

BMI and waist circumference are frequently discordant

January 19 2015



(HealthDay)—Body mass index (BMI) and waist circumference (WC) are frequently discordant, generally because of variability in visceral adiposity (VAT) within BMI categories, according to a study published in the Feb. 1 issue of *The American Journal of Cardiology*.

Julie-Anne Nazare, Ph.D., from the Institut Universitaire de Cardiologie et de Pneumologie de Québec in Canada, and colleagues examined the relevance of adding WC to BMI for the estimation of VAT and cardiometabolic risk (CMR). Two hundred ninety-seven physicians recruited 4,504 patients from 29 countries; analyses included data from 4,109 patients. The authors measured both BMI and WC and assessed VAT and liver fat by computed tomography.

The researchers found that although there was a strong correlation between WC and BMI (r , 0.87 and 0.84 for men and women,

respectively), about 30 percent of participants displayed discordant values for WC and BMI quintiles. VAT and WC showed considerable between-subject variability within each BMI category. Increasing gender-specific WC tertiles correlated with significantly higher VAT, liver fat, and a more adverse CMR profile within each BMI category.

"In conclusion, this large international cardiometabolic study highlights the frequent discordance between BMI and WC, driven by the substantial variability in VAT for a given BMI," the authors write. "WC allows a further refinement of the CMR related to any given BMI."

Several authors disclosed financial ties to pharmaceutical companies, including Sanofi, which funded the study.

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

Copyright © 2015 [HealthDay](#). All rights reserved.

Citation: BMI and waist circumference are frequently discordant (2015, January 19) retrieved 2 May 2024 from <https://medicalxpress.com/news/2015-01-bmi-waist-circumference-frequently-discordant.html>

<p>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.</p>
--