Medical Xpress

In T2DM, bariatric surgery ups splanchnic vascular responses

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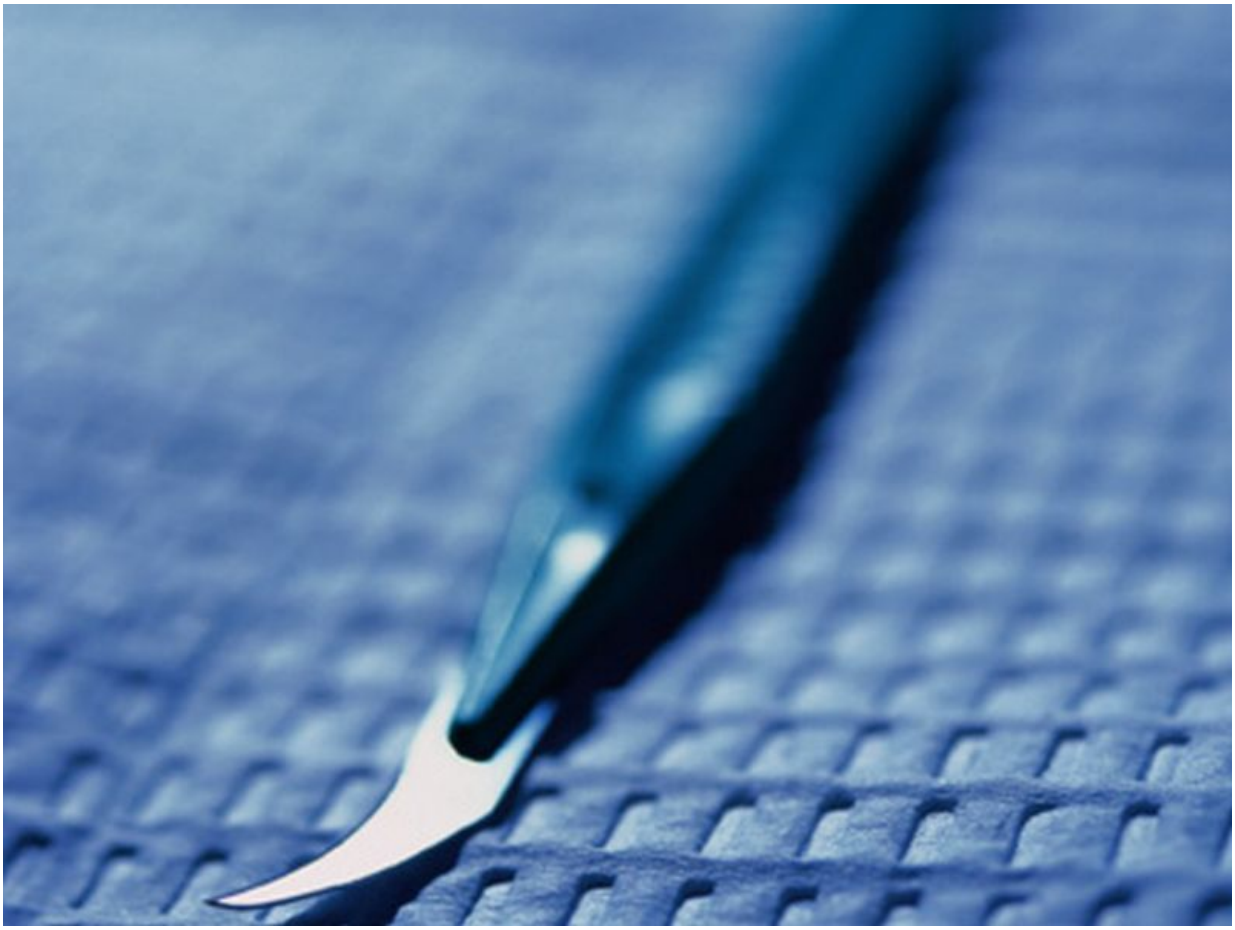

(HealthDay)—For obese patients with type 2 diabetes (T2D), bariatric

surgery is associated with improved splanchnic vascular responses, according to a study published online Jan. 17 in *Diabetes*.

Henri Honka, from the University of Turku in Finland, and colleagues characterized the vascular effects of a mixed-meal and of infusion of exogenous glucose-dependent insulinotropic polypeptide (GIP) in the splanchic region in 10 lean controls and 10 obese patients with T2D before and after bariatric surgery. At baseline, 20, and 50 minutes, they measured pancreatic and intestinal blood flow (BF) with ^{15}O-water using positron emission tomography and magnetic resonance imaging.

The researchers found that there was no difference between obese and lean controls in terms of pancreatic and intestinal BF responses to a mixed-meal before surgery. The mixed-meal induced greater increase in plasma glucose, insulin, and GIP concentrations after surgery compared with before surgery, which was accompanied by an increase in pancreatic and intestinal BF responses. Both before and after surgery, GIP infusion decreased pancreatic but increased small intestinal BF similarly in all groups.

"Taken together, these results demonstrate that bariatric surgery leads to enhanced splanchnic vascular responses, most likely as a consequence of rapid glucose appearance and GIP hypersecretion," the authors write.

More information: Full Text (subscription or payment may be required)