

Genetic variant may explain weight loss post-RYGB surgery

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Image courtesy of Blausen Medical

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(HealthDay)—A genetic variant associated with weight loss after Roux-en-Y gastric bypass (RYGB) surgery has been identified, according to a study published in the May 2 issue of the *American Journal of Human Genetics*.

Ida J. Hatoum, Sc.D., from Massachusetts General Hospital in Boston, and colleagues performed a genome-wide association study involving 693 individuals undergoing RYGB to examine potential genetic factors associated with weight loss. Findings were replicated in an independent population of 327 individuals undergoing RYGB.

The researchers found that there was a significant correlation between a 15q26.1 locus near *ST8SIA2* and *SLCO3A1* and weight loss after RYGB. Baseline *ST8SIA2* expression in omental fat of these individuals correlated significantly with post-RYGB weight loss. In addition, expression of *St8sia2* and *Slco3a1* was significantly altered in metabolically active tissues in RYGB-treated versus weight-matched sham-operated mice.

"We have identified a [genetic locus](#) that is reproducibly associated with weight loss after RYGB," the authors write. "This study provides evidence for the use of genomics to identify

response to surgical procedures (surgicogenomics)."

Several authors disclosed [financial ties](#) to Merck, which partially funded the study.

More information: [Abstract](#)
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