunities. In: Alexander K, Pitcock S, Boulay M, eds. *Summer Learning and Summer Learning Loss: Theory, Research and Practice*. New York: Teacher's College Press; 2016.
- 16 Zarrett N, Sorensen C, Skiles B. Environmental and social-motivational contextual factors related to youth physical activity: Systematic observations of summer day camps. *Int J Behav Nutr Phys Act*. 2013;10:63. doi:10.1186/1479-5868-10-63.
- 17 Wiecha JL, Hall G, Gannett E, Roth B. National AfterSchool Association standards for healthy eating and physical activity in out-of-school time programs. 2011.
- 18 Beets MW, Tilley F, Weaver RG, Turner-McGrievy G, Moore JB, Webster C. From policy to practice: Addressing snack quality, consumption, and price in after-school programs. *J Nutr Educ Behav*. 2014;46(5):384-389. doi:10.1016/j.jneb.2013.10.005.
- 19 Hickerson BD, Henderson KA. Opportunities for promoting youth physical activity: An examination of youth summer camps. *J Phys Act Health*. 2013;11:199-205.
- 20 Zarrett N, Skiles B, Sorensen C. The camp setting for promoting youth physical activity: Systematic observations of summer day camps. *J Youth Dev*. 2012;7(3).
- 21 Weaver RG, Beets MW, Webster C, Huberty J. System for observing staff promotion of activity and nutrition (SOSPAN). *J Phys Act Health*. 2014;11:173-185.
- 22 *American Recovery and Reinvestment Act of 2009*. H.R.1.
- 23 Mead LM. Only connect: Why government often ignores research. *Policy Sci*. 2015;48(2):257-272. doi:10.1007/s11077-015-9216-y.
- 24 Silwa SA, Sharma S, Dietz WH, Dolan PR, Nelson ME, Newman MB, Economos CD. Healthy kids out of school: Using mixed methods to develop principles for promoting healthy eating and physical activity in out-of-school settings in the United States. *Prevent Chronic Dis*. 2014; 11:140207. DOI: <http://dx.doi.org/10.5888/pcd11.140207>.