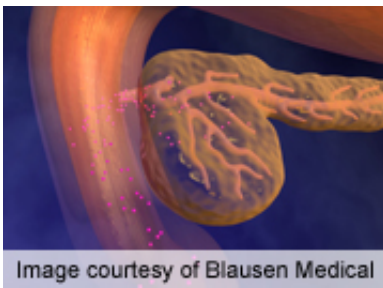


Single moderate exercise session ups insulin sensitivity in obese

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A single, afternoon session of moderate exercise improves insulin sensitivity the next day in obese adults, according to a study published online June 11 in *Diabetes Care*.

(HealthDay)—A single, afternoon session of moderate exercise improves insulin sensitivity the next day in obese adults, according to a study published online June 11 in *Diabetes Care*.

Sean A. Newsom, Ph.D., from the University of Michigan in Ann Arbor, and colleagues examined the effect of an [exercise session](#) on [insulin sensitivity](#) and fatty acid uptake in a group of 11 sedentary [obese adults](#). In two experimental trials, subjects had to exercise to expend 350 kcal in the afternoon at different exercise intensities (50 percent [EX50] or 65 percent [EX65] peak [oxygen uptake](#)). A control trial was completed without exercise. Insulin sensitivity (hyperinsulinemic-euglycemic clamp) and whole-body fatty acid uptake (palmitate rate of

disappearance from plasma) were measured the next morning.

The researchers found that exercise correlated with increased insulin sensitivity the next day, with a significant improvement noted after EX50 (35 percent improvement; $P = 0.01$), but not after EX65 (20 percent improvement; $P = 0.17$), compared with the control condition. Systemic fatty acid uptake was significantly lower after EX50 compared with EX65 ($P = 0.02$), but was not significant compared with the control condition ($P = 0.07$). Systemic fatty acid uptake values were similar for controls and EX65 ($P = 0.88$). Compared with the control condition, there was a significant negative correlation between the change in fatty acid uptake after exercise and the change in insulin sensitivity for all trials.

"A relatively modest single session of exercise in obese adults improved insulin sensitivity the next day, and a reduction in systemic fatty acid uptake in the several hours after exercise may be important for this effect," the authors write.

More information: [Abstract](#)

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