

# Mini-dose glucagon may halt post-exercise hypoglycemia

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(HealthDay)—Mini-dose glucagon (MDG) is an effective approach for

preventing exercise-induced hypoglycemia in patients with type 1 diabetes, according to a study published online May 18 in *Diabetes Care*.

Michael R. Rickels, M.D., from the University of Pennsylvania in Philadelphia, and colleagues aimed to determine whether MDG given subcutaneously pre-exercise could prevent glucose lowering and compared the glycemic response to current approaches for mitigating exercise-associated [hypoglycemia](#). The authors performed a four-session, randomized crossover trial in which 15 adults with type 1 [diabetes](#) treated with continuous subcutaneous insulin infusion exercised fasting in the morning at approximately 55 percent  $VO_{2max}$  with no intervention (control), 50 percent basal insulin reduction, 40-g oral glucose tablets, or 150- $\mu$ g subcutaneous MDG.

The researchers found that during exercise and early recovery from exercise, plasma glucose increased slightly with MDG and decreased with control and insulin reduction, and there was a greater increase with glucose tablets. There were no differences in insulin levels among sessions; glucagon increased with MDG administration. Six participants experienced hypoglycemia (plasma glucose

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