

# Long, low intensity exercise may have more health benefits relative to short, intense workouts

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Standing and walking for longer stretches improves insulin sensitivity and blood lipid levels more than an hour of intense exercise each day does, but only if the calories spent in both forms of exercise are similar. The findings are published February 13 in the open access journal *PLOS ONE* by Hans Savelberg and colleagues from Maastricht University, Netherlands.

The researchers recruited eighteen normal-weight 19 to 24-year-old participants for their study and asked them to follow three regimes. In the first, participants were instructed to sit for 14 hours each day and not indulge in any form of exercise; the second regime required participants to sit for 13 hours each day and exercise vigorously for 1 hour; and in the third, participants substituted six hours of sitting with four of walking and two hours standing. After each regime, the researchers tracked each participant's [insulin sensitivity](#) and [blood lipid levels](#), both of which can help identify metabolic conditions like diabetes and obesity.

The authors found that overall, when participants followed the strictly sedentary regimen they burned over the course of the day than in the other two routines, which were roughly the same. Cholesterol and lipid levels improved slightly when participants exercised vigorously for an hour each day, but improved significantly when participants were active for longer periods at low intensity. According to the study, being active

simply by standing or walking for long periods of time significantly improved [insulin levels](#) compared to both a strictly sedentary lifestyle, and one in which participants were largely sedentary except for an hour of exercise each day. The study concludes that when energy expenditure is equivalent, longer durations of low-intensity exercise may offer more benefits than shorter periods of intense activity.

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