

Preventing Childhood Obesity: Maternal-Child Life Course Approach

An evidence-based approach to curbing early childhood obesity

Childhood obesity is a serious epidemic. It affects the physical and psychological well-being of millions of children and youth in the United States, increasing the risk for chronic diseases, bullying and social discrimination.¹ In addition, Latino and Black children in the US are significantly more likely than their White counterparts to be exposed to almost all known risk factors for becoming overweight or obese early in life.²

Prevention efforts need to start early.

To curb the epidemic, preventing obesity in early childhood and eliminating existing ethnic/racial disparities in its prevalence must be a strong health priority. Recent research shows that obesity may be very difficult to reverse if children are obese by 5 years of age.

To target childhood obesity, we must focus on both mother and child. Children born to mothers who were obese or overweight before pregnancy were 1.37 to 4.25 times more likely to be overweight themselves.³ This maternal-child life course obesity cycle indicates that the body mass index (BMI) of the mother around the time of conception and the amount of weight she gains during pregnancy can have an impact on the risk of her offspring to become obese and develop chronic diseases later in life.

The latest report in the Child Health and Development Institute's (CHDI) IMPACT series, [*Preventing Childhood Obesity: Maternal-Child Life Course Approach*](#), reviews the scientific evidence that links maternal pre-pregnancy weight and weight gain during pregnancy with obesity risk in offspring. It looks at the evidence associating infant feeding practices, weight gain during infancy, and eating habits during toddlerhood and preschool with subsequent obesity risk. It also presents current Connecticut programs that address different aspects of the maternal-child life course approach to obesity prevention.

In the report, authors Rafael Perez-Escamilla, professor of epidemiology and public health at the Yale School of Public Health, and Judith Meyers, CHDI's president and CEO, make recommendations based on the findings, aimed at supporting women of reproductive age during pre-pregnancy, pregnancy and the mothering of infants and toddlers.

The proposed approach includes actions to improve proper nutrition, physical activity and body weight in the following:

- Among women before becoming pregnant for the first time, as well as during pregnancy and the postpartum period;^{3,4}
- During the first five years of a child's life

Recommendations for Connecticut

Drawing on the research findings and expert input, the report offers the following recommendations to Connecticut policymakers, advocates and other leaders on how to address early childhood obesity, focusing on children from birth to age 3:

1. Promote and support **evidence-based programs** targeting early childhood obesity prevention, based on an analysis of current programs in Connecticut and effective national models.
2. Develop and share a **consistent set of messages and related tools** for promoting healthy infant growth, based on a review of evidence-based practices and guidelines.
3. Develop strategies to **expand participation in the WIC and SNAP programs**, and assure policies and program incentives are aligned with positive parenting behavior related to nutrition for young children.
4. Increase the rate of **sustained breastfeeding**, recognizing its importance in preventing early childhood obesity for certain subgroups and its benefit in overall healthy development.
5. Incorporate early childhood obesity prevention approaches within the framework of Connecticut's **State Healthcare Innovation Model (SIM)**.
6. Develop well-integrated **management information systems** to facilitate a more thorough understanding of the issues, support guidance to parents and caregivers, and track progress at the population level.
7. Designate an existing **umbrella group**, or form a new group, to address obesity prevention in early childhood, and coordinate and monitor efforts.
8. Pay concerted attention to the role of **social determinants** in carrying out each of the previous recommendations.

Addressing childhood obesity requires multi-level and multi-generational interventions grounded in the social-ecological framework. The IMPACT review helps point toward a comprehensive approach that can reverse the rising rates of obesity, resulting in improved health and life outcomes for all of Connecticut's children.

CHDI, with funding from the Children's Fund of Connecticut, plans to contract with the Center for Public Health and Policy at the University of Connecticut to conduct the analyses necessary to proceed with recommendations 1 and 2. To address the remaining recommendations, however, there needs to be collective action from Connecticut's leaders to successfully alter the childhood obesity epidemic.

For more information, read CHDI's latest IMPACT report, [Preventing Childhood Obesity: Maternal-Child Life Course Approach](#), visit www.chdi.org or contact Judith Meyers (meyers@uchc.edu).

¹ Trust for America's Health and the Robert Wood Johnson Foundation. F as in fat: how obesity threatens America's future 2012. healthyamericans.org/report/100/2012.

² Taveras EM, Gillman MW, Kleinman K, Rich-Edwards JW, Rifas-Shiman SL. Racial/ethnic differences in early-life risk factors for childhood obesity. *Pediatrics*. 2010; 125(4): 686-695.

³ Parsons TJ, Power C, Logan S, Summerbell CD. Childhood predictors of adult obesity: a systematic review. *Int J Obes Relat Metab Disord*. 1999; 23 Suppl 8: S1-107.

⁴ 2010 Dietary Guidelines Advisory Committee. Report of the 201 Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010 to the Secretary of Agriculture and the Secretary of Health and Human Services. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC. May 2010.