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Refining the Research on Childhood Obesity



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Obesity in children and adolescents in the United States has reached epidemic proportions. To combat the problem and reverse the trend in childhood obesity, the National Institutes of Health partnered with the Centers for Disease Control and the Robert Wood Johnson Foundation to form the National Collaborative on Childhood Obesity Research (NCCOR).

Edward Ip, PhD, professor in the Department of Biostatistical Sciences, specializes in developing methodologies and measures that improve the efficiency and effectiveness of social and behavioral research. He currently heads one of the Envision projects, which coordinate and support computational and statistical modeling efforts to forecast the impact of public health policies and interventions on childhood obesity on a population-wide level, as well as among specific subpopulations.

Dr. Ip's Envision project is part of NCCOR's efforts to build capacity for multi-level, systems-oriented, integrated research that examines the effects of individual, socio-cultural, economic, environmental, and policy forces on children's diet, physical activity, energy balance, and body weight. The goal of the project is to determine whether a school-based intervention could improve a child's body mass index and have a positive impact on his or her behavior, such as making better food choices or becoming more physically active.

Dr. Ip and his colleagues are developing analytic methods to look at multiple factors simultaneously rather than the usual approach of examining one variable at a time. This strategy will seek to fill a gap in research by evaluating the larger picture—how changing one contributing factor in childhood obesity can have an impact on the many others.

The public health benefit from this type of study is not isolated to the research itself. It includes the development of tools that help researchers come to conclusions across all areas that impact childhood obesity—parents, schools, environment, and genetics. The findings from these studies will help dictate future intervention strategies and policy development, as well as provide cost savings in healthcare management.