In Obesity, Zip Code Matters More than Genetic Code, according to University of Washington Researchers

(May 23 2012, Seattle) Where you live matters to your weight, especially if you are a woman. Unique studies conducted by the University of Washington School of Public Health show that obesity rates among women in King County were closely linked to the value of their home.

“We knew that obesity affected some neighborhoods much more than others” said senior author Dr. Adam Drewnowski. “But we did not expect to see geographic disparities on such a massive scale, especially in one of the healthiest counties in Washington State”.

The UW study, now available online in the journal Social Science and Medicine, found that women living in homes in the lowest 25 percent of assessed property values were 3.4 times more likely to be obese than women living in top-end homes. For each $240,000 drop in property values, obesity rates rose 80 percent. The link held after adjusting for individual education and incomes. No such economic link was observed for men.

The study, conducted in 2008-2009, was unique in addressing the geographic distribution of obesity at the individual level. “People still talk about obesity rates by state, county, or metropolitan area”, said Dr. Drewnowski. “We wanted to take a closer look at the built environment, and the most granular data are at the individual tax parcel lot.”

To obtain such detailed data, researchers conducted a telephone survey of a random sample of 2,001 adult residents of Seattle and its suburbs. Telephone numbers were matched with street addresses that were confirmed by respondents and geocoded. Property values came from 2008 King County tax assessor records. Homes could be single-family homes or apartments, either rented or owned. The measure of property values also included the mean value of all properties within a 10-minute walk. Residents were asked their height, weight, age, gender, education, household income, and home ownership.

Residential property values are a good measure of neighborhood wealth and are likely to reflect socioeconomic status better than either education or incomes. “Parks, trails, walkable neighborhoods, and access to healthy foods stores are what make a neighborhood desirable - and more expensive” said Dr. Drewnowski. “Unfortunately, obesity thrives in lower-income areas. Understanding social disparities will help us understand what drives the obesity epidemic.”

The study, funded by the National Institutes of Health, was conducted jointly with the Urban Form Lab at the UW College of Built Environments. Co-authors were Dr. Anne Vernez Moudon, professor and UFL director, Dr. Phil Hurvitz, Research Assistant Professor in the Department of Urban Design and Planning. Lead author was Colin Rehm, doctoral student in the department of Epidemiology, School of Public Health. Dr. Drewnowski is professor of Epidemiology in the UW School of Public Health and Director of the Center for Public Health Nutrition and of the Nutritional Sciences Program.
The Center for Public Health Nutrition is located within the University of Washington School of Public Health. [http://depts.washington.edu/uwcphn](http://depts.washington.edu/uwcphn). The University of Washington School of Public Health educates future and current public health practitioners and leaders, advances scientific knowledge and health policies, and improves the well-being of communities locally, nationally, and globally.

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