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## **Childhood weight linked to proximity to green space and food stores**

INDIANAPOLIS -- Living in greener neighborhoods or in closer proximity to grocery stores is associated with reduced risk of being overweight, according to a study of more than 7,000 children ages 3 to 18 conducted by researchers from the Indiana University School of Medicine; the Department of Geography, Indiana University-Purdue University Indianapolis; and the University of Cincinnati. The study, the largest of its type to date, appears in the March/April issue of the American Journal of Health Promotion.

"We seem to be losing the battle to prevent childhood obesity by dealing with diet and exercise in individual children. Our study notes the interaction between environment and weight and suggests that environmental approaches to childhood obesity may prove more successful than working individually with the growing number of overweight children," said Gilbert Liu, M.D., assistant professor of pediatrics at the IU School of Medicine and a Regenstrief Institute, Inc. affiliated scientist, who is the principal investigator of the new study. The study relied upon patient data from the Regenstrief Medical Record System. Neighborhood vegetation and proximity to food retail were calculated using geographic information systems.

The study, which was conducted in Marion County, Indiana, found that increased green space was closely associated with decreased risk for being overweight, but only for children residing in higher population density regions. In more suburban areas, closer distance between a child's home and the nearest major supermarket was more closely associated with decreased risk of being overweight than proximity of the home to green space.

The study authors hypothesize that being close to green space or to a grocery store affects weight by positively influencing physical activity and dietary behaviors. "As a pediatrician, I hope this study will encourage neighborhood organizations, community activists, and others to bring more opportunities for physical activities and healthy food choices to the places where children live," said Dr. Liu.

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Authors of the study, which was funded by the National Institute of Diabetes and Digestive and Kidney Diseases, in addition to Liu, of the Children 癩 Health Services Research Program, Department of Pediatrics, IU School of Medicine, were Jeffrey S. Wilson, Ph.D., of the Department of Geography, Indiana University-Purdue University Indianapolis; Rong Qi, M.S., of the Division of Biostatistics, Department of Medicine, IU School of Medicine, and Jun Ying, Ph.D., of the Institute for the Study of Health, University of Cincinnati.

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