

Study links increased exercise with lower sleep apnea risk

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A study published online as an accepted paper in the *Journal of Clinical Sleep Medicine* found that increased physical activity is associated with a lower risk of obstructive sleep apnea, a common sleep-related breathing disorder. The study is the largest to date focused on the relationship between sleep apnea and levels of physical activity in the general community.

Researchers reviewed lifestyle, medical, socio-demographic and sleep health data collected from more than 155,000 adults participating in the Ontario Health Study. Based on the [physical activity](#) of participants with and without sleep apnea, the investigators determined that a modest increase in physical activity, including walking, is associated with a 10 percent reduction in the risk of developing sleep apnea.

"Our results highlight the importance of physical activity as a preventive measure against developing sleep apnea," said senior author Lyle Palmer, who is professor of genetic epidemiology at the University of Adelaide in Australia. "One surprising finding was that not only vigorous

physical activity but also just walking alone was associated with a decreased risk of sleep apnea."

The authors found that adding 20 minutes to a daily walk and increasing vigorous daily activity by eight minutes would be enough to achieve a lower sleep apnea risk. The finding is independent of other known [risk factors](#) for sleep apnea such as sex, age, ethnicity and obesity.

It is estimated that more than 29 million American adults have sleep apnea, many of them undiagnosed. Untreated sleep apnea is associated with an increased risk of heart disease, stroke, high blood pressure and other potentially serious conditions.

"The rates of sleep apnea in children and adults are continuing to rise. Therefore, understanding the role of modifiable protective factors for sleep apnea is important," said Palmer. "Exercise is one such protective factor and has many other positive effects on general health. Sleep health care professionals should be trying to get their patients to exercise more."

The cross-sectional, population-based study analyzed baseline questionnaire data from 155,448 adult residents of Ontario, Canada (60% women and 40% men). Their mean age was 46 years, and about 75% were white. About 6.9% of participants reported being told by a doctor that they have sleep apnea. Those with sleep apnea were more sedentary, sitting for a median of 4.4 more hours per week than those without sleep apnea.

Due to the cross-sectional nature of the study, the authors were unable to make temporal inferences on the observed associations between physical activity and sleep apnea. However, they report that previous studies also have suggested that physical activity can reduce the severity of sleep [apnea](#).

In a related commentary, also published as an

accepted paper in *JCSM*, Dr. Joyce Lee-Iannotti and Dr. James Parish write that the study's findings give sleep physicians another tool to treat mild to moderate [sleep apnea](#) that may be more appealing to patients.

More information: Kelly A. Hall et al, Physical Activity is Associated With Reduced Prevalence of Self-Reported Obstructive Sleep Apnea in a Large, General Population Cohort Study, *Journal of Clinical Sleep Medicine* (2020). DOI: [10.5664/jcsm.8456](https://doi.org/10.5664/jcsm.8456)

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