Nutrition and the Child-Care Setting

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A century ago, the lives of many young children were spent in a world quite separate from today's child-care environment. Children were usually cared for at home by their mothers and other relatives, and the primary caregivers were schooled in the art of raising children. Nutrition was an integral part of this upbringing, with the focus on nourishing the body and mind for healthy development.

Today, approximately 21% of the US preschool population is characterized as overweight or obese (5). Overweight or obesity during childhood has been shown to be a strong predictor for comorbidities in adolescents and later in life, these include atherosclerosis, type 2 diabetes, sleep apnea, hypertension, hyperlipidemia, asthma, lower self-esteem, and psychological and social stress (6). The primary contributing factors to the development of overweight and obesity in preschool children is the quality of overall diet and a lack of physical activity. In this issue of the Journal of the American Dietetic Association, there is an excellent review of the role of child-care in preventing obesity (7). Given the increase in child-care center enrollment and concurrent increase in obesity among this population, it seems prudent to address nutrition-related components of the child-care setting and examine guidelines and strengthen policy oriented toward child care.

NUTRITION COMPONENTS OF THE CHILD-CARE SETTING

Eating habits and food preferences of young children are established early in life. Therefore, the environment where children learn these habits must provide an ideal template for development. Children in the child-care center consume meals from two sources: the child-care center serves food or the child consumes food prepared at home. Centers that receive funding from the Child and Adult Care Food Program (CACFP) must follow regulations for serving meals at their centers. Approximately 141,000 child-care homes and 51,000 child-care centers participate in CACFP (8). All child-care centers fall under the auspices of state regulations, including centers that participate in CACFP. Meals prepared at home and consumed at the child-care center fall under the supervision of the child’s parent(s) or guardian and may or may not also fall under state regulations. The guidelines adopted at child-care centers in the United States for serving meals are variable. Moreover, regulations set at the state level vary for child-care centers not under the direction of CACFP (9,10). The intricacies of individual state regulations are beyond the scope of this commentary; nonetheless, state regulations also deserve more attention from professionals.

An average of 2.3 million children participate daily in centers (including Head Start) that receive funds from CACFP. Due to the age and developmental status of this population, a continued review of Child Meal Patterns (11) outlined by CACFP is warranted. Current CACFP intake recommendations do not parallel those made by some professionals. Registered dietitians and pediatricians suggest children in child care for 8 or more hours per day should receive at least two thirds of their nutritional intake needs from the child-care center (12). However, CACFP sets the benchmark for daily intake at 50%, leaving the remaining 50% for parents to provide outside the child-care center. At the child-care center, CACFP Child Meal Patterns (11) translate into food served to children. A study has shown that menus found in child-care centers across the nation fall short of meeting the standards outlined by CACFP (13). This reinforces the need for continued review of CACFP guideline content and adherence to CACFP guidelines by participating centers.

Scant research reveals the impact of child-care providers on the feeding behaviors of young children. However,
to effectively implement change in the child-care setting to prevent obesity, the research community should continue the pursuit of understanding the influence of child-care providers on preschool children. No certain link has been identified that suggests providers influence food consumption behaviors of preschool children. A recent study by Acharya and colleagues does examine the relationship between the body mass index of providers and the body mass index of children in child care (14). Modeling behavior combined with encouragement has shown some promise (12,15). Studies about beliefs and social norms practiced by providers did not parallel current recommendations for development of self-regulation for food intake by preschool children (16,17). As the body of research characterizing the provider population continues to increase, approaches to educating providers about their role in child development should receive continued consideration.

Supporting and educating parents about nutrition-related decisions will be paramount for reversing recent trends in obesity among preschool children. Parents serve as role models and directly influence the eating behaviors of their children (17). The economic status of parents also plays a role in health-related outcomes. In one study, the consumption of fruit and vegetables by children was directly related to the education status of the mother (18). Furthermore, identification of food deserts supports the finding that availability of fruits and vegetables is another major contributor to underconsumption of these foods (19,20). Other factors influence the food behaviors of children. Child satiety and the amount of food served to a child often play an important role. Parents should decide what to serve and in what quantity, and ultimately allow the child to decide what to eat (21). Mothers also have a powerful role developing eating habits in children (17). Finally, parents may inadvertently promote excess weight gain in childhood by using inappropriate child-feeding behaviors, for example, parent restriction of snack foods and interference in child autonomy in practice of self-regulation (22). In summary, parent involvement remains imperative for development of a child’s eating habits that could contribute to lifelong healthy and preventative behavior.

PROFESSIONAL GUIDELINES AND THE HEALTHY, HUNGER-FREE KIDS ACT 2010

Child-care centers serving meals to children that receive funding from CACFP must comply with nutrition guidelines set by CACFP; however, the guidelines set by professional organizations often differ. The discrepancies tend to originate from the definition of age categories or the basis for measuring portion size. CACFP partitions meal components in age groups defined as 1 to 2 years, 3 to 5 years, and 6 to 12 years (11,23). Alternately, the American Pediatric Association guidelines are based on the MyPyramid (24) framework, which categorizes age groups as 2 to 3 years, 4 to 8 years, and 9 to 12 years (25). Moreover, the American Dietetic Association—recommended Dietary Reference Intake categorizes children by 1 to 3 years, 4 to 8 years, and 9 to 13 years (26). The discrepancy observed by comparison in age ranges recommended among these organizations could complicate parents’ understanding of what guideline should be followed. Future research and policy discussions should address the myriad standards recommended by professional organizations.

In an effort to address childhood obesity, the Healthy, Hunger-Free Kids Act of 2010 should increase the availability of healthy food to low-income children. The legislation authorizes the US Department of Agriculture to determine the nutrition standards for meals that are sold in the school and child-care environment. The legislation will provide funds for facilities that meet federal subsidized meal standards. In addition, the legislation establishes local farm-to-school distribution networks to increase the volume of local produce in schools (27). The bill also supports increased availability of drinking water to children in schools and during meal times (27) and attempts to establish standards for school wellness policies. Finally, the act supports breastfeeding through the Special Supplemental Nutrition Program for Women, Infants, and Children (27). The legislation advances several areas previously deficient in child-care centers and schools and should be lauded for its breadth. Observing the effects of the legislation on child-care centers in the future should be an avenue of interest for researchers.

CONCLUSION

In the past 3 decades, child-care centers have replaced the family table as the learning environment for young children’s food habits. Child care has rapidly become the new forum for change. This transition should be viewed as an excellent opportunity to captivate America’s children and address the obesity issue. America is facing the reality that one in three children younger than 5 years is classified as obese or overweight (28). The greatest impact on obesity can be made among this population and assure that the next generations have eating and exercise habits that support a life of good health as well as reduced medical costs. Parents must become advocates for their children’s food intake and support policy changes that strengthen nutrition programs that will enable all children to eat nutritious meals and snacks that support a lifetime of good health.

Parent involvement will be essential for preschool children’s development. Interactions and learning fostered in the home should remain a continued focus of education efforts. More specifically, the development of healthy eating messages targeting parents and children and understanding the complexities of this environment will be necessary to decrease obesity in young children. Additional recommendations include uniformity among age group categorization used for guidelines and requiring registered dietitians as consultants in all child-care settings regardless of affiliation with CACFP or state regulatory agencies. Young preschool children are the segment of America’s population that will set the stage for the economy and development of the next generation of ideas and discoveries. Education must be provided to this segment of the population for America to reverse the increasing obesity epidemic.

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References


