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## Protect Children From Household Food Insecurity: Promote Access To Food and Stress-Alleviating Resources

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The recent economic downturn has resulted in record-breaking rates of national poverty, particularly among households with children. As families struggle to meet their children's basic needs, household food insecurity (uncertain access to enough food for all household members to sustain an active and healthy life) has become a major public health problem, affecting an estimated 21.8% of US households with children under age 6 years, with rates as high as 49.9% for low-income, female-headed households with children.<sup>1-3</sup>

In a systematic review published in this issue, Rafael Perez-Escamilla and Rodrigo Pinheiro de Toledo Vianna report consistent evidence that children in food insecure households experience higher vulnerability to intellectual, behavioral, and psycho-emotional developmental problems than children in food secure households, even after adjusting for socioeconomic indicators. Their review also provides evidence that the negative associations between food insecurity and caregivers' mental health may not only mediate the relationship between household food insecurity and children's development, but may also lead to family dysfunction, adding additional stress and potentially interfering with families' ability to transition out of food insecurity. These findings are consistent with a recent report from Children's HealthWatch that, as the number of family stressors (household food insecurity and maternal depressive symptoms) increases, the odds of children's fair/poor health, hospitalizations, and developmental risk increase and the odds of children achieving a "well-child" status (weight and length within normal, good/excellent health, no hospitalizations, and no developmental risk) decrease.<sup>4</sup>

The family stress and cumulative stress models<sup>5-7</sup> suggest that families with limited resources who must make difficult choices to meet their children's needs often experience frustration and emotional distress.<sup>8</sup> In turn, emotional distress increases the number of family stressors, further disrupting the family's functioning and care giving practices, and potentially undermining children's development and sense of security. Thus, strategies to alleviate household food insecurity may need to extend beyond meeting families' nutritional needs to address the increases in family stress and dysfunction that often accompany household food insecurity.

The studies comparing persistent versus episodic household food insecurity illustrate that food insecurity extends beyond the presence or absence of food. For example, in one study toddlers in persistently food-insecure households fared better than toddlers in households that experienced episodic food insecurity.<sup>9</sup> In another study, children in

households that transitioned from food insecure to food secure had lower scores on measures of social skills than children in persistently food insecure households.<sup>10</sup> There are several possible explanations for why exposure to episodic household food insecurity or the transition out of food insecurity may be so challenging to children and families. One possibility is that persistently food insecure caregivers develop adaptive coping skills for handling food insecurity that are less accessible or acceptable to families in transition. Another possibility is that transitioning to a food-secure status is associated with a loss of public assistance services, thereby introducing other stressors. With few longitudinal studies, our ability to understand how families cope with fluctuating resources related to the varying availability of adequate and healthy food is limited.

Providing food assistance is a critical intervention for alleviating food insecurity, particularly because food insecure families often resort to low-cost, low nutrient-dense food,<sup>11,12</sup> with limited consumption of fruits, dark green vegetables, grains, yogurt, nuts, seeds, and dried beans and peas.<sup>13</sup> As a result, children in food-insecure households are at risk for iron deficiency<sup>14,15</sup> and high cholesterol values.<sup>14</sup> Evidence suggests that national nutritional programs, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), are effective in reducing household food insecurity by providing children and families with healthy food, nutritional counseling, and referrals when necessary.<sup>4,16</sup>

WIC participation has also been associated with lower rates of caregiver depressive symptoms, compared to WIC-eligible non-participants.<sup>4</sup> Other investigators have also reported that poverty alleviation and family-oriented programs that are not specifically designed to address mental health problems have been associated with lower rates of maternal depressive symptoms.<sup>17-19</sup> These findings, consistent with the family stress model,<sup>1</sup> suggest that maternal depressive symptoms are sensitive to the availability of household and family resources. Although WIC participation attenuates the negative association in families experiencing both household food insecurity and depressive symptoms with indicators of child health and development, a significant association remains,<sup>4</sup> suggesting that families and children may benefit from additional assistance to address the stress-associated impact of household food insecurity.

Recent research, including the review by Perez-Escamilla and Pinheiro de Toledo Vianna, has shown that not only is household food insecurity associated with children's intellectual, behavioral, and psycho-emotional developmental problems, but the stress associated with food insecurity can undermine caregiver mental health and family functioning.

Longitudinal research is needed to clarify the mechanisms linking household food insecurity, caregiver and family stress, and children's intellectual, behavioral, and psycho-emotional development, along with effective strategies to prevent and alleviate food insecurity. However, there is enough current evidence to demonstrate that national assistance programs and policies are needed to ensure that families and children have access to adequate sources of healthy food and to stress-alleviating resources.

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