

# Research supports role of BMI in incident asthma in children

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Image courtesy of Blausen Medical

Overweight and obese children have a significantly increased risk of incident asthma, with evidence of a dose-response effect of elevated body mass index, according to a meta-analysis published online Nov. 12 in *Obesity Reviews*.

(HealthDay)—Overweight and obese children have a significantly increased risk of incident asthma, with evidence of a dose-response effect of elevated body mass index (BMI), according to a meta-analysis published online Nov. 12 in *Obesity Reviews*.

Y.C. Chen, from the National Taiwan University in Taipei, and colleagues reviewed the literature and conducted a meta-analysis using a prospective cohort of pediatric studies that analyzed age- and sex-specific BMI (as a measure of childhood overweight) and the primary outcome of incident asthma.

Based on data from six studies meeting the inclusion criteria, the researchers found that, compared with non-[overweight children](#), overweight children had increased risks of incident asthma (relative risk [RR], 1.19). When comparing obese versus non-[obese children](#), the association was further elevated (RR, 2.02). There was a significant dose-responsiveness of elevated BMI on asthma incidence (P for trend, 0.004). In addition, there was a gender difference noted, with obese boys exhibiting a significantly larger effect than obese girls (RR, boys: 2.47; girls: 1.25), also

with a significant dose-dependent effect.

"Our findings support the impact of [childhood obesity](#) on incident asthma, and provide information to compel obese children to lose weight," the authors write. "Policy makers for children's health and parents should pay more attention on preventing obesity-associated risk and environments."

**More information:** [Abstract](#)  
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