

Policy Landscape and Recommendations for Obesity Prevention in Early Child Care Settings

Introduction

The American Heart Association advocates for strong obesity prevention programs and policies in early child care. This is an important environment for forming healthy habits around children's dietary intake, physical activity, screen time, and energy balance.¹ Child care providers are in a unique position to educate parents about the importance of healthy eating and physical activity, while also supporting a healthy environment for children to learn and grow. The 2012 National Household Education Survey reports that 60% of all U.S. children five years and younger not yet in kindergarten were in some form of non-parental care. Of those children, 56% were in a center-based child care program, making this an ideal setting for obesity interventions.² Over one million children are served by the federal Head Start programs every year, including children in every U.S. state and territory.³ This figure does not include the many children from infancy to age five who are in private and public day care and preschool programs. Furthermore, it has been reported that many children from low-income backgrounds consume 50% to 100% of their Recommended Dietary Allowances (RDA) in a child care setting.⁴ Reaching young children and their families is an essential strategy for primary prevention of obesity, cardiovascular disease, and its associated risk factors.

Globally, an estimated 43 million preschool aged children are overweight or obese, a 60% increase from 1990.⁵ In more recent years, nationally representative data have shown no significant change in obesity among youth, demonstrating obesity prevalence may be stabilizing.⁶ This could be due in part to large, broad scale nutrition and physical activity efforts. The Pediatric Nutrition Surveillance

System (PedNSS), a child-based public health surveillance system that described the nutritional status of low-income children, showed that the incidence of obesity in low-income children under five years old slightly decreased between 2009 and 2012.⁷ PedNSS has been discontinued by the CDC so there are gaps to fill in our surveillance of 0-5 year olds especially at the state and community level. Continued effort and improved surveillance is needed to ensure the downward momentum continues.

Research also shows that overweight five year olds are four times as likely as normal weight children to become obese moving into adolescence.⁸ This sets the stage for an unhealthy future for these children considering obesity generally tracks into adulthood.⁹ These findings illustrate why it is imperative to intervene in early childhood to prevent obesity and related cardiovascular disease risk factors.

Despite the importance of addressing obesity prevention in early child care, researchers know relatively little about either the nutritional or physical activity offerings in this setting. Research suggests the meals and snacks served may be lacking in nutritional quality and physical activity levels may be insufficient.¹⁰ Research has shown that preschool aged children consume too much sodium, saturated fat, and added sugar and have inadequate consumption of fruits, vegetables, and whole grains. Roughly 85% of preschoolers consume a sweetened beverage, dessert, or a sweet or salty snack each day.¹¹ The American Heart Association recommends a heart healthy diet that emphasizes fruits and vegetables, whole grains, low-fat dairy products, poultry, fish, legumes, non-tropical oils and nuts and limits intake of sodium, sweets, sugar-sweetened beverages and red meat.¹² Assuring that healthy foods are served in age-appropriate portion sizes is extremely important for overall health and effective dietary patterns. Because children's food preferences and practices originate in the first years of life, early dietary interventions may have immediate nutritional benefit and reduce chronic disease risk if these healthful habits are carried into adulthood.¹³

In general, sedentary behaviors are associated with higher body weight.¹⁴ One of the most common sedentary activities preschoolers participate in is screen time, such as viewing computers or television.¹⁵ In addition to reducing screen time, the American Heart Association recommends that

children participate in at least 60 minutes of enjoyable, moderate-intensity physical activities every day that are developmentally appropriate and varied.¹⁶ Given that the early years play a vital role in the development of health-related behaviors, early intervention around screen-viewing and physical activity is required to prevent sedentary behaviors from carrying into adolescence and adulthood.¹⁷

According to a comprehensive review by the Institute of Medicine (IOM), food advertising affects children's food choices, food purchase requests, diets, and health.¹⁸ Multiple studies have shown children's brand knowledge, in relation to food and beverage, is a significant predictor of their body mass index (BMI).¹⁹ Marketing and advertising of unhealthy products in child care settings can be seen in cognitive development books (e.g., candy counting activity pages), toys in play areas (e.g., fast food happy meals), posters, and vending machines. Advertising of high-calorie, low nutrient-dense foods could contribute to higher consumption of those foods, therefore, should not be allowed in child care settings.

Controlling and reversing the childhood obesity epidemic in early childhood will require comprehensive and multifaceted programs and policies, with caregivers (parents, guardians, child care providers) playing a critical part. They play a direct role in a child's eating pattern by helping shape their behaviors, attitudes, and feeding styles around food and beverages.²⁰ They are important role models and are largely responsible for physical activity opportunities, the type of food offered to young children, the portion sizes presented, and the emotional environment in which food is eaten.²¹ There is widespread agreement that involving caregivers is critical in childhood obesity prevention to ensure that children are developing healthful habits from an early age.²²

The Policy Landscape

With the exception of the federal Head Start program, the licensing of child care facilities is generally regulated by state laws and their rules can vary substantially. The Public Health Law Center conducted a 50-state analysis of child care licensing laws and regulation through 2012. Some states have updated their statutes since this analysis, but the analysis provides a helpful baseline for advocates who want to address nutrition and physical activity standards in early child care. There is a plethora of federal,

state and local laws beyond licensing that affect child care settings, such as smoke-free laws, the Americans with Disabilities Act, food safety codes, and zoning ordinances.

Every state regulates the child care setting in some way, however these regulations differ by state depending on the type of facility and provider and generally do not provide adequate nutrition and physical activity standards. Where states do have strong standards, they are typically not being implemented fully or effectively. Accordingly, there is a very important role for technical assistance and programming. Local governments can play a largely untapped role in strengthening nutrition and physical activity standards where states fail to do so.

At the federal level, the current administration has made early child care a priority. On November 19, 2014, President Obama signed the Child Care and Development Block Grant (CCDBG) Act of 2014 into law. For a summary of the provisions of the CCDBG, please see Appendix A. This legislation reauthorized the child care program for the first time since 1996 and represented a significant re-envisioning of the Child Care and Development Fund (CCDF) program. The CCDF assists low-income families in obtaining child care so they can work or attend training/education. The program also improves the quality of child care, and promotes coordination among early childhood development and afterschool programs. In 2012, the CCDF made \$5.2 billion available to States, Territories, and Tribes. There will be significant opportunity for public comment on the law as regulation is proposed. Under the health and safety standards, states "may include requirements relating to nutrition, access to physical activity, or any other subject area determined by the State to be necessary to promote child development or to protect children's health and safety."²³

As a result of the diverse state legislative and regulatory landscape, few uniform standards apply to foods eaten or physical activity programs administered in the early child care setting.⁹ An exception to this are programs that participate in the federal Child and Adult Care Food Program (CACFP). If enrolled in CACFP (which is not required), settings must meet nationally established food-based standards to receive reimbursement. These federal standards do not contain standards for physical activity. There are a number of national accrediting organizations for early child care (https://occqrisguide.icfwebservices.com/files/National_Accred.pdf). Most of these organizations do not make their standards for accreditation easily transparent to the general public. Their standards for accreditation have to be purchased by those applying and it is not clear that the standards for nutrition, screen time, and physical activity would meet AHA's *Healthy Way to* Grow standards. Pursuing accreditation is a voluntary commitment that early child care centers can make that involves a rigorous process of self-study and improvement. Programs that choose to be accredited are going beyond the state's licensing requirements. Centers have the option of pursuing accreditation or pursuing the state's quality rating system. Twenty-five states have developed a statewide quality rating and improvement system (QRIS) as a method to assess, improve, and communicate the level of quality in early and school-age care settings. Twenty-one of these states include accreditation in their QRIS, although how it is included varies.

Policy Recommendations for Early Child Care

The American Heart Association is dedicated toward addressing policy recommendations for early child care through state, local, and federal advocacy efforts:

• Child care providers should meet minimum, uniform standards in nutrition, physical activity, screen time limitations, breastfeeding, and professional development (e.g. nutrition and physical activity education) such as the *Healthy Way to Grow* best practices, recommendations in the IOM's report *Child and Adult Care Food Program: Aligning Dietary Guidance for All*,²⁴ recommendations in the collaborative report *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs*,²⁵ and the

CACFP program nutrition guidelines²⁶. In order to ensure compliance, licensing and accreditation should require providers and centers to meet these standards.

- Technical support and funding to child care settings should be expanded in order to assist those needing help reaching these standards. Attention should be given to centers/providers serving the needs of high-risk populations and underserved communities.
- Mandatory, statewide, quality rating recognition programs should be provided and funded. These
 programs would distinguish child care settings going above and beyond minimum requirements
 and help ensure continuous improvement throughout child care settings. These recognition
 programs should incorporate best practice standards for nutrition, physical activity, and screen
 time. They should be overseen by the appropriate state agency in collaboration with other
 relevant agencies such as the Department of Education, the Department of Agriculture, the
 Department of Health, and others. Oversight of recognition programs may differ by state.
 Additional funding should be provided to help centers/providers serving the needs of high-risk
 populations and underserved communities to participate in these programs and meet the
 requirements.
- States should disseminate research and best practices pertaining to nutrition, physical activity, screen time, breastfeeding, and professional development to child care providers. In order to help parents better understand the quality of child care in their communities, states should make available, potentially through a state-run website, easily understandable information on the quality rating recognition programs in the state and how settings rank. In addition to rankings, the state could also highlight improvements by providers over time.

- All forms of marketing and advertising of unhealthy foods and beverages to children should be prohibited in child care programs. Definitions for what qualifies as the marketing/advertising of unhealthy foods and beverages may be based on the IOM's report *Food Marketing to Children and Youth: Threat or Opportunity?*²⁴ or from the Robert Wood Johnson Foundation's Healthy Eating Research report *Recommendations for Responsible Food Marketing to Children.*²⁷
- Support state-level BMI registries that capture BMI data from physician/clinical visits to improve BMI surveillance for 0-5 year olds. This can be done in conjunction with data collection for immunization rates.

Making Change by Engaging with and Influencing the Systems impacting the Early Childcare Environment

Certification/Licensing

With the exception of the federal Head Start program, the licensing of child care facilities is generally regulated by state laws and their rules can vary substantially. The Public Health Law Center conducted a 50-state analysis of child care licensing laws and regulation through 2012. Some states have updated their statutes since this analysis, but the analysis provides a helpful baseline for understanding how states are currently addressing nutrition and physical activity standards in early child care. Every state regulates the child care setting in some way, however these regulations differ by state depending on the type of facility and provider and generally do not provide adequate nutrition and physical activity standards. Where states do have strong standards, they are typically not being implemented fully or effectively.

Accreditation

There are a number of national accrediting organizations for early child care

(https://occqrisguide.icfwebservices.com/files/National_Accred.pdf). Most of these organizations do not make their standards for accreditation easily transparent to the general public. Their standards for accreditation have to be purchased by those applying and it is not clear that the standards for nutrition, screen time, and physical activity would meet AHA's *Healthy Way to* Grow standards. Pursuing accreditation is a voluntary commitment that early child care centers can make that involves a rigorous process of self-study and improvement. Programs that choose to be accredited are going beyond the state's licensing requirements. To achieve health impact with accreditation, it will be important to work with the national accrediting organizations to ensure that there are robust standards for nutrition, physical activity and screen time.

Quality Rating Systems

Early child care providers and centers also have the opportunity to pursue recognition under a state's quality rating system. Twenty-five states have developed a statewide quality rating and improvement system (QRIS) as a method to assess, improve, and communicate the level of quality in early and school-age care settings. Twenty-one of these states include accreditation in their QRIS, although how it is included varies. Just as in accreditation, it is very important that nutrition, physical activity, and screen time standards are integrated into the quality rating system and are mandatory rather than optional for recognition.

Provider Credentialing and ongoing Professional Development

There are two credentials for early child care providers – the Child Development Associates Credential (CDA) and the Certified Childcare Professional (CCP). States typically regulate credentialing and professional development for providers which varies by state. These requirements for professional development can include hundreds of hours of professional education, professional experience and family

references. Incorporating nutrition, physical activity, and screen time standards into this training is an important way to reach providers and foster inclusion of these standards into the early child care curriculum and best practices.

Surveillance

Currently, in the United States we depend on nationally representative samples in NHANES for BMI surveillance in very young children. In more recent years, these nationally representative data have shown no significant change in obesity among youth.²⁸ The Pediatric Nutrition Surveillance System (PedNSS), a child-based public health surveillance system that described the nutritional status of low-income children, was discontinued by CDC in 2012. One drawback of nationally representative datasets is that they do not allow providers or organizations who are working on the front lines of obesity prevention the opportunity to optimize resources or monitor and evaluate the impact of state and/or local initiatives.²⁹ Some states are responding to this surveillance gap by passing legislation to integrate BMI surveillance into existing registries, especially immunization databases. Health care providers systematically collect these data during clinical visits and as they are captured in electronic medical records they can be integrated into an existing public health registry and made available to the public health agencies for monitoring obesity trends across the state or localities. This can also promote increased screening for obesity in children in the health care setting.

Healthy Way to Grow

*Healthy Way to Grow*³⁰ is an example of a comprehensive, multifaceted obesity prevention program. The program is a joint venture of the American Heart Association and Nemours that provides technical assistance for child care centers across the country. Its aim is to create healthier children, better-informed parents and caregivers, and, ultimately, reduce childhood obesity. Components of the program include nutrition education for children and providers, family engagement, community partnering, center wellness policy implementation, screen time limitations, infant feeding, and recommendations for physical activity and healthy food and beverage choices. The best practices developed by *Healthy Way to Grow* relevant to obesity prevention in child care settings are:

Healthy Way to Grow Best Practices

Nutrition Education for Providers
Child care providers participate in professional development activities two or more times per year in
order to effectively teach children about nutrition.
Infant Feeding and Nutrition
100% juice (even if diluted with water) is not provided until age 1.
Fruits and Vegetables
All meals and snacks for children include a variety of fruits and vegetables, especially deeply colored
ones, and should be included at every meal or snack.
Fried or pre-fried and then baked vegetables (e.g., French fries, tater tots, hash browns) are served less
than once per month.
Meat and Meat Alternatives
Fried and baked pre-fried meats like chicken nuggets and fish sticks are provided less than one time per
month.
Grains and Breads

Providers serve a variety of grains daily and make sure at least half of grains served are whole grains. Foods high in saturated and *trans* fat, sugar and sodium, especially from refined grains, are served less than one time per week or are not served at all.

Drinking Water

Safe, fresh drinking water is available and accessible for children to serve themselves at all times, indoors and outdoors.

Milk

Skim (fat-free) or 1% (low-fat) milk is served to children aged 2 and older (unless otherwise directed by the child's health care provider).

Flavored milk is not served, even if reduced fat.

Juice

No more than 4-6 ounces of 100% juice is provided to toddlers and preschoolers in a day; including the amount of juice served at home.

Sugar Sweetened Beverages

Sugar-sweetened beverages are not served to children.

Eating Environment and Modeling Behavior

Providers encourage children to serve themselves meals and snacks with supervision (family style meals).

Supporting and Promoting Breastfeeding

Child care programs encourage, provide arrangements for and support breastfeeding.

Child care programs and their providers promote and support mothers who want to breastfeed or pump their breast milk by having a quiet, private area (not a bathroom) with an outlet, comfortable seating, and a place to wash their hands.

Screen Time

Children under 2 years old are not exposed to screen time.

Among children age 2 and older, screen time is limited to no more than 30 minutes once per week. Only quality, educational or physical activity programming is shown under direct supervision.

Physical Activity Learning Experiences and Education for Children and Child Care Providers Child care providers, teachers and staff receive professional development on gross motor play and learning as well as physical activity education at least two or more times per year.

Infant Physical Activity

While awake, infants will spend less than 15 minutes at a time in confining equipment such as swings, bouncy chairs, car seats, and strollers.

Physical Activity for Toddlers and Preschoolers

For toddlers: At least 60–90 minutes of active playtime are provided each day including 30-45 minutes of structured (teacher-led) physical activity and 30-45 minutes of unstructured (active play) time. For preschoolers: At least 120 minutes of active playtime are provided each day including 60 minutes of structured (teacher-led) physical activity and 60 minutes of unstructured (active play) time. Children have outdoor active playtime at least two times daily, weather and air quality permitting.

Appendix A

Child Care and Development Block Grant Act (CCDBG) of 2014: Plain Language

Summary of Statutory Changes

Published: November 18, 2014

Health and Safety Requirements for Child Care Providers

- Requires States to establish health and safety requirements in 10 different topic areas (e.g., prevention of sudden infant death syndrome (SIDS), first-aid, and CPR).
- Child care providers serving children receiving assistance through the Child Care and Development Fund (CCDF) program must receive pre-service and ongoing training on such topics.
- Requires States to conduct criminal background checks for all child care staff members, including staff members who don't care directly for children but have unsupervised access to children, and specifies disqualifying crimes.
- Requires States to certify child care providers will comply with child abuse reporting requirements.
- Requires States to conduct pre-licensure and annual unannounced inspections of licensed CCDF providers and annual inspections of license-exempt CCDF providers.
- States must establish qualifications and training for licensing inspectors and appropriate inspector-toprovider ratios.
- Requires States to have standards for CCDF providers regarding group size limits and appropriate childto-provider ratios based on the age of children in child care.
- Requires emergency preparedness planning and statewide disaster plans for child care.

Transparent Consumer and Provider Education Information

• States must make available by electronic means, easily accessible provider-specific information showing results of monitoring and inspection reports, as well as the number of deaths, serious injuries, and instances of substantiated child abuse that occur in child care settings each year.

- Requires States to have a website describing processes for licensing and monitoring child care providers, processes for conducting criminal background checks, and offenses that prevent individuals from being child care providers.
- Funds a national website to disseminate consumer education information that allows search by zip code and referral to local child care providers, as well as a national hotline for reporting child abuse and neglect.

Family-Friendly Eligibility Policies

- Establishes a 12-month eligibility re-determination period for CCDF families, regardless of changes in income (as long as income does not exceed the federal threshold of 85% of State median income) or temporary changes in participation in work, training, or education activities.
- Allows States the option to terminate assistance prior to re-determination if a parent loses employment, however assistance must be continued for at least 3 months to allow for job search.
- Eligibility re-determination should not require parents to unduly disrupt their employment.
- Provides for a graduated phase-out of assistance for families whose income has increased at the time of re-determination, but remains below the federal threshold.
- Requires procedures for enrollment of homeless children pending completion of documentation, and training and outreach to promote access to services for homeless families.

Activities to Improve the Quality of Child Care

- Phases-in increase in minimum quality set-aside from 4% to 9% over a 5-year period. In addition, requires States to spend minimum of 3% to improve the quality of care for infants and toddlers.
- Requires States to spend quality funds on at least 1 of 10 specified quality activities, which include developing tiered quality rating systems and supporting statewide resource and referral services.
- Requires establishment of professional development and training requirements with ongoing annual training and progression to improve knowledge and skills of CCDF providers.
- Requires States to implement Early Learning and Development Guidelines describing what children should know and be able to do, appropriate from birth to kindergarten entry.
- Includes provisions on social-emotional health of children, including providing consumer and provider education about policies regarding expulsions of children from early care and education programs and developmental screenings for children at risk of cognitive or developmental delays.

Tribes

- Tribal set-aside: Establishes a set-aside of not less than 2% (prior law said up to 2%) for Tribes.
- The law does not indicate the extent to which many of the new provisions apply to Tribes¹.

Other Provisions

- *Equal Access:* Requires States to conduct a market rate survey, or use an alternative methodology, such as a cost estimation model, and describe how payment rates will be established based on results of the survey or alternative methodology, taking into account cost of providing higher quality services.
- *Supply-building*: States must develop strategies for increasing supply and quality of services for children in underserved areas, infants and toddlers, children with disabilities, and children in non-traditional hour care—which may include use of grants/contracts and alternative reimbursement.

- *Provider payment practices*: States must establish policies that reflect generally accepted payment practices for child care providers, including (to the extent practicable) paying for absence days, and timely reimbursement for child care services.
- *Technical assistance set-aside*: Establishes a set-aside of up to ½ of 1% for technical assistance on administering the CCDF program.
- *Research set-aside*: Establishes a set-aside of up to ½ of 1% to conduct research and demonstration activities, as well as periodic, external, independent evaluations of the CCDF program.
- *Plan period*: Changes CCDF Plan period from 2 to 3-year Plan cycle.
- *Waiver authority*: Allows HHS to waive provisions or penalties in the statute for up to 3 years (with the option of a 1 year extension) based on a request from a State identifying duplicative requirements preventing effective delivery of child care services, extraordinary circumstances, or an extended period of time for a State legislature to enact legislation to implement the statute.

1 The Office of Child Care will issue policy guidance on how provisions apply to Tribes after consultation with Tribal Leaders and administrators.

References:

¹ Kumanyika, S.K., et al. (2008). Population-based prevention of obesity: The need for comprehensive promotion of healthful eating, physical activity, and energy balance. *Circulation*, 118(4), 428-464. doi: 10.1161/circulationaha.108.189702.

² U.S. Department of Education. (2013). *Early childhood program participants, from the national household education surveys program of 2012*. Washington, D.C.: U.S. Government Printing Office. Retrieved from http://nces.ed.gov/pubs2013/2013029.pdf.

³ U.S. Department of Health and Human Services. *Head Start Services*. Retrieved from http://www.acf.hhs.gov/programs/ohs/about/head-start.

⁴ Natale, R., Scott, S.H., Messiah, S.E., Schrack, M.M., Uhlhorn, S.B., & Delamater, A. (2013). Design and methods for evaluating an early childhood obesity prevention program in the childcare center setting. *BMC Public Health*, *13*(1), 78.

⁵ De Onis, M., Blössner, M., & Borghi, E. (2010). Global prevalence and trends of overweight and obesity among preschool children. *The American Journal of Clinical Nutrition*, 92(5), 1257-1264. doi: 10.3945/ajcn.2010.29786. ⁶ Skinner, A. C., & Skelton, J. A. (2014). Prevalence and trends in obesity and severe obesity among children in the

United States, 1999-2012. JAMA Pediatrics, 168(6), 561-566. doi:10.1001/jamapediatrics.2014.21.

⁷ Centers for Disease Control and Prevention. (2012). 2011 Pediatric Nutrition Surveillance. Retrieved from http://www.cdc.gov/pednss/what_is/pednss/index.htm.

⁸ Cunningham, S.A., Kramer, M.R., & Narayan, K.V. (2014). Incidence of childhood obesity in the United States. *New England Journal of Medicine*, 370(5), 403-411. doi: 10.1056/NEJMoa1309753.

⁹ Serdula, M. K., Ivery, D., Coates, R. J., Freedman, D. S., Williamson, D. F., & Byers, T. (1993). Do obese children become obese adults? A review of the literature. *Preventive medicine*, 22(2), 167-177. doi: 10.1006/pmed.1993.1014.

¹⁰ Story, M., Kaphingst, K.M., & French, S. (2006). The role of child care settings in obesity prevention. *The Future of Children*, 16(1), 143-168. doi: 10.1353/foc.2006.0010.

¹¹ Fox, M.K., Condon, E., Briefel, R.R., Reidy, K.C., & Deming, D.M. (2010). Food consumption patterns of young preschoolers: Are they starting off on the right path? *Journal of the American Dietetic Association*, *110*(12), S52-S59.

¹² American Heart Association. (2014). *The American Heart Association's Diet and Lifestyle Recommendations*. Retrieved from http://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/The-American-Heart-Associations-Diet-and-Lifestyle-Recommendations_UCM_305855_Article.jsp.

¹³ Nicklas, T.A., Baranowski, T., Baranowski, J.C., Cullen, K., & al, e. (2001). Family and child-care provider influences on preschool children's fruit, juice, and vegetable consumption. *Nutrition Reviews*, 59(7), 224-35. doi: 10.1111/j.1753-4887.2001.tb07014.

¹⁴ Prentice-Dunn, H., & Prentice-Dunn, S. (2012). Physical activity, sedentary behavior, and childhood obesity: a review of cross-sectional studies. *Psychology, Health & Medicine*, 17(3), 255-273. doi: 10.1080/13548506.2011.60880.

¹⁵ De Decker, E., De Craemer, M., De Bourdeaudhuij, I., Wijndaele, K., Duvinage, K., Koletzko, B., ... & Cardon, G. (2012). Influencing factors of screen time in preschool children: An exploration of parents' perceptions through focus groups in six European countries. *Obesity Reviews*, 13(s1), 75-84. doi: 10.1111/j.1467-789X.2011.00961.x.
 ¹⁶ Pate, R.R., Davis, M.G., Robinson, T.N., Stone, E.J., McKenzie, T.L., & Young, J.C. (2006). Promoting physical activity in children and youth a leadership role for schools: A scientific statement from the American Heart Association Council on Nutrition, Physical Activity, and Metabolism (Physical Activity Committee) in collaboration with the councils on Cardiovascular Disease in the Young and Cardiovascular Nursing. *Circulation*, *114*(11), 1214-1224.

¹⁷ Vanderloo, L. M. (2014). Screen-viewing among preschoolers in childcare: A systematic review. *BMC Pediatrics*, 14(1), 205. doi: 10.1186/1471-2431-14-205.

¹⁸ Institute of Medicine. (2006). *Food Marketing to Children: Threat or Opportunity?* Washington, DC: National Academies Press.

¹⁹ Cornwell, T.B., McAlister, A.R., & Polmear-Swendris, N. (2014). Children's knowledge of packaged and fast food brands and their BMI. Why the relationship matters for policy makers. *Appetite*, 81, 277-283. doi: 10.1016/j.appet.2014.06.017.

²⁰ Patrick, H., & Nicklas, T. A. (2005). A review of family and social determinants of children's eating patterns and diet quality. *Journal of the American College of Nutrition*, 24(2), 83-92. Doi: 10.1080/09315724.2005.10719448.
 ²¹ Davis, M. M., Gance-Cleveland, B., Hassink, S., Johnson, R., Paradis, G., & Resnicow, K. (2007).

Recommendations for prevention of childhood obesity. *Pediatrics*, 120(Supplement 4), S229-S253. doi: 10.1542/peds.2007-2329E.

²² 4. Agrawal, T., Hoffman, J.A., Ahl, M., Bhaumik, U., Healey, C., Carter, S., ... & Castaneda-Sceppa, C. (2012). Collaborating for impact: A multilevel early childhood obesity prevention initiative. *Family & Community Health*, 35(3), 192-202. doi: 10.1097/FCH.0b013e318250bc25.

²³ Child Care and Development Block Grant Act. November 2014.

https://www.acf.hhs.gov/sites/default/files/occ/child_care_and_development_block_grant_markup.pdf.

²⁴ Moats, S., Suitor, C.W., Yaktine, A.L., & Murphy, S.P. (Eds.). (2011). *Child and Adult Care Food Program: Aligning dietary guidance for all*. National Academies Press.

²⁵ American Academy of Pediatrics, American Public Health Association, & National Resource Center for Health and Safety in Child Care and Early Education. (2011). *Caring for our children: National health and safety performance standards; guidelines for early care and education programs*. American Academy of Pediatrics. ²⁶ United States Department of Agriculture. (2013). *Child and Adult Care Food Program*. Retrieved from http://www.fns.usda.gov/cacfp/meals-and-snacks.

²⁷ Robert Wood Johnson's Healthy Eating Research. (2015). *Recommendations for Responsible Food Marketing to Children*. Retrieved from http://healthyeatingresearch.org/wp-content/uploads/2015/01/HER_Food-Marketing-Recomm_1-2015.pdf.

²⁸ Skinner, A. C., & Skelton, J. A. (2014). Prevalence and trends in obesity and severe obesity among children in the United States, 1999-2012. *JAMA Pediatrics*, 168(6), 561-566. doi:10.1001/jamapediatrics.2014.21.

 ²⁹ Altarum Institute. Registry-Based BMI Surveillance: A Guide to System Preparation, Design, and Implementation. June 2011. Accessed online March 10, 2015 at http://altarum.org/sites/default/files/uploadedrelated-files/Chomp_BMI_FINAL_060811lr_0.pdf.
 ³⁰ American Heart Association. (2013). *Healthy Way to Grow*. Retrieved from

http://www.healthywaytogrow.org/HWTG/.