

Bariatric surgery may reduce heart failure risk

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Bariatric surgery and other treatments that cause substantial weight loss can significantly reduce the risk of heart failure in obese patients, according to preliminary research presented at the American Heart Association's Scientific Sessions 2016.

Researchers compared 25,804 [bariatric surgery](#) patients in a Scandinavian obesity [surgery](#) registry to 13,701 Swedish nationwide registry patients who used an intensive structured lifestyle-modification program. Both groups had no history of [heart failure](#) before starting treatment and body mass indices greater than 30 and weighed on average 119 kilograms/262.35 pounds before treatment.

They found:

- 4 years after start of treatment, the risk of heart failure was nearly 50 percent lower in the bariatric surgery group.
- The rate of death and heart attack was similar between the treatment groups.
- However, patients in the bariatric surgery group had fewer incidences of [atrial fibrillation](#), diabetes and hypertension.
- The bariatric surgery group lost more weight than those in the intensive lifestyle modification program. Obesity surgery led to 18.8 kilograms/41.44 pounds more [weight loss](#) than lifestyle treatment after one year, and 22.6 kilograms/49.82 pounds more weight loss after two years.

The lifestyle modification program participants consumed a very low-energy diet of 500 calories a day for 3 to 10 weeks followed by 2 to 8 weeks of gradual incorporation of food, and then 9 months of a weight-maintenance regimen that included regular exercise, dietary advice and behavioral therapy. Around 20 percent of patients in the lifestyle modification program dropped out by the first year.

"Our study shows an association between obesity and heart failure and offers support for efforts to prevent and treat obesity aggressively, including the use of bariatric surgery," said Johan Sundstrom, M.D., Ph.D., senior author of the study and professor of epidemiology at Uppsala University in Sweden. "Bariatric surgery might affect the incidence of atrial fibrillation, diabetes and hypertension—known risk factors of heart failure—explaining the lower risk of heart failure we observed."

While the findings report that heart failure risk is lower in patients who lose more weight, it does not prove that obesity causes heart failure, he said. But, patients in both treatment groups lost weight intentionally, supporting the idea.

The study was done in a most likely white Scandinavian population. Whether the study's findings would relate to a U.S. population is unclear. In addition, because the study's participants did not have heart failure before the weight-loss [treatment](#), "the study does not provide any advice on how to treat cardiovascular disease in [obese patients](#)," Sundstrom said.

American Heart Association, American College of Cardiology and the Obesity Society Clinical Practice guidelines advise adults with a body mass index (BMI) of 40 or higher and [patients](#) with a BMI of 35 or higher, who have two other cardiovascular risk factors such as diabetes or high blood pressure, that bariatric surgery may provide significant

health benefits. The guidelines do not recommend weight loss surgery for people with a BMI under 35 and do not recommend one surgical procedure over another.

Provided by American Heart Association

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