Child Health and Development Institute of Connecticut, Inc.

ISSUE BRIEF

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Promoting a Healthy Weight from Birth:

Strategies to Improve Early Childhood Feeding Practices and Address Racial and Ethnic Disparities in Obesity

This Issue Brief is dedicated to Dr. Marjorie Rosenthal in honor of her extraordinary life and work to improve children's health. Marjorie was the lead investigator for Yale's obesity prevention project highlighted in this Issue Brief. CHDI was fortunate to partner with her over the years and she will be greatly missed.

Childhood obesity is a significant public health challenge in the U.S., with one in five children and adolescents affected by overweight or obesity.[1] In Connecticut, close to one in three kindergarten and third grade students are already overweight or obese.[2] As concerning as the prevalence of obesity is among all children, its disproportionate impact on children of color and children from low-income families is even more alarming. American Indian, African American and Hispanic children are significantly more likely to experience overweight or obesity compared to White or Asian children.[3] Similarly, children from low-income families are significantly more likely to experience overweight or obesity compared to their higher-income peers.[4]

Such disparities begin early in life, setting trajectories for children's growth patterns. Addressing these disparities necessitates early intervention. Promoting healthy infant and toddler feeding practices is key to ensuring children grow up at a healthy weight.[5] In this issue brief, we share lessons learned from four projects focused on improving early feeding practices and reducing disparities for Connecticut's children. The projects were funded as part of a collaboration between the Children's Fund of Connecticut, the Connecticut Health Foundation, and Newman's Own Foundation and administered by the Child Health and Development Institute (CHDI).

1. Supporting Healthy Eating in Low-Income Toddlers: The Department of Allied Health Sciences at the University of Connecticut

The Department of Allied Health Sciences at the University of Connecticut developed messages on toddler feeding best practices and assessed the effectiveness of these messages among low-income parents in East Hartford. **The research team used surveys and focus groups to identify ways in which toddler feeding behaviors diverge from recommendations among a diverse group of families.** The survey was administered at the East

Hartford WIC office, a daycare center, and the library. Of the 134 survey respondents, 35% were Hispanic, 28% were Black, 19% were White, 6% were Black/Hispanic, 4% were Asian, 2% were American Indian, and 6% were multiethnic/other. Fifty-four percent of respondents reported serving sweetened drinks to toddlers. White children were less likely to receive fruit juice more than five times per week when compared to children of color. This finding is not surprising, considering previous research has revealed that unhealthy food marketing disproportionately targets Hispanic and Black communities.[6]

The team developed targeted messages based on the survey results to address problems with common feeding behaviors and improve feeding practices. The messages focused on:

- identifying and decreasing intake of sweetened beverages that parents may not consider "sugary drinks";
- implementing strategies to support toddlers in regulating the amount of food they eat, i.e., responsive feeding; and
- encouraging healthier toddler snacks and family meals.

The team pilot-tested the messages with parents in the waiting room of the East Hartford WIC office, as well as through a private Facebook group. **The study found that participating parents expressed a high willingness to address the targeted behaviors, affirmed the need for clear messaging, and verified the helpfulness of the messages.** The feasibility of delivering clear and effective messages was especially heartening, given that parents reported receiving conflicting information about healthy feeding from various sources (e.g., pediatricians, WIC staff, family members, etc.) and would like to receive consistent and clear messages. The team is currently coordinating the delivery of targeted messages to families across multiple points of contact, including WIC, family resource centers, and early childhood education programs. To do so, the team has developed a web-based platform to screen for targeted toddler feeding behaviors and to deliver clear and consistent messages tailored to parents' responses.

2. Engaging Pediatric Primary Care Providers as Partners in Preventing Childhood Obesity: Connecticut Children's Medical Center Office for Community Child Health

The Office for Community Child Health at Connecticut Children's Medical Center developed an Educating Practices training module for pediatric primary care providers on key messages and best practices in infant and toddler feeding. Educating Practices offers brief, onsite trainings to pediatric primary care offices to promote practice change. The team piloted the module in three primary care sites, incorporated feedback from the pilot sites into the module, and delivered the updated module to 298 participants in 23 practices across the state. Many of the participating practices serve patients from lower-income families. The project team also conducted a survey of pediatric primary care providers in Connecticut to assess routine screening for obesity risk factors and documentation of abnormal growth during 0-2 year well-child care visits. The survey found that only 37% of providers reported screening 0-2 year olds for obesity risk factors at well-child care visits most or all of the time; 48% reported documenting obesity in their notes. Providers reported referring children with overweight or obesity for nutrition counseling or community services 10% of the time. Lack of time during the visit and parental perception of obesity risk were cited as reasons for not engaging in obesity prevention activities during the visit. It is possible that parents' perception of their child's weight status is influenced by their sociocultural background[7], and implementing standardized risk factor screening is one step toward normalizing discussions around infant weight and weight trajectories. In addition, it is helpful for primary care providers to have a deeper understanding of the sociocultural backgrounds of the patients they serve so they can understand the specific issues that may arise when they start discussions regarding infant weight and feeding practices. **The project confirmed the need for pediatric practices to be trained to screen for obesity risk factors, connect families to needed services, and engage in obesity prevention activities at well-child care visits.**

3. Healthy Eating through Group Well Child Care: Yale New Haven Hospital Primary Care Center

Yale New Haven Hospital Primary Care Center (PCC) examined the impact of embedding a healthy eating curriculum within an existing group well-child care model. The project team developed a bilingual, bicultural curriculum of healthy eating that included nutrition education, recipes, and cooking demonstrations in partnership with the hospital's Women's Infants and Children (WIC) program. The team then incorporated the curriculum into ongoing group well-child care visits. To examine the impact of the intervention on children's weight status, the project compared weight-for-length at 6 and 12 months for children participating in group well-child care plus the healthy eating curriculum versus those participating in group well-child care without the curriculum. The study did not find statistically significant differences in weight status for the intervention versus non-intervention groups. However, qualitative results from semi-structured interviews with 16 participating families (12 interviews conducted in Spanish, the remaining 4 in English) revealed a high level of satisfaction with the healthy eating intervention, and families reported that they tried the recipes at home. Moreover, families shared that they are overwhelmed by choices at the supermarket and the WIC app, leaving them unsure of the healthiest choices. For example, while describing her experience looking at food options at the supermarket, one participant noted, "I do not know if it will be good; I do not know if I will be wrong." Families also noted that they receive nutrition information from multiple sources, including other family members, healthcare providers, and the internet. **Overall, the findings highlighted a broader need for credible information and clear, unified messaging about healthy early feeding practices to support families in making healthy feeding choices.** In addition, the study found that immigrant families experiencing food insecurity are hesitant to enroll in WIC for fear of endangering their residency or citizenship applications, although enrolling in WIC and other support programs has no bearing on immigration procedures.[8] The lack of Spanish-speaking nutritionists at the WIC office, despite a third of the PCC's patient population being most comfortable communicating in Spanish, was another barrier to enrolling immigrant families. Project staff were mindful of these challenges and responded to families' suggestions for improving the cultural appropriateness of the intervention. For example, the project team altered the recipes offered as part of the intervention in response to feedback from some families and providers that the dishes were not bicultural.

4. Barriers to Participation in the Child and Adult Care Food Program (CACFP) in Connecticut: UConn Rudd Center for Food Policy and Obesity

The federal Child and Adult Care Food Program (CACFP) provides subsidies to child care sites that serve healthy meals. Child care sites receive CACFP reimbursement based on the type of meal served and the income of the child's family. Children from lower-income families are eligible to receive meals at no charge, while children from middle- or higher-income families are charged reduced or full prices, respectively. The program has been shown to improve the nutritional quality of meals served in child care settings and reduce food insecurity.[9–11]

Despite the evidence supporting CACFP's positive impact, Connecticut has low participation in the program among child care sites.[11] This project, led by the UConn Rudd Center for Food Policy and Obesity, aimed to understand barriers to participation among child care sites serving infants and toddlers from low-income families. The research team conducted a survey among 231 child care sites, including 96 CACFP-participating and 135 non-CACFP sites. The team also completed 11 informational interviews to guide survey development. The survey topics included food service capability, nutrition training, knowledge about CACFP, experiences with CACFP, and reasons for choosing to participate or not participate. **Based on the results, the study recommended several changes that could improve participation.** The recommended changes include: streamlining paperwork, funding ongoing non-food costs, better/free software for planning menus, assistance with finding vendors/catering companies, apps or other aids to help with purchasing foods/beverages, more or different education on the program, more support from state staff, and facilitated networking with other providers.

CONCLUSIONS AND RECOMMENDATIONS

Improving healthy weight is a statewide priority in Connecticut, articulated as one of two priority aims for the state's Health Enhancement Communities (HEC) initiative. As the HEC initiative gets underway, it is an opportune time to examine and apply lessons learned from these childhood obesity prevention projects that were informed by the experiences and input from a diverse group of families, child care centers and pediatric providers. The following summarizes several findings and recommendations that can inform the HECs, WIC, CACFP, as well as other initiatives aiming to address racial, ethnic, and income disparities in childhood obesity.

Finding: Families report gaps in knowledge in best early feeding practices and conflicting information from various sources, pointing to the need for targeted information from credible sources.

Recommendations:

1. Pediatric primary care providers, WIC, SNAP-Ed, child care sites, and other child- and family-serving agencies should collaborate and prioritize the delivery of unified messages to families, as well as support families in implementing best practice feeding strategies.
2. Pediatric primary care providers, WIC, SNAP-Ed, child care sites, and other child- and family-serving agencies should leverage the newly released Dietary Guidelines for Americans, 2020-2025 in raising families' awareness of best early feeding practices.[12] Notably, for the first time since the 1985 edition, the 2020-2025 edition of the Guidelines includes recommendations for healthy dietary patterns of infants and toddlers.
3. Messages must be culturally appropriate, and delivered in a language that families feel most comfortable communicating in.
4. Messages should be targeted to address suboptimal common feeding practices identified by families.

Finding: There is an opportunity to facilitate the participation of additional child care sites in CACFP, as child care sites are a critical partner in the fight against childhood obesity.

Recommendations:

5. The Connecticut State Department of Education should undertake an analysis of federal dollars that are available to the state, but are currently not utilized due to low enrollment of Connecticut child care sites in the CACFP program.
6. The Office of Early Childhood should ensure that the final Child Care Center Licensing and Family Day Care Provider Licensing recommendations promote childhood obesity prevention as a priority for child care sites and encourage their participation in CACFP when eligible.

Finding: There is an opportunity to increase pediatric primary care providers' engagement in obesity prevention activities.

Recommendations:

7. Pediatric providers should normalize conversations with patients related to infant weight and feeding practices and be familiar with cultural norms of families served in their community.
8. Pediatric primary care providers should consistently screen for obesity risk factors and provide or refer families to counseling and/or other resources based on the results of the screening.
9. Training programs for pediatric primary care providers (e.g., residency programs) should incorporate training in screening, counseling, and referral for childhood obesity.
10. Public and private insurance plans should reimburse providers for obesity risk factor screening at well-child care visits.
11. Public and private insurance plans should support innovative pediatric primary care models that integrate nutrition counseling and education into primary care.

The current COVID-19 pandemic has had a significant and disproportionate economic impact on many families. Access to adequate and healthy food is one such manifestation of economic hardship. As families emerge from the pandemic, we have an opportunity to increase caregiver knowledge in early feeding practices, standardize the messages caregivers receive, increase child care facility participation in CACFP, and enhance pediatric provider engagement in childhood obesity prevention.

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For more information about CHDI's work to advance children's healthy weight, please visit www.chdi.org or contact Abby Alter at aalter@uchc.edu.