

Young Adults Consuming Walnuts Reported Improved Sleep Quality, New Study Finds

Category: Business

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Eating a daily serving of about one handful of walnuts (40 grams) with dinner may help improve measures of overall sleep quality and reduce daytime sleepiness in healthy young adults, according to a new randomized controlled trial published in Food & Function.^{1*}



A handful of California walnuts

Researchers from the University of Barcelona aimed to study the potential impact that daily walnut consumption could have on specified urine biomarkers (6-SMT, a biproduct of melatonin), sleep quality parameters (sleep latency, wake after sleep onset, awakenings, and efficiency) and daytime sleepiness.

The study evaluated the effects of consuming 40 grams of walnuts daily with dinner over an eight-week period among 76 healthy young adults ages 20-28 (85% female), who completed both walnut and control phases in a crossover design. Researchers found that eating walnuts boosted a key biomarker of the sleep-regulating hormone, melatonin, which was significantly increased in evening urine samples after a four-week intervention period when participants consumed walnuts, as compared to the control period.

The walnut intervention also shortened the time it took participants to fall asleep by 1.3 minutes, improved overall sleep quality scores, and reduced self-reported daytime

sleepiness compared to a control, nut-free period. While global sleep quality scores improved, there were no significant differences in measures of circadian-related variables between the intervention and control conditions. With these findings, the researchers suggest that walnut consumption could potentially be a simple, food-based approach to supporting healthy sleep.



California Walnuts

"This is the first randomized controlled trial to show that daily walnut consumption measurably improved objective sleep quality and increased melatonin levels during evening hours after an intervention period," said **Dr. Maria Izquierdo-Pulido**, lead researcher of the study out of the **University of Barcelona**. Insufficient sleep is seen as a global health concern, with multi-faceted public health implications, ranging from chronic illness to cognitive and economic impacts.³

The researchers explain that walnuts' unique combination of sleep-supportive nutrients such as tryptophan (84.6mg) – a precursor to melatonin, plant-based melatonin (118mg), magnesium (45mg), and B vitamins (0.2mg each vitamin B5 and vitamin B6) may help explain the positive outcomes seen in the study. These findings suggest walnuts may help naturally support sleep quality, though more research is needed to understand the mechanism.

Dr. Mara Fernanda Zeron-Rugerio, Co-leader of the study explains, *"While the observed effects in this study came following walnut consumption at dinner, we believe that the daily intake, rather than the timing, led to the sleep-supportive benefits."*

This study is among the first to demonstrate walnuts' potential as a sleep-supporting food. As such, the study contained a number of limitations, including unmeasured dietary tryptophan and melatonin intake, that restrict the applicability of the study findings to the general population. While further research is warranted to examine these effects, these initial findings add to the growing body of evidence supporting the role of diet and specific nutrient-dense foods, such as walnuts, in promoting sleep health.

To learn more about the breadth of research supporting walnut

consumption, along with recipe ideas and inspiration, visit californiawalnuts.in.

About the California Walnut Commission

The California Walnut Commission (CWC) represents more than 3,700 California walnut growers and nearly 70 handlers, grown in multi-generational farmers family orchards. California walnuts, known for their excellent nutritional value and quality, are shipped around the world all year long, with more than 99% of the walnuts grown in the United States being from California. The CWC, established in 1987, promotes usage of walnuts through domestic and export market development activities as well as supports health research with consuming walnuts.

References

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