Environmental factors tied to childhood obesity

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(HealthDay)—Childhood obesity is associated with multiple environmental factors, including exposure to smoking and air pollution, according to a study recently published in *Environmental Health Perspectives*.

Martine Vrijheid, Ph.D., from Universitat Pompeu Fabra in Barcelona, Spain, and colleagues used data from 1,301 children (six European birth cohorts ages 6 to 11 years) participating in the Human Early Life Exposome study to estimate 77 prenatal exposures and 96 childhood exposures. All exposure-outcome associations were evaluated.

The researchers found that the prevalence of overweight and obesity combined was 28.8 percent. The only prenatal exposure variable associated with higher child body mass index (BMI) was maternal smoking (z-score increase of 0.28). Particulate and nitrogen dioxide air pollution inside the home, urine cotinine levels (indicative of secondhand smoke exposure), and residence in more densely populated areas and in areas with fewer facilities were associated with increased child BMI. Higher BMI was associated with child blood levels of copper and cesium, while organochlorine pollutants, cobalt, and molybdenum were associated with lower BMI.

"The implications for public health are important since these results may help to identify obesity-related exposures that could be targeted for prevention and intervention early in life," Vrijheid said in a statement.

More information: Abstract/Full Text