Vitamin D and Sleep Disorders

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Scientists are starting to wonder if there is a correlation between the 35% of Americans who don’t get enough sleep (CDC statistic) and the 30-50% of the general population that is vitamin D-deficient (Lee et al. 2008).

A 2012 Medical Hypothesis submission stated that the authors believe the world epidemic of sleep disorders might be linked to vitamin D deficiency. They suggest that vitamin D’s role in brainstem nuclei may be directly linked to sleep. The authors called for more research. However, there has already been a good deal of research completed on how vitamin D affects sleep disorders.

Multiple studies have found that people with sleep disorders are likely to have lower levels of vitamin D. A 2014 Sleep Medicine Review article theorized that vitamin D plays a role in wake impairment, which is common in people with sleep disorders. The same study suggested that chronically low vitamin D levels may be a factor in developing obstructive sleep apnea, one of the most common sleep disorders. Low vitamin D appears to be more common in people who have sleep apnea (Neighbors et al., 2014). However, it’s not clear whether vitamin D deficiency is a risk factor for the sleep apnea or vice versa.

The good news, however, is that increasing vitamin D levels may help people with sleep disorders get a better night’s sleep. A small study of 89 people published in Nutritional Neuroscience in 2017 found that a vitamin D supplement could improve people’s sleep. Those who received the supplement fell asleep faster and slept longer. They also reported feeling better. Getting enough vitamin D could help you sleep better.

Sleeping enough is a boon for your health. Like vitamin D, insufficient sleep has been linked to the development of chronic diseases. These sleep-linked diseases are both physical issues (including diabetes and obesity) and mental health issues (such as depression). In the short term, getting adequate rest also makes you think more clearly and feel less irritable. Being deprived of sleep is harmful to your body and mind.

Unfortunately, no supplement exists for better sleep. Hypnotic drugs can make you fall asleep, but many have serious side effects, like potential dependency. A supplement like melatonin can help in the short term without causing dependency, but side effects like headaches and nausea are possible. Improving your sleep habits and lifestyle is probably a better long-term solution.

Changing your diet and eating schedule may be of help. Eat foods that promote the production of the sleep hormone melatonin, such as bananas, oats, and oranges. Including these foods in your afternoon snack may help you to drift off easier. Since vitamin D may also play a role in sleep, it may be wise to eat foods high in vitamin D as well or consider taking a supplement. Avoiding large meals in the late evening may also help you sleep. Acid reflux and the digestive process can make it hard to fall asleep. If you eat earlier in the day, you’ll have already digested before bedtime.
Minimize distractions to sleep longer. Blackout curtains can keep out distracting light pollution. A mattress that is suited to your sleeping position, temperature and body size should allow you to rest deeply. If you think your current bed is a bad fit, there are many mattresses available online for a good price. Another new addition to your bedroom that may help you sleep is a white noise machine, which can block out disruptive sounds.

Setting a consistent sleep-wake schedule can also improve your sleep quality. Your circadian rhythm uses signals like light and food to determine when you need to be sleepy and when you need to feel more awake. If you start going to bed and waking at the same time each day, it will slowly start to align with this schedule. You’ll start feeling tired in the evening and perhaps wake more easily in the morning.

Maintaining healthy vitamin D levels and a sufficient number of sleep hours could help you stay healthy for years to come.

References


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