

Weight loss surgery substantially reduces the risk of developing type 2 diabetes

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Bariatric (weight loss) surgery, such as gastric bypass or gastric banding, could reduce the risk of developing type 2 diabetes by around 80% in obese people, compared with standard care, new research published in *The Lancet Diabetes & Endocrinology* journal suggests.

Being overweight or obese is the main modifiable risk factor for [type 2 diabetes](#). More than 80% of adults with type 2 diabetes are overweight or obese. In England, just over a quarter of adults (26%) were classified as obese in 2010 (body mass index [BMI] 30kg/m² or over). Up to 3% of people with severe obesity (BMI 40kg/m² or more) develop diabetes each year.

Using electronic health records from the UK Clinical Practice Research Datalink, Martin Gulliford, Professor of Public Health at King's College London, UK, and colleagues assessed the effect of contemporary surgical weight loss procedures on the development of diabetes.

They identified 2167 obese adults without diabetes who underwent one of three surgical procedures (laparoscopic adjustable banding, sleeve gastrectomy, or [gastric bypass](#)) for weight loss from 2002 onwards. These participants were compared with 2167 controls matched for age, sex, BMI, and blood glucose control (measured as HbA1c) who did not have surgery or other obesity treatments. Participants were followed up for a maximum of 7 years (median 2.8 years).

During follow-up, 38 new diagnoses of diabetes among participants who had [weight loss surgery](#) were recorded, compared with 177 in control participants. Compared with controls, diabetes incidence was reduced by about 80% in participants who had surgery, even after controlling for other important factors including smoking, high blood pressure, and high cholesterol.

According to Professor Gulliford, "Our results

suggest that bariatric surgery may be a highly effective method of preventing the onset of new diabetes in men and women with severe obesity. We need to understand how [weight loss](#) surgery can be used, together with interventions to increase physical activity and promote healthy eating, as part of an overall diabetes prevention strategy."

Writing in a linked Comment, Dr Jacques Himpens from Saint Pierre University Hospital in Brussels, Belgium, says, "Although the results...bring us a step closer to confirming the effect of [bariatric surgery](#) on the incidence of de-novo type 2 [diabetes](#), many questions still remain unanswered, and more evidence is needed to convince endocrinologists about the nature of this effect."

More information: *The Lancet Diabetes & Endocrinology*, www.thelancet.com/journals/lan... (14)70214-1/abstract

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