Two nights of **broken sleep** can **make people feel years older**, finds study

**Beyond simply feeling decrepit, perception of being older can affect health by encouraging unhealthy eating and reducing exercise**

Two nights of broken sleep are enough to make people feel years older, according to researchers, who said **consistent, restful slumber** was a key factor in helping to **stave off feeling one’s true age**.

Psychologists in Sweden found that, on average, volunteers felt more than four years older when they **were restricted to** only four hours of sleep for **two consecutive nights**, with some claiming the sleepiness made them feel decades older.

**The opposite was seen** when people were allowed to stay in bed for nine hours, though the effect was more **modest**, with participants in the study claiming to feel on average three months younger than their real age after **ample rest.**

“Sleep has a major impact on how old you feel and it’s not only your **long-term sleep patterns**,” said Dr Leonie Balter, a psychoneuroimmunologist at the Karolinska Institute in Stockholm and first author on the study. “Even when you only sleep less for two nights that has a real impact on how you feel.”

Beyond simply feeling more decrepit, the perception of being many years older may affect people’s health, Balter said, by encouraging unhealthy eating, **reducing physical exercise**, and **making people less willing to socialise** and engage in new experiences.

The researchers ran two studies. In the first, 429 people aged 18 to 70 answered questions about how old they felt and on how many nights, if any, they had slept badly in the past month. **Their sleepiness was also rated according to a standard scale used in psychology research.**

For each day of poor sleep the volunteers felt on average three months older, the scientists found, while those who reported **no bad nights in the preceding month** felt on average nearly six years younger than their true age. It was unclear, however, whether bad sleep made people feel older or **vice versa**.

In the second study, the researchers quizzed 186 volunteers aged 18 to 46 on how old they felt after two nights of plentiful sleep, in which they stayed in bed for nine hours each night, and two nights when they slept for only four hours a night. **Feeling older was linked, unsurprisingly, to feeling sleepier.**

Writing in [Proceedings of the Royal Society B](https://royalsocietypublishing.org/doi/10.1098/rspb.2024.0171), the psychologists describe differences in people’s responses to **sleep loss** depending on whether they were **a morning person**, who woke and went to bed early, or an evening person who **rose late and retired late**. **Evening types** typically felt older than their true age even after plenty of sleep, but **morning types** were hit harder in how old they felt when their sleep was disrupted.

Balter says **the findings, if confirmed, could be put to good use**. “**It’s important to realise how malleable subjective age is**,” she said. “

“**Another important thing to consider in future research is an exploration of these mechanisms over time**,” she added. “This study tells us that a bad night of sleep can impact how we feel the day after, but what are the cumulative effects of bad sleep for months and years?”

Dr Iuliana Hartescu, a senior lecturer in psychology at Loughborough University, who was also not involved in the study, said **insufficient or poor sleep quality** was important for lifestyle behaviours that **ultimately** affect long-term health.

“Sleep is one **modifiable** behaviour which has **an immediate, noticeable effect** on health,” she said. “The effects of poor diet and low physical activity take some time to notice. **The effect of a poor night of sleep is immediate and influences all the other 24-hour lifestyle behaviours.”**

In separate work, a 10-year study of more than 4,000 Europeans found those who consistently exercised two to three times a week were significantly less likely to suffer from **insomnia** than inactive people, and better able to **clock up the recommended six to nine hours** of sleep each night.

The international team of researchers analysed **questionnaires** from people **enrolled** in the European community **respiratory health** survey on their exercise habits, how well and how long they slept, and how sleepy they felt in the day. Volunteers at 21 sites in nine countries were followed for a decade.

Those who exercised two or more times a week, for at least an hour a week, were 42% less likely to have problems falling asleep than inactive people, the study found, and **55% more likely to be “normal sleepers” who got a healthy amount of shut-eye each night.**

“This study has a long follow-up period, 10 years, and indicates strongly that consistency in physical activity might be an important factor in **optimising** sleep duration and reducing the symptoms of insomnia,”