

Excess Weight Can Cause Asthma

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DENVER — A new meta-analysis conducted by researchers at National Jewish Medical and Research Center has found that being overweight or obese increases the odds of developing [asthma](#) in the coming year by about 50%. The study, published online in the [American Journal of Respiratory and Critical Care Medicine](#), also found that the more overweight a person is, the greater the risk of developing asthma.

"Our findings indicate that obesity is a significant risk factor for asthma," said E. Rand Sutherland, MD, Assistant Professor of Medicine at National Jewish and co-author on the paper. "We hope this will increase awareness of the impact of obesity on an individual's risk of developing asthma and provide additional impetus for effective programs that support weight loss."

It has been known for some time that asthma patients are more likely than healthy individuals to be overweight. But it has been unclear whether having asthma causes people to become overweight or whether being overweight causes people to develop asthma. People who have asthma often take medications that can cause weight gain, and they are also often relatively inactive because of their breathing difficulties. On the other hand, there are biochemical and physiological markers linking obesity to the inflammation central to asthma.

Dr. Sutherland and [David Beuther](#), MD, Assistant Professor of Medicine at National Jewish, figured that one way to tease out the direction of causation would be to look at large prospective studies that followed people who originally did not have asthma but developed it in subsequent years. They selected seven such studies with more than 330,000 subjects.

When they crunched the numbers, Drs. Sutherland and Beuther found that people with a body mass index of greater than or equal to 25 (5'4"/145 pounds, 5'10"/174 pounds, 6'0"/184 pounds) were 1.51 times as likely to develop asthma in a given year as those with a body mass of less than 25. Obese people, with a body mass index of 30 or more (5'4"/174 pounds, 5'10"/209 pounds, 6"/221 pounds), were 1.92 times as likely to develop asthma as those with a BMI of less than 25. Overweight women had a slightly higher chance of developing asthma, although it was not statistically significant.

Previous studies suggest that new asthma cases develop in the U.S. adult population at a rate of about 0.5 percent per year. Using an adult population of 220 million, two-thirds of which are overweight, the researchers calculated that excess weight accounts for about 250,000 new asthma cases per year.

"Even small changes in the average BMI of people in the United States could translate into significant decreases in the number of new cases of asthma each year," said Dr. Beuther.

National Jewish Health is the leading respiratory hospital in the nation. Founded 121 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit the [media resources page](#).

Media Contacts

Our team is available to arrange interviews, discuss events and story ideas.

William Allstetter

Adam Dormuth

303.398.1002
allstetterw@njhealth.org

303.398.1082
dormutha@njhealth.org