

Adiposity genetic risk score tied to cardiometabolic health

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(HealthDay)—Data from a large cohort have replicated the association

between the genetic risk score of 11 favorable adiposity variants with lower risk of cardiometabolic disease, according to research published online April 26 in *Diabetes*.

Hanieh Yaghootkar, M.D., Ph.D., from the University of Exeter in the United Kingdom, and colleagues used data from 164,609 individuals from the U.K. Biobank and five other studies to explore the associations between a genetic score of adiposity variants and [risk](#) for disease.

The researchers found that the body mass indexes (BMIs) and [body fat percentage](#) were higher for the 50 percent of individuals carrying the most favorable adiposity alleles from the U.K. Biobank versus the 50 percent carrying the fewest alleles. For a given BMI, [individuals](#) carrying the most favorable adiposity alleles had lower risk of type 2 diabetes (odds ratio, 0.837), lower risk of hypertension (odds ratio, 0.935), and lower risk of heart disease (odds ratio, 0.921). In women, the alleles associated with higher BMI but lower risk of disease also correlated with lower waist-hip ratio; the favorable adiposity [alleles](#) correlated with higher waist circumference and higher waist-to-hip ratio in men. Results were strengthened on meta-analysis with the additional studies.

"Different molecular mechanisms that lead to higher body fat percentage (with greater subcutaneous storage capacity) can have different impacts on cardiometabolic disease risk," the authors write. "While higher BMI is associated with higher risk of diseases, better [fat](#) storage capacity could reduce the risk."

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