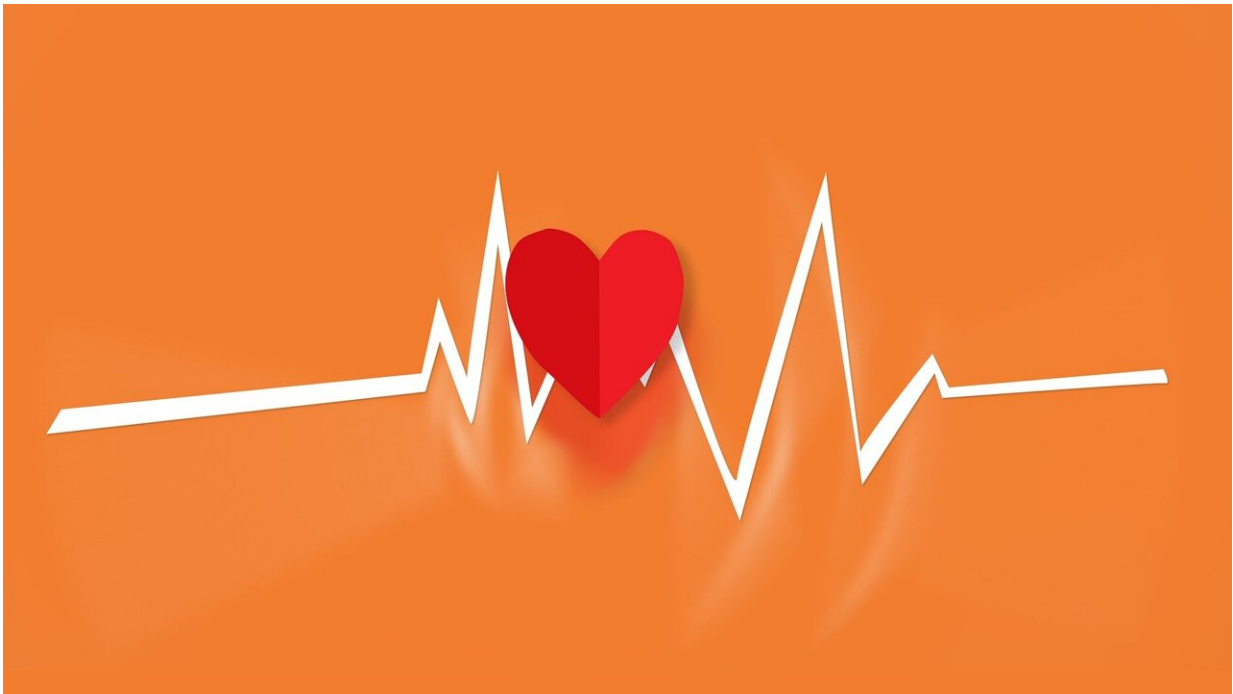


Bariatric surgery linked to heart health improvements in people with severe obesity

March 14 2024



Credit: Pixabay/CC0 Public Domain

Bariatric surgery may result in significant cardiometabolic improvements, particularly among younger, female, or white people and those without comorbidities, according to new research, titled "Cardiometabolic Improvements After Metabolic Surgery and Related Pre-surgery Factors," published in the *Journal of the Endocrine Society*.

The United States has the highest obesity rates globally. In 2017–2018, about [40%](#) of U.S. adults had obesity and 9% had severe obesity. The prevalence is particularly high among Black adults. Bariatric surgery is one method to help people with severe obesity lose a lot of weight and improve their health.

"Our study highlights how bariatric surgery not only leads to significant weight loss but also substantially improves [heart health](#)," said study author Lei Wang, M.Phil., of Vanderbilt University Medical Center in Nashville, Tenn. "These [health benefits](#) include [lower blood pressure](#), blood lipids and blood sugar, and an estimated 35% reduction in 10-year cardiovascular disease risk one year after surgery."

"Additionally, 30% to 50% of people in our study experienced remissions of diabetes, hypertension and dyslipidemia," added co-author Danxia Yu, Ph.D., of Vanderbilt University Medical Center. "Individuals who were younger, female, self-identified as white and had no history of cardiometabolic diseases tended to see greater post-surgery cardiometabolic improvements."

The researchers analyzed over 7,800 people between the ages of 20 to 79 who underwent bariatric surgery during 1999–2022 at the Vanderbilt University Medical Center. Most study participants were women and white, but the study also includes a significant number of male patients and Black patients, who have been underrepresented in [bariatric surgery](#) research.

The researchers evaluated various cardiometabolic improvements, including blood pressure, cholesterol, glucose and HbA1c. They also measured remission rates of diabetes, hypertension and dyslipidemia, and the estimated 10-year [cardiovascular disease risk](#).

Older, male or Black patients showed less reduction in 10-year heart

disease risk and lower odds of diabetes, hypertension and dyslipidemia remission than younger, female or [white patients](#). Patients with a history of diabetes, hypertension, dyslipidemia or cardiovascular disease showed less cardiometabolic improvements than those without.

"Our findings can help people with severe obesity experience better health outcomes and help us recognize which patients may require extra health management after surgery," Wang said.

More information: Cardiometabolic Improvements After Metabolic Surgery and Related Pre-surgery Factors, *Journal of the Endocrine Society*. doi.org/10.1210/jendso/bvae027

Provided by The Endocrine Society

Citation: Bariatric surgery linked to heart health improvements in people with severe obesity (2024, March 14) retrieved 28 April 2024 from <https://medicalxpress.com/news/2024-03-bariatric-surgery-linked-heart-health.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>
--