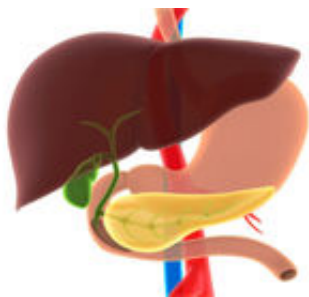


# Intra-pancreatic triacylglycerol drops with weight loss in T2DM

December 21 2015

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(HealthDay)—The weight loss-associated decrease in intra-pancreatic triacylglycerol which occurs after gastric bypass is specific to type 2 diabetes mellitus (T2DM), according to a study published online Dec. 1 in *Diabetes Care*.

Sarah Steven, M.B., Ch.B., from the Institute of Cellular Research at Newcastle University in the United Kingdom, and colleagues collected data for individuals listed for [gastric bypass](#) surgery who had either T2DM or normal glucose tolerance (NGT). The participants were matched for age, weight, and gender and evaluated before and eight weeks after surgery. Triacylglycerol content of the pancreas and liver was quantified.

The researchers observed similar weight loss after surgery (NGT:  $12.8 \pm$

0.8 percent; T2DM:  $13.6 \pm 0.7$  percent); fat mass change was also similar for the NGT and T2DM groups. There was no change in pancreatic triacylglycerol in the NGT group, but there was a decrease in the T2DM group ( $P = 0.007$ ). At week eight there was no change in the NGT group in the first phase insulin response to a stepped intravenous glucose infusion, while normalization was seen in the T2DM group ( $P = 0.005$ ). After gastric bypass there was no differential effect of incretin secretion; more rapid glucose absorption brought about similarly enhanced glucagon-like peptide 1 secretion in both groups.

"The fall in intra-pancreatic triacylglycerol in type 2 diabetes which occurs during weight loss is associated with the condition itself rather than decreased total body fat," the authors write.

**More information:** [Abstract](#)  
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