

# Sleep Finds Its Goldilocks Range



By *Chuck Dinerstein* — December 6, 2018

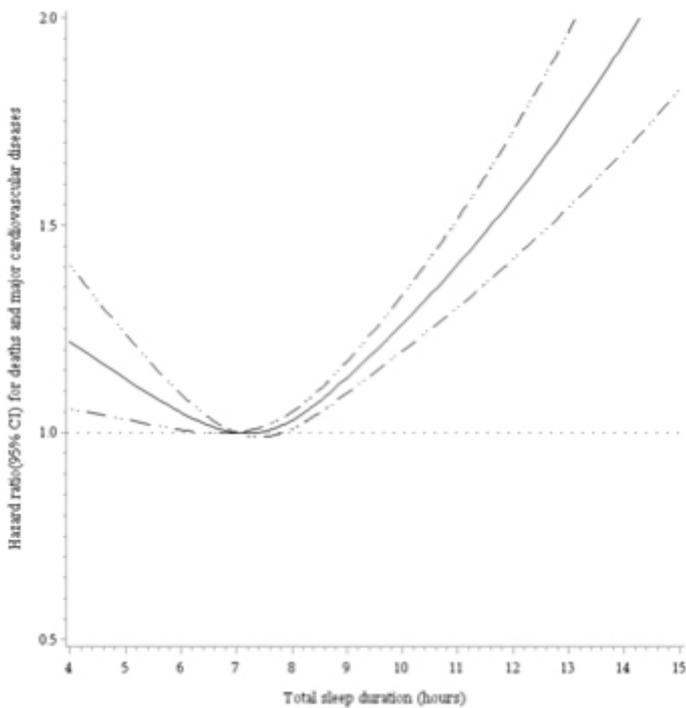


Courtesy of DieterRobbins [1]

How much sleep is enough? How about naps, I personally love a nice little afternoon nap after perhaps a bit too much lunch. A new report from PURE, the Prospective Urban Rural Epidemiology studies, the people who brought you the [finding that too little and too much salt were both bad](#) [2], looked now at our sleep. And again they found what we might call a sleep “sweet spot” although to be honest; the graphs seems a bit better than the data.

PURE is an international study involving 21 countries and participants age 35-70. Sleep was self-reported from surveys recording naps in minutes and “nocturnal” sleep as the time to bed till the time to wake up. And for those of us that toss and turn, the researchers pointed to data showing we sleep about 85% of that time frame. The outcomes were all-cause mortality and major cardiovascular events – fatal and non-fatal heart attacks, strokes and heart failure; all the usual suspects. Roughly these followed 117,000 individuals from a mean of 7.8 years; breaking them into three groups sleeping  $\leq 6$  hrs, 6-8 hrs or  $> 8$  hrs, with the hours representing both nocturnal sleep and naps. 4381 died, and 4365 had significant cardiovascular events.

The researchers freely acknowledge the usual limitation of observational studies not showing causation, that the data was not objective but subjectively reported and that they assumed that the patterns of sleep and naps did not change during the period after the initial survey. Finally, they made did not evaluate whether sleep disorders like sleep apnea were present although they did note that 1.6% of participants used a sleep medication and this rate was higher at 6.3% in wealthier countries.



Here is the graphic of the data, that same

Swoosh, J-shaped curved they found for salt intake and disease. Those participants sleeping 6-8 hours daily were in the sweet spot, mortality and cardiovascular event wise. Those who slept less and those who sleep more had increasing rates of both. And while I really, really want to believe this data, because it fits my bias that our physiology works within a range, I am afraid that the pretty picture is going to require some words in describing its limitations.

First, the findings concerning all-cause mortality were statistically significant only for those sleeping longer than 6-8 hours. The results were statistically significant for both the too little and the too much sleep groups for major cardiovascular events and mortality making me wonder whether those cardiovascular events benefited from the statistical significance of mortality. Moreover, when you look at the groups those with too much sleep were “more often ?50 years old, females, smokers, and hypertensives, were less educated, and were more likely to live in a rural area;” and those who slept too little “had higher BMI and waist-to-hip ratio, less likely to consume alcohol, and more likely to have diabetes.” So respect to our know cardiovascular risk factors we were comparing apples and oranges.

### But what about naps?

Naps count towards those final totals. If you already are sleeping 6-8 hours, naps were associated with poorer outcomes. And if you hadn't slept enough the night before, naps “appear to mitigate their [individuals sleeping less than 6 hours at night] risk.” Funny, how when you haven't “slept enough” your body wants to catch up all on its own. But is it scientism to say that naps “mitigate” effects or that they have “possible protective effects?” I am afraid the answer is yes because in both these cases the word choice suggests a causality that is not proven.

I do, so much like that J-shaped curve where too little and too much are bad and where, in between, there is a range of good. But I am not sure that we can put this issue to rest and say all the facts are in. Better for us to sleep on it for a while.

Source: Association of estimated sleep duration and naps with mortality and cardiovascular events: a study of 116 632 people from 21 countries European Heart Journal DOI:

---

COPYRIGHT © 1978-2016 BY THE AMERICAN COUNCIL ON SCIENCE AND HEALTH

---

**Source URL:** <https://www.acsh.org/news/2018/12/06/sleep-finds-its-goldilocks-range-13649>

**Links**

[1] <https://pixabay.com/en/bed-sleep-girl-white-tired-pillow-945881/>

[2] <https://www.acsh.org/news/2018/08/10/spoonful-salt-makes-blood-pressure-go-down-13289>