

Increasing BMI causally linked to asthma, not hay fever

July 10 2017



(HealthDay)—There is a causal relationship between increasing body

mass index (BMI) and asthma and decreased lung function, according to a study published online July 4 in *Allergy*.

Tea Skaaby, Ph.D., from the Center for Health in Denmark, and colleagues examined the causal effect of BMI on asthma, [hay fever](#), and [allergic sensitization](#). Data were included for 490,497 and 162,124 participants in observational and genetic analyses, respectively. Using 26 BMI-associated single nucleotide polymorphisms, the authors created a genetic risk score (GRS).

The researchers found that per BMI-increasing allele there was a significant correlation for GRS with asthma (odds ratio, 1.009; 95 percent confidence interval, 1.004 to 1.013), but not with hay fever (odds ratio, 0.998; 95 percent confidence interval, 0.994 to 1.002) or with allergic sensitization (odds ratio, 0.999; 95 percent confidence interval, 0.986 to 1.012). There was a significant correlation for GRS with decrease in forced expiratory volume in one second ($\beta = -0.0012$; 95 percent confidence interval, -0.0019 to -0.0006) and in forced vital capacity ($\beta = -0.0022$; 95 percent confidence interval, -0.0031 to -0.0014) per BMI-increasing allele.

"The results support the conclusion that increasing BMI is causally related to higher prevalence of asthma and decreased [lung function](#), but not with hay fever or biomarkers of allergy," the authors write.

One institution was partially funded by a donation from the Novo Nordisk Foundation.

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2017 [HealthDay](#). All rights reserved.

Citation: Increasing BMI causally linked to asthma, not hay fever (2017, July 10) retrieved 3 May 2024 from <https://medicalxpress.com/news/2017-07-bmi-causally-linked-asthma-hay.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.