March 2007

Family Food Insufficiency is Related to Overweight Preschoolers

In Canada, an increasing number of families are living in poverty, and food insufficiency is one possible outcome of material deprivation. According to the results of the 2004 Canadian Community Health Survey, approximately one-fifth of Canadian families (around 1.4 million people) live with food insecurity. Using data from the Longitudinal Study of Child Development in Quebec (1998-2002), Lise Dubois and colleagues’ 2006 study indicates that there is an association between food insufficiency and obesity among preschool children. This relationship exists over and above the effects of living in income insufficient families. Children born with low-birth-weights who live in a household that experienced food insufficiency are at higher risk of being overweight at 4.5 years of age.

Various explanations related to food adequacy and diet quality can be formulated to explain this association. Parents experiencing food insufficiency may be overprotecting their younger children by giving them more food than they need. Furthermore, when resources are limited, a common coping strategy is to consume less expensive foods. In this situation families may have enough to eat, but the quality of their diet is reduced. Finally, following a period of food restriction individuals may have overeating or binge eating behaviours when food is available. An alternative explanation may be related to the Barker Hypothesis in which the relationship between low-birth-weight and chronic diseases later in life may be related to fetal malnutrition.

Given that the highest risk for overweight at 4.5 years is among low-birth-weight children who experience food insufficiency in their preschool years, supportive interventions targeting low-income and food insufficient families, including pregnant women, are recommended for preventing overweight and obesity among their children.


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