NIH Award from the Eunice Kennedy Shriver National Institute of Child Health and Human Development

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- **Project:** New Methods for Estimating Effects of Parenting on Child Eating and Overweight
- **Start Date:** May 1, 2009
- **Total Award Amount:** $85,492

**How the results of this project will benefit society:**
This project will (a) generate new statistical methods and software to enable obesity researchers to draw more reliable causal conclusions about effects of parenting practices that are measured with uncertainty, and (b) apply these methods in analyses of observational studies of the causal relationship between parenting practices and childhood obesity. Methods and scientific findings will inform the design of future studies and implementation of more effective programs for prevention of childhood obesity.

**The problem the project is trying to solve:**
Research has consistently shown that children’s eating and weight status are strongly influenced by parental feeding styles and practices. Because it is infeasible to randomize naturalistic behaviors, data that relate feeding practices to child eating typically come from observational studies in which the practices are selected by the parents. In these data, associations may be correlational rather than causal, and the direction of causation may be difficult to ascertain.

**How this project will work:**
In this R03 project, we will develop new methods for understanding causal linkages between parental feeding practices and outcomes related to childhood obesity. Our new methodology, which we call Latent Causal Inference (LCI), will combine latent-class analysis of parental feeding practices with causal modeling of potential outcomes. We will apply LCI to data from the Girls’ NEEDS Project, a ten-year longitudinal study, to assess causal effects of parenting practices on outcomes related to eating and overweight. The scientific findings on causal relations between parenting practices and childhood obesity will be disseminated through articles in journals on obesity and prevention research, and the methodology will be described in journals of biostatistics. At the end of this project, we will document strategies for LCI with tutorial examples and disseminate software and documentation free of charge via The Methodology Center’s website.

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