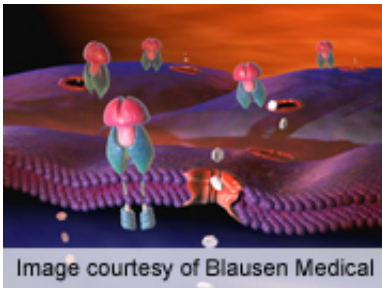


Insulin resistance ups T2D risk, independent of BMI

July 7 2014



(HealthDay)—A genetic score for insulin resistance is associated with lower body mass index (BMI) and with incident type 2 diabetes (T2D) even among individuals of normal weight, according to a study published online June 19 in *Diabetes*.

Robert A. Scott, Ph.D., from the University of Cambridge in the United Kingdom, and colleagues examined the correlations of genetic scores with euglycemic-hyperinsulinemic clamp- and oral glucose tolerance test-based measures of [insulin resistance](#) and secretion in up to 18,565 individuals. They also examined the correlation between genetic variants and T2D risk among 8,124 [normal-weight](#), overweight, and obese incident T2D cases.

The researchers found that the insulin resistance score correlated with

lower [insulin sensitivity](#), as measured by M/I value ($P = 0.004$). Significant correlations were seen for the insulin resistance score with lower BMI and gluteofemoral fat-mass, and with higher alanine transaminase and gamma-glutamyltransferase. In leaner individuals, the secretion score was more strongly associated with T2D ($P_{\text{interaction}} = 0.001$), but the association between insulin resistance score and T2D did not differ among BMI- or waist-strata ($P_{\text{interaction}} > 0.31$).

"While insulin resistance is often considered secondary to obesity, the association of the insulin resistance score with *lower* BMI and adiposity and with incident T2D even among individuals of normal weight highlights the role of insulin resistance and ectopic fat distribution in T2D, independently of body size," the authors write.

One author disclosed financial ties to the pharmaceutical industry.

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

Copyright © 2014 [HealthDay](#). All rights reserved.

Citation: Insulin resistance ups T2D risk, independent of BMI (2014, July 7) retrieved 13 March 2024 from <https://medicalxpress.com/news/2014-07-insulin-resistance-ups-t2d-independent.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.