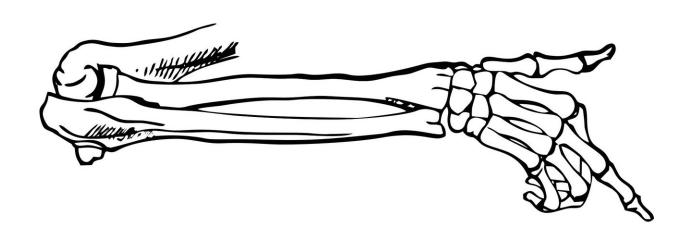


## Sleep deprivation linked to weaker bones

November 6 2019, by Stacey Burling, The Philadelphia Inquirer



Credit: CC0 Public Domain

Women who don't get enough sleep may be putting their bones at risk, a new study found.

The research showed that postmenopausal women who slept less than five hours a night were 22% more likely than those who slept at least seven hours to have low bone mass and 63% more likely to have osteoporosis of the hip. Results for the spine were similar.

Bone mass is important because weaker bones are more likely to break.



In the elderly, fractures can reduce quality and length of life.

In the study, which was published in the *Journal of Bone and Mineral Research*, researchers described the relationship between short sleep and bone health as "modest" and said it was equivalent to a year of aging.

Still, sleep, unlike many treatments, comes with no harmful side effects. "It's not a pill. No one has to pay for it," said Heather Ochs-Balcom, a University at Buffalo epidemiologist who led the study. "It's just a nice easy recommendation to improve health."

The study adds to mounting evidence that sleep has wide-ranging effects on our health. Short sleeping has been associated with cardiovascular, mood, metabolic and immune system problems.

Previous work by this team found an association between sleeping too much or too little or having disturbed sleep and recurrent falls and fractures.

This new study analyzed data on 11,084 postmenopausal women. It relied on self reports of sleep. The researchers, who were from 12 institutions, including the University of Pittsburgh, controlled for weight, smoking, age, education and several other factors. Ten% of the women said they slept less than five hours a night.

Ochs-Balcom said this study was not meant to examine why sleep affects bone health. Previous work has shown a connection between short sleep and hormonal and metabolic changes as well as inflammation.

Earlier this week, the American Academy of Sleep Medicine released a new survey that found that many Americans are letting entertainment get in the way of a good night's sleep. Binge watching was the most common culprit, but video games, books and sports events were also common



sleep robbers.

**More information:** Heather M Ochs-Balcom et al. Short Sleep Is Associated With Low Bone Mineral Density and Osteoporosis in the Women's Health Initiative, *Journal of Bone and Mineral Research* (2019). <a href="mailto:onlinelibrary.wiley.com/doi/10.1002/jbmr.3879">onlinelibrary.wiley.com/doi/10.1002/jbmr.3879</a>

©2019 The Philadelphia Inquirer Distributed by Tribune Content Agency, LLC.

Citation: Sleep deprivation linked to weaker bones (2019, November 6) retrieved 6 May 2024 from <a href="https://medicalxpress.com/news/2019-11-shortened-negatively-affect-women-bone.html">https://medicalxpress.com/news/2019-11-shortened-negatively-affect-women-bone.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.