Study finds living near fast food outlet not a weighty problem for kids

June 16 2009

A new study by Indiana University-Purdue University Indianapolis (IUPUI) researchers contradicts the conventional wisdom that living near a fast food outlet increases weight in children and that living near supermarkets, which sell fresh fruit and vegetables as well as so called junk food, lowers weight.

The IUPUI investigators in economics, pediatrics, geography and urban planning compared children's weights over time before and after one of these food purveyors moved near the children's residences. Living near a fast food outlet had little effect on weight and living near a supermarket did not lower it.

The IUPUI researchers also report that residing near certain recreational amenities -- fitness areas, kickball diamonds, and volleyball courts -- lowers children's body mass indexes (adjusted for normal childhood growth). The researchers estimated that locating one of these facilities near the home of an overweight eight-year-old boy could lower his weight by three to six pounds. Surprisingly, living in proximity to a track and field facility (typically on the campus of a middle or high school) was associated with weight gain.

Reducing obesity in children is a high priority in health care and public policy, yet its causes and, consequently, what medical interventions might be effective, are not well understood.

"This study contradicts anecdotal information and provides scientifically verified insights into a wide range of variables that we hope will help physicians and public policy makers fight childhood obesity more effectively," said the study's first author Robert Sandy, Ph.D., professor of economics and assistant executive vice president of Indiana University.

The IUPUI research, published in the *National Bureau of Economic Research's Economic Aspects of Obesity*, utilized electronic medical records of visits over 11 years to pediatric clinics in inner city Indianapolis to determine the effects on body mass of environmental changes, such as the opening or closing of a convenience store or the installation of a playground or opening of a recreational trail.

The researchers looked at data for more than 60,000 children between the ages of 3 and 18. The children were 53 percent African-American, 30 percent Caucasian and 12 percent Hispanic. Most were poor, and publically insured.

The effect of each environmental change, for example the closing of a

fast food establishment or installation of a baseball diamond, was studied at 0.10 mile, 0.25 mile, 0.50 mile and 1.00 mile from a child's residence.

Earlier studies typically have looked at one moment in time, the so-called snapshot approach, not a decade-long expanse of data.

"Previous studies did not benefit from the wide range of information we acquired such as details of both sick and well doctor visits, changes in a child's address, annual food service establishment inspection data, aerial photographs of neighborhoods and crime statistics over time. And other studies have not taken into account, as we did, families self-selecting their locations - for example families who value exercise may be more likely to live near a park," said Dr. Sandy.

Source: Indiana University (news : web)