

Society of Behavioral Medicine Position Statement: **Early Care and Education (ECE) Policies Can Impact Obesity Prevention among Preschool Aged Children***

(SEPTEMBER 2014) Joanna Buscemi, PhD, University of Illinois at Chicago; Katelyn Kanwischer, MS, Consortium to Lower Obesity in Chicago Children; Adam B. Becker, PhD, MPH, Northwestern University; Dianne S. Ward, EdD, University of North Carolina; and Marian L. Fitzgibbon, PhD, University of Illinois at Chicago, on behalf of the Society of Behavioral Medicine Health Policy Committee**

The Society of Behavioral Medicine recommends that early care and education settings provide healthy foods in age-appropriate portions; increase physical activity during childcare hours to as close to 120 minutes per day as possible; decrease sedentary behavior to no more than 30 minutes at a time; and decrease entertainment screen time in childcare to less than 30 minutes weekly.

The Society of Behavioral Medicine recommends that early care and education settings provide healthy foods in age-appropriate portions; increase physical activity during childcare hours to as close to 120 minutes per day as possible; decrease sedentary behavior to no more than 30 minutes at a time; and decrease entertainment screen time in childcare to less than 30 minutes weekly.

Introduction

In the US, approximately 76% of children ages 3-5 attend early care and education (ECE).¹ ECE settings include preschools, childcare centers, day care homes/family homes, Head Start, and prekindergarten programs. Children of working parents spend nearly 40 hours per week in ECE.¹ ECE settings typically provide one to two meals and snacks on average per day,² and also provide opportunities to be physically active and reduce overall screen time. Given that nearly 23% of American children ages 2-5 years are overweight or obese,³ **ECE settings represent an opportunity for reducing and preventing obesity among young children.** Policies and regulations regarding nutrition, physical activity, and sedentary time in ECE can help to ensure that children stay healthy. However, many states' current policies do not adequately address obesity prevention. Ensuring that ECE settings provide healthy food and regular, structured physical activity can help establish long-term healthy habits.⁴⁻⁵

The Problems

Nutrition

Proper nutrition in early childhood can help to prevent obesity and promote healthy growth. ECE settings typically provide children with one to two meals per day and



snacks. The Child and Adult Care Food Program (CACFP) is a federal nutrition assistance program that provides reimbursement to ECEs for purchasing nutritious foods.⁶ Both federally-funded and private facilities serving low-income families can participate in CACFP. ECE settings participating in CACFP are only reimbursed for food items that comply with CACFP nutrition guidelines. These guidelines require the provision of fruits and/or vegetables, grains/breads, and meats/meat alternatives in age-appropriate portion sizes. Additional requirements include the following: milk must be low fat, fruit or vegetable juice must be 100% juice with no added sugar, and bread must be made from whole grain or enriched meal or flour (http://www.fns.usda.gov/sites/default/files/Child_Meals.pdf) Children attending ECE settings that comply with CACFP consume more nutritious diets than those who do not.⁷⁻⁹

Unfortunately, there are many ECE settings that do not participate in CACFP and are not required to follow CACFP guidelines. Additionally, monitoring of compliance with the guidelines varies significantly by state.^{4,10} Further, ECE settings participating in CACFP are allowed to provide foods that do not comply with guidelines as long as they are not seeking reimbursement for those foods. In 2012, the American Academy of Pediatrics (AAP), American Public Health Association, and National Resource Center for Health and Safety in Child Care and Early Education collaborated to develop guidelines to address obesity prevention in childcare settings.¹¹ In their report, they recommend that all ECE settings, regardless of funding source, provide preschool-aged children with foods and beverages that comply with CACFP standards.

Physical Activity

Physical activity is good for young children; it improves overall health and prevents obesity, in addition to promoting the development of motor skills.¹² The National Association for Sport and Physical Education recommends that preschool children engage in at least 60 minutes of structured physical activity and 60 minutes of unstructured physical activity daily.¹³ Caring for Our Children (CFOC) recommends that 3-6 year olds be allowed 90-120 minutes of overall physical activity per 8-hour day.¹¹ Activity levels of children attending ECE settings, however, are generally below these guidelines.¹⁴⁻¹⁶ Regulations for physical activity in ECE settings vary across states. On average, state ECE regulations only include one-third of the 17 physical activity standards recommended by CFOC.¹⁷ Larson and colleagues note that barriers to regular physical activity in ECE settings include inadequate outdoor play space, sedentary staff who do not promote physical activity, and withholding physical activity time as punishment.⁴

Screen Time

The AAP discourages screen time (TV, computer, video games, cell phone, etc.) for children under 2 years.¹⁸ The AAP recommends that children older than 2 years limit their screen time to less than 2 hours per day.¹⁸ CFOC recommends that ECE settings limit screen time to 30 minutes per week during childcare hours.¹¹ Among children aged 2-5, screen time can interfere with physical activity time,¹⁹ which may contribute to weight gain. Television viewing, in particular, can expose children to advertisements that promote unhealthy foods, and research shows that such ads influence children's food preferences.^{8, 20} Removing or limiting screen time may not in and of itself decrease sedentary behavior.²¹⁻²² Thus, exposure to food marketing may be a more important rationale for limiting specific types of screen-based activity than the sedentary nature of screen time in childcare in general. The National Association for the Education of Young Children advises that quality technology and screen time can enhance learning and relationships, though they should not replace exploration, physical activity, creative play, or social interactions.²³ Therefore, specific types of screen time may be more desirable than limiting all screen time in general. Similar to regulations for nutrition and physical activity, the amount of screen time provided by ECE settings is poorly monitored in most states.

Let's Move! Child Care: Strategies for Change

ECE interventions to improve nutrition, physical activity, and limit screen time are a key component of Michelle Obama's Let's Move! obesity prevention initiative. Specifically, the Let's Move! Child Care goals related to preschool children are to (1) serve fruits and vegetables at every meal, eat meals family style when possible, and avoid serving fried foods; (2) provide 1-2 hours of physical activity throughout the day; (3) limit screen time to no more than 30 minutes per week during childcare hours; and (4) provide water and avoid sugary drinks.

Spectrum of Opportunities for Obesity Prevention in Early Care and Education Settings



Figure 1: Spectrum of Opportunities

Let's Move! Child Care (<http://www.healthykidshealthyfuture.org/home/collaborate.html>) also includes a five-step process for state and local leaders to help them to implement strategies for obesity prevention in ECE settings. Figure 1 depicts the "Spectrum of Opportunities," or obesity prevention approaches, that leaders can use to address obesity across states and types of ECE settings. It is not necessary to pursue all of the opportunities to promote change, but it is suggested that multiple coordinated opportunities be pursued to improve ECE standards for diet, physical activity, and screen time.^{10, 23} The spectrum can serve as a guide to help leaders implement obesity prevention efforts in ECE settings:

1. Assess partnerships: Change requires the support of multiple stakeholders. Most states have ongoing obesity prevention initiatives already in place, so it is important to identify existing and potential stakeholders. Stakeholders may include state and local health departments, childcare agencies, CACFP sponsoring organizations, ECE providers, and parents of children in care.
2. Assess efforts to date: Identify previous or current prevention efforts and assess them.
3. Create a state profile: Use the state profile worksheet to determine how your state is doing in terms of meeting the CFOC guidelines.
4. Determine feasibility of options: Identify the gaps in policies and programs, and decide which gaps should be addressed first based on resources, priorities in your state, and timing.
5. Develop an action plan: Plan for first and next steps including timelines for completion of each step.

Let's Move! Child Care includes worksheets and relevant resources for each step (<http://www.healthykidshealthyfuture.org/home/collaborate.html>).

Summary and Recommendations

Childhood obesity is a significant public health concern. Most children in the United States spend between 30-40 hours a week in childcare settings, most of which are regu-

lated to some degree by state governments in terms of nutrition, physical activity, and screen time. Most children do not meet recommended guidelines in any of these areas associated with obesity, and the degree to which states monitor compliance varies. Stronger state regulations based on CFOC recommendations and enforcement of these regulations may reduce rates of childhood obesity. Let's Move! Child Care recommends a set of straightforward regulations addressing nutrition, physical activity, and screen time in ECE settings, and provides local and state leaders with a model and steps to implement obesity prevention initiatives. We recommend that policymakers refer to these steps to assess current state policies in ECE settings and to identify areas for improvement using the Spectrum of Opportunities for change (Figure 1).



Based on CFOC, CACFP, and Let's Move! Child Care recommendations for nutrition, physical activity, and screen time, SBM recommends that policymakers consider the following regulations for ECE settings:

- * Nutrition
 1. Provide healthy foods in age-appropriate portions during meals and snacks (see CACFP, CFOC, and Let's Move! guidelines).
- * Physical activity and sedentary screen time:
 2. Increase physical activity during childcare hours to help children obtain as close to 120 minutes per day as possible.
 3. Decrease sedentary behavior to no more than 30 minutes at a time.
 4. Decrease entertainment screen time in childcare to less than 30 minutes weekly.
 - a. Eliminate children's exposure to food and beverage marketing in childcare settings.
 - b. Educate childcare providers about how unhealthy foods and beverages are marketed through screen time (television, computer, educational media with food and beverage industry sponsors).

We also recommend that local and state officials monitor adherence to these regulations using Let's Move! Child Care or other more comprehensive assessment tools.²⁴

*SBM also acknowledges the importance of diet- and exercise-related policies in ECE settings caring for infants and toddlers. We have focused the scope of this brief specifically on preschool-aged children given the variations of policy recommendations depending on developmental level.

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

References

- 1 National Center for Education Statistics, "Early Childhood Program Participation Survey of the National Household Education Surveys Program (ECPP-NHES:2012)," available at <http://nces.ed.gov/programs/digest/d09/tables/dt09_044.asp> (last visited June 19, 2014).
- 2 Briley, M. & McAllister, M. Commentary: Nutrition and the child-care setting. *J Am Diet Assoc* 2011; 111(9): 1298-1300.
- 3 Ogden, C.L.C., M.D., Kit, B. K.; Flegal, K.M., *Prevalence of Childhood and Adult Obesity in the United States, 2011-2012. Journal of the American Medical Association* 2014; 311(8): 806-814.
- 4 Larson N, Ward DS, Neelon SB, Story M. What role can child-care settings play in obesity prevention? A review of the evidence and call for research efforts. *J Am Diet Assoc* 2011;111:1343-1362.
- 5 Potter, C.M. & Ulijaszek, S. Predicting adult obesity from measures in earlier life. *J Epidemiol Community Health* 2013; 67: 1032-1037.
- 6 U.S. Department of Agriculture, "Child and Adult Care Food Program," available at <<http://www.fns.usda.gov/cnd/care/>> (last visited July 11, 2014).
- 7 Crepinsek, M. K., and N. Burstein. Maternal Employment and Children's Nutrition: Volume II, Other Nutrition-Related Outcomes 2004; U.S. Department of Agriculture, Economic Research Service.
- 8 Institute of Medicine (IOM). 2011. Early Childhood Obesity Prevention Policies. Washington, DC: The National Academies Press.
- 9 Whaley, S., Gomez, J., Mallo, N., James, P., Fredericks, D., Abascal, P., Sharp, M., Chandran, K., & Hecht, K. (2008). It's 12 O'clock...What Are Our Preschoolers Eating for Lunch? An Assessment of Nutrition and the Nutrition Environment in Licensed Child Care in Los Angeles County. Irwindale, CA: Public Health Foundation Enterprises WIC Program, Child Care Food Program Roundtable and California Food Policy Advocates. Available at: http://www.cfpa.net/cacfp/gilbert_execsumm.pdf. Accessed July 11 2014.
- 10 Reynolds MA, Cotwright CJ, Polhamus B, Gertel-Rosenberg A., & Chang D. Obesity prevention in early care and education settings: successful initiatives across a spectrum of opportunities. *The Journal of Law Medicine and Ethics* 2013; 41 Suppl 2: 8-18.
- 11 American Academy of Pediatrics, American Public Health Association, and National Resource Center for Health and Safety in Child Care and Early Education. 2012. Preventing Childhood Obesity in Early Care and Education: Selected Standards from Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3rd Edition.http://nrckids.org/CFOC3/PDFVersion/preventing_obesity.pdf

- 12 Timmons BW, LeBlanc AG, Carson V, Gorber SC, Dillman C, Janssen I et al. Systematic review of physical activity and health in the early years (aged 0-4). *Appl Physiol Nutr Metab* 2012; 37: 773-792.
- 13 National Association for Sport and Physical Education Active Start: A Statement of Physical Activity Guidelines for Children from Birth to Age 5, 2nd Edition Sewickley, PA: American Alliance for Health, Physical Education, Recreation, and Dance; 2009.
- 14 Pate R, McIver K, Dowda M, Brown W, Addy C. Directly observed physical activity levels in preschool children. *J Sch Health*. 2008;78: 438-444.
- 15 Pate RR, Pfeiffer KA, Trost SG, Ziegler P, & Dowda M. Physical activity among children attending preschools. *Pediatrics* 2004; 114(5): 1258-1263.
- 16 Oliver M, Schofield GM, & Kolt GS. Physical activity in preschoolers: Understanding prevalence and measurement issues. *Sports Med* 2007; 37(12): 1045-1070.
- 17 Cradock A, O'Donnell E, Benjamin S, Walker E, Slining M. A review of state regulations to promote physical activity and safety on playgrounds in child care centers and family child care homes. *J Phys Act Health*. 2010;7(suppl):S108-S119.
- 18 American Academy of Pediatrics. *Media Use by Children Younger Than 2. Policy Statement* 2011.
- 19 US Department of Health and Human Services (HHS). 2010. *Healthy People 2020*. <http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=33>. Accessed March 27, 2014.
- 20 Story M, Kaphingst KM, Robinson-O'Brien R, Glanz K. Creating Healthy Food and Eating Environments: Policy and Environmental Approaches. *Annual Review of Public Health*. 2008. 29; 253-272.
- 21 Biddle SJ, Gorely T, Marshall SJ, Murdey I, & Cameron N. Physical activity and sedentary behaviours in youth: issues and controversies. *The Journal of the Royal Society for the Promotion of Health* 2004; 124(1), 29-33.
- 22 Sallis J, Prochaska J and Taylor W (2000) A review of correlates of physical activity of children and adolescents. *Medicine and Science in Sports and Exercise*; 32(5), 963-975.
- 23 Let's Move! Child Care. 2010. *Learn the Facts*. <http://www.letsmove.gov/learn-facts/epidemic-childhood-obesity>. Accessed April 16, 2014.
- 24 Ward DS, Hales D, Haverly K, Marks J, Benjamin S, Ball S, Trost SG. An Instrument to Assess the Obesogenic Environment of Child Care Centers. *American Journal of Health Behavior* 2008; 32(4):380-6.