
Thrive

Six tips by a sleep psychologist to improve sleep quality

by DAN FORD

INCREASE YOUR HUNGER FOR SLEEP: POOR QUALITY SLEEP FOUND TO BE COMMON IN UMBRELLA SURVEY

Do you feel like you aren't getting good quality sleep at night? Do you wake up feeling tired and unrefreshed? You aren't alone. Poor sleep quality is one of the most common complaints we see in the Umbrella Wellbeing Survey. In fact, research shows that around 30% to 40% of New Zealanders report they wake up feeling tired and fatigued on a regular basis. So, how do we get better quality sleep? The first step is to understand what determines sleep quality.

WHAT DETERMINES SLEEP QUALITY?

Sleep quality is determined by the depth and intensity of the deep sleep we experience. Thanks to sleep science, it's now known that this intense and deep sleep is related to the build-up of the metabolite adenosine in the brainstem (the sleep/wake centre of the brain). Effectively, the adenosine build-up in the brainstem signals to the brain that sleep is needed. The brain responds with deep sleep, which clears the adenosine out, getting you ready to face the next day. So, the more (or less) adenosine present, the deeper (or lighter) the sleep.

So, what creates adenosine? Adenosine is actually a by-product of daily brain activity. The more you use your neurons to think and move, and the longer your day, the more adenosine builds up and the deeper your sleep. Basically, you can think of adenosine as your body's "sleep hunger". Big appetite, deep, refreshing sleep. Little appetite, short or broken sleep.

Armed with the little bit of sleep science above, what can you do to aid the build-up of adenosine, contribute to "sleep hunger" and a quality deep sleep every night? Here are six tips backed by science and clinical practice.

1. Anchor your wake time

Getting up at the same time each day is arguably the most important behaviour in sleep science. Anchoring your wake time regulates your body clock and can also make you feel better emotionally. Provided you go to bed at the same time (if you're actually sleepy), the steady wake time, regardless of sleep the night before, also ensures the same length of day (and activity) to build adenosine and sleep hunger.

2. Avoid "sleeping in"

After a night of poor sleep it's natural to want to "catch up" by sleeping in. That's "sleep desire". It's not necessarily "sleep hunger". Unfortunately, because adenosine accumulates when you're moving and your brain is active, giving in to "sleep desire" and lying in bed will result in slower adenosine accumulation, lower sleep hunger, and lighter sleep the following night.

3. Balance the books

Daytime napping is another natural response to poor sleep. Unfortunately, napping will clear out any adenosine that has built up, resulting in less sleep need by bedtime and a lighter, broken sleep. Basically, naps are sleep snacks. Too much snacking, not enough appetite at dinner time. The solution? If you must nap, keep naps to no more than 20 minutes and not after 3pm. If you nap longer, push your bedtime back by the length of the nap time to "balance the books".



4. Keep active

In the same way that exercise burns calories and makes you feel physically hungry, science shows that regular exercise builds adenosine and enhances the body's "hunger" for deep sleep. For the working age population, around 1 hour a day of moderate intensity movement (ideally outdoors) improves deep sleep. For older people, around 30 minutes of movement is adequate.

5. Check your nightly breathing

This tip isn't actually related to adenosine build up per se. It's the other end of the spectrum. While the previous tips relate to poor sleep quality due to inadequate sleep hunger, for some, poor sleep quality will be the result of breathing-related issues during sleep. This leads to a failure to clear out adenosine, leading to sleep that is not refreshing and excessive daytime sleepiness. When we sleep deeply, muscles are at their most relaxed which can result in a narrowing of our airways and lower oxygen levels in the body. The body will respond to inadequate oxygen supply while sleeping with lighter sleep. Lighter sleep maintains airway muscle tension and keeps the airway open. The result is minimal deep sleep and waking feeling unrefreshed and sleepy. A key indicator of breathing-related issues during sleep is snoring. So, if you snore, or you continually feel sleepy despite sleeping through the night (and giving yourself adequate sleep time), you may need to talk to a sleep clinic about getting an at-home sleep study to check your nightly blood oxygen and the presence of a breathing-related sleep disorder. Research tracking a community sample in Australia for 20 years showed that untreated moderate to severe breathing-related sleep disorders were significantly associated with increased all-cause mortality risks.

6. Address chronic insomnia

Chronic insomnia is defined as three or more nights a week of trouble falling asleep, staying asleep, or waking too early, that goes on for longer than three months. The tips above, combined with basic sleep hygiene (e.g. keep the bedroom dark, cool, noise-free etc), will ensure a few nights of poor sleep won't transition to chronic insomnia. But if you already have chronic insomnia then your best bet is to get professional support from a psychologist that specialises in sleep. The reason is that studies show that up to 88% of people with chronic insomnia still report sleep trouble 5 years later. On the other hand, specialised treatment with cognitive behaviour therapy for insomnia (CBTi) can see up to 90% of people with insomnia significantly improve their sleep, and around 50% gain complete remission.

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