

# Obese moms, asthmatic kids

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Babies born to obese mothers may have an increased risk of asthma, according to data from a new study to be presented on May 19 at the 105th International Conference of the American Thoracic Society in San Diego.

"Obesity is not a neutral state; adipose tissue is an active producer of pro-inflammatory cytokines, while it also suppresses the action of anti-inflammatory cytokines," said Jet Smit, Ph.D., of the National Institute of Public Health and the Environment in the Netherlands. "Therefore, when you have an obese person, you are not just looking at a problem of excess fat, but a problem of systemic inflammation. This may affect the immunological and pulmonary development in the fetus and possibly result in a higher risk of [asthma](#) symptoms after birth."

To determine whether the presence of these pro-inflammatory factors in overweight mothers did, in fact, put their children at a greater risk of developing asthma, Dr. Smit and colleagues analyzed data from nearly 4,000 children of the Prevention and Incidence of Asthma and Mite Allergy (PIAMA) birth cohort for evidence of asthma. The children were included prenatally and followed up yearly until the age of eight years.

Asthma was defined as at least one episode of wheeze and/or dyspnea and/or a prescription for inhaled corticosteroids in the last year. Maternal [body mass index](#) (BMI) of greater than 25 kg/m<sup>2</sup> was considered overweight.

More than one in five mothers (20.9 percent) were overweight. In children who had at least one asthmatic parent, maternal obesity increased their risk of having asthma at age eight by 65 percent over children of asthmatic parents whose mothers were not overweight. This was true irrespective of confounding factors, such as [birth weight](#) and the child's BMI.

"This suggests that children of overweight mothers are exposed to increased levels of pro-inflammatory factors during fetal life, and may have a much greater risk for developing asthma than similar [children](#) whose mothers were not overweight," said Dr. Smit.

"These findings suggest that there are multiple benefits to maintaining—or in some cases attaining—a healthy body weight. In women of child-bearing age, it may not just be a benefit to their health, but to their offspring as well," said Dr. Smit.

Source: American Thoracic Society ([news](#) : [web](#))

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