



# The Good Night Guide

Your doctor-designed roadmap to restful sleep





# Putting restful sleep in reach

Ask any doctor how to improve your health, and they'll point to five basic strategies: Eat well; exercise; minimize stress; avoid tobacco and get more sleep. When it comes to that last one—sleep—it's hard to overstate the importance. But for too many of us, regular, restful slumber feels out of reach; almost one in three American adults say they don't get the recommended seven hours<sup>12</sup>. The impact on their health can be severe.

If you're among those who have trouble sleeping, you know how agonizing it can be: You lie in bed, but sleep doesn't come. Or you snatch a few hours only to wake feeling drained. This guide aims to change that by explaining a little about how sleep works and drawing on peer-reviewed science to give you practical pointers for bringing those precious Z's back in reach.

## Sleep: a full-body tune-up

A good night's rest does more than improve your energy. Those hours unconscious give your body a chance to recalibrate a host of systems that are vital to your day-to-day functioning. It's like a free nightly tune-up for your body and mind—skip it (or cut it short) and it won't be long before you start to misfire. This system-wide impact means sleep's benefits are numerous, varied—and in some cases surprising:

- Sleep can help you manage your weight<sup>3</sup> by regulating hormones that affect appetite<sup>4</sup>, cravings<sup>5</sup> and metabolism<sup>6</sup>;
- It supports your heart health<sup>7</sup> by helping you manage your blood pressure and some natural chemicals linked to inflammation;
- It can improve your mood<sup>8</sup>, by helping you manage the psychological symptoms associated with sleep deprivation;
- It can support your memory<sup>9</sup> by enabling the transfer of memories to your brain cortex for permanent storage (a process that makes room for new ones);
- It can make you feel smarter<sup>10</sup> by improving your ability to concentrate and problem-solve;
- It can help protect you from illness<sup>11</sup> by enabling your immune system to build the tools it needs to fight off infection.

And that's just to name a few.





## Get good sleep in 12 simple steps

For some people, sleeplessness is the result of a medical issue—depression, restless leg syndrome, sleep apnea—but for most of us, it's about lifestyle: It's not what we do at bedtime that's the problem; it's what we do all day. The good news is, there are practical steps you can take to fix this. Here are some of the most important.



### Exercise

Humans are built for movement. For much of our history, we spent our days walking, running and moving our limbs, but in contemporary life, we pass much of our time all but motionless on the couch, in a car or at a desk—and that gets in the way of sleep.

That's why it's vital to find time during the day for regular, moderate exercise—a walk, a jog, a bike ride or some other physical activity—and to do it well ahead of bedtime. When you do, you should find you get to sleep faster, stay asleep longer and have more energy in your waking hours<sup>14,15</sup>.



### Get outside when the sun's up

Your body has a natural clock—your circadian rhythm—that it calibrates using sunlight: When it's light outside, your clock tells you to wake up; when it's dark, it tells you to sleep. Not surprisingly, a life spent indoors and away from natural light can push that mechanism out of alignment, making it hard to get to sleep when you need to.

To put your body clock back on schedule, try to expose yourself to bright light during the day—either by going outside or, if that's not possible, investing in a bright artificial light designed for that purpose. Studies have shown that kind of light exposure can make a big difference at bedtime<sup>14,15</sup>.



### Manage screen time

In recent years, we've come to understand that it's not just the amount of light that impacts your natural clock; it's also the wavelength. Light from the blue end of the spectrum does more to wake you up than light from the red end. It appears to do this by reducing melatonin, a hormone that helps you sleep<sup>16</sup>.

This phenomenon means the light emitted by screens, which tends to contain a lot of blue, can get in the way of sleep when you absorb it too close to bedtime. To get your body ready for rest, turn off your phone, your TV and your other screens at least two hours before bed.



### Optimize your bedroom

Your sleep environment can have a big impact on sleep quality<sup>17</sup>. For the best results, make sure you keep your bedroom:

- **dark** (using blackout curtains if necessary),
- **quiet** (blocking noise from traffic and other sources),
- **comfortable** (investing in a new mattress if yours is getting old<sup>18</sup>); and
- **free** from disruptive electronic devices.

It's also important to keep your room at a comfortable temperature. Your body starts to cool naturally as you prepare for sleep and continues to do so until just before dawn. A room at the wrong temperature—especially one that's too warm<sup>19</sup>—can get in the way of that. Before you go to bed, select bedding and a thermostat setting that feel right for you.



### Stick to a schedule

Good-quality sleep isn't just about duration; it's also about regularity<sup>20</sup>. To improve your sleep, try to get to bed the same time every night and up at the same time every morning—including weekends.

This regular rhythm will train your body to expect sleep at a predictable point in the day-night cycle. Eventually, you may even find you no longer need an alarm, but instead wake naturally—at the right time—feeling rested.



### Cut the caffeine early

It's no secret that caffeine can keep you awake, but many people don't know how long that effect can last. Research suggests caffeine can have a significant impact on your system for as much as six hours after you consume it<sup>21</sup>. That's bad news at bedtime. To ensure you get a good night's sleep, avoid drinking tea, coffee and other caffeinated beverages after about 4pm.



## Limit alcohol

Although alcohol's effects are markedly different from caffeine's, it can have a similarly disruptive impact on slumber—even in small amounts. It does this by getting in the way of hormones the body produces during healthy sleep and triggering symptoms like snoring, sleep apnea and sleep disruption<sup>23</sup>. To prevent this issue, keep your alcohol consumption moderate, and try not to drink close to bedtime.



## Curb water in the evening

Water plays a key role in the healthy functioning of your body, meaning it's important to stay hydrated during the day, but drinking water too late in the evening can disrupt your sleep by forcing you to get up to urinate<sup>24</sup>. To sleep through the night, cut down your liquids in the last couple of hours before bed.



## Eat early, eat well

The healthy processes that happen during sleep require support from multiple systems in your body—including your blood. Eating just before bed can get in the way of those processes by redirecting blood flow to your digestive system, depriving you of some of sleep's benefits.

These disruptive effects can be compounded if the meal in question includes sugary<sup>25</sup>, spicy or gas-forming foods. It can also make it harder to control your weight<sup>26</sup>, as food taken just before bed will trigger the release of insulin, a hormone that encourages your body to store fat.

To improve your sleep and support your health goals, aim to finish your dinner at least three hours before bed—and keep late-night snacking to a minimum. If you really need to eat near bedtime, go for something small, low-sugar and nutrient-dense<sup>27</sup> like some plain yogurt, a handful of berries or a few nuts.



## Check your medications

If you take medication on a regular basis—whether it's over the counter or by prescription—it could be getting in the way of good sleep. Certain classes of drugs, including antihistamines, corticosteroids, antihypertensives and antidepressants<sup>28</sup>, have side effects that can make falling asleep and staying asleep difficult.

Check the info that comes with your medications to be sure sleep disruption isn't a side effect. If it is, talk with your doctor or pharmacist about alternatives.

# 11

## Avoid sleeping pills

When you're suffering from insomnia, pills can seem like an easy fix, but they may be causing more problems than they're solving. Many prescription and over-the-counter sleep aids contain antihistamines that can cause you to wake in the night. Worse, long-term, regular use of sleep aids can contribute to cognitive decline.

If you feel a pill is a must, consider melatonin<sup>29</sup>—a sleep hormone you produce naturally in your body. In some countries, it requires a prescription, so you may need to talk with your doctor. If you do start taking it regularly, make sure you skip a dose from time to time to support your body's healthy chemistry.

# 12

## Be smart with your supplements

The negative impact of some medications can be heightened when they interact with certain supplements, especially if those supplements contain caffeine. Avoid this hazard by checking with your doctor or by taking the Persona Assessment, a doctor-designed online questionnaire that analyzes your physiology, health concerns, medications and other lifestyle factors. It checks that info against an extensive drug database and then builds a supplement program that fits your needs and avoids side effects like disrupted sleep.

You can also look into sleep supplement regimens built around natural ingredients. Persona's multi-step Sound Slumber program is a great example. It harnesses the natural benefits of melatonin and Herbal Rest—a blend of magnesium citrate, L-theanine and hops flower extract—to help support your sleep over time:

- Phase 1** **Order 1-3:** 3mg Melatonin + Herbal Rest
- Phase 2** **Order 4:** 500mcg Melatonin + Herbal Rest
- Phase 3** **Order 5:** Herbal Rest



If you don't want to take melatonin, or if you live in a country where it's only available by prescription, you can try Persona's plant-based sleep formula, made from valerian, passionflower and lavender. Learn more at: [personanutrition.com](https://personanutrition.com).



# About Persona

With personalized supplements and one-on-one expert advice, Persona provides a convenient, long-term nutrition solution tailored precisely to your needs. Persona's science-based assessment takes into account your lifestyle, diet, health concerns—even your medications—and uses that insight to build a doctor-approved nutrient recommendation just for you.

With a monthly membership, you'll get high-quality, customized vitamin packs delivered right to your door—and unlimited access to expertise from qualified dietitians. No hype, no confusion, just clean nutrients that fit your family's needs.

**Take Persona's FREE assessment at [personanutrition.com](https://personanutrition.com).**



**Only One *You*.**



# Meet our Medical Advisory Board

Persona's Good Night Guide was created with expertise from our Medical Advisory Board, a team of leading doctors and health experts who analyze the latest research to ensure Persona's nutrition assessments and recommendations are grounded in cutting-edge science. Together, they've seen more than 100,000 patients. They use that experience to ensure you get the right nutrition for you.



**Michael Roizen, MD**  
Chair



**Robin West, MD**



**Harry Oken, MD**



**Barry Lance, MD**



**Elizabeth Somer, RD, MA**



**Lou Malinow, MD**



**Tamara Bernadot**  
Chief Nutrition Officer



**Philip Schauer, MD**



**Carielle Nikkel, MS, RDN**  
VP of Nutrition Support



## References:

- <sup>1</sup> [cdc.gov/sleep/data\\_statistics.html](https://cdc.gov/sleep/data_statistics.html)
- <sup>2</sup> Watson NF, Badr MS, Belenky G, et al. Recommended amount of sleep for a healthy adult: a joint consensus statement of the American Academy of Sleep Medicine and Sleep Research Society. *Sleep*. 2015;38(6):843-844.
- <sup>3</sup> Taheri S. The link between short sleep duration and obesity: We should recommend more sleep to prevent obesity. *Arch Dis Child* 2006;91:881-884.
- <sup>4</sup> xaiikat FM, Makarem N, Liao M, St-Onge MP, Aggarwal B. Measures of Poor Sleep Quality Are Associated With Higher Energy Intake and Poor Diet Quality in a Diverse Sample of Women From the Go Red for Women Strategically Focused Research Network. *J Am Heart Assoc*. 2020 Feb 18;9(4):e014587.
- <sup>5</sup> Hanlon EC, Tasali E, Leproult R, Stuhr KL, Doncheck E, de Wit H, Hillard CJ, Van Cauter E. Sleep Restriction Enhances the Daily Rhythm of Circulating Levels of Endocannabinoid 2-Arachidonoylglycerol. *Sleep*. 2016 Mar 1;39(3):653-64.
- <sup>6</sup> Spiegel K, Leproult R, Van Cauter E. Impact of sleep debt on metabolic and endocrine function. *Lancet*. 1999;354(9188):1435-1439. doi:10.1016/S0140-6736(99)01376-8
- <sup>7</sup> He Q, Zhang P, Li G, Dai H, Shi J. The association between insomnia symptoms and risk of cardio-cerebral vascular events: A meta-analysis of prospective cohort studies. *European Journal of Preventive Cardiology*. 2017;24(10):1071-1082. doi:10.1177/2047487317702043
- <sup>8</sup> Hayley AC, Williams LJ, Venugopal K, Kennedy GA, Berk M, Pasco JA. The relationships between insomnia, sleep apnoea and depression: findings from the American National Health and Nutrition Examination Survey, 2005-2008. *Aust N Z J Psychiatry*. 2015;49(2):156-170. doi:10.1177/0004867414546700
- <sup>9</sup> Chai, Y., Fang, Z., Yang, F.N. et al. Two nights of recovery sleep restores hippocampal connectivity but not episodic memory after total sleep deprivation. *Sci Rep* 10, 8774 (2020). <https://doi.org/10.1038/s41598-020-65086-x>
- <sup>10</sup> Walker MP, Liston C, Hobson JA, Stickgold R. Cognitive flexibility across the sleep-wake cycle: REM-sleep enhancement of anagram problem solving. *Brain Res Cogn Brain Res*. 2002;14(3):317-324. doi:10.1016/s0926-6410(02)00134-9
- <sup>11</sup> Irwin M, McClintick J, Costlow C, Fortner M, White J, Gillin JC. Partial night sleep deprivation reduces natural killer and cellular immune responses in humans. *FASEB J*. 1996;10(5):643-653. doi:10.1096/fasebj.10.5.8621064
- <sup>12</sup> Reid KJ, Baron KG, Lu B, Naylor E, Wolfe L, Zee PC. Aerobic exercise improves self-reported sleep and quality of life in older adults with insomnia. *Sleep Med*. 2010;11(9):934-940. doi:10.1016/j.sleep.2010.04.014
- <sup>13</sup> King AC, Oman RF, Brassington GS, Bliwise DL, Haskell WL. Moderate-intensity exercise and self-rated quality of sleep in older adults. A randomized controlled trial. *JAMA*. 1997;277(1):32-37.
- <sup>14</sup> Campbell SS, Dawson D, Anderson MW. Alleviation of sleep maintenance insomnia with timed exposure to bright light. *J Am Geriatr Soc*. 1993;41(8):829-836. doi:10.1111/j.1532-5415.1993.tb06179.x
- <sup>15</sup> Fetveit A, Skjerve A, Bjorvatn B. Bright light treatment improves sleep in institutionalised elderly--an open trial. *Int J Geriatr Psychiatry*. 2003;18(6):520-526. doi:10.1002/gps.852
- <sup>16</sup> Chinoy ED, Duffy JF, Czeisler CA. Unrestricted evening use of light-emitting tablet computers delays self-selected bedtime and disrupts circadian timing and alertness. *Physiol Rep*. 2018;6(10):e13692. doi:10.14814/phy2.13692
- <sup>17</sup> Lee KA, Gay CL. Can modifications to the bedroom environment improve the sleep of new parents? Two randomized controlled trials. *Res Nurs Health*. 2011;34(1):7-19. doi:10.1002/nur.20413
- <sup>18</sup> Jacobson BH, Boolani A, Smith DB. Changes in back pain, sleep quality, and perceived stress after introduction of new bedding systems. *J Chiropr Med*. 2009;8(1):1-8. doi:10.1016/j.jcm.2008.09.002
- <sup>19</sup> Libert JP, Bach V, Johnson LC, Ehrhart J, Wittersheim G, Keller D. Relative and combined effects of heat and noise exposure on sleep in humans. *Sleep*. 1991;14(1):24-31. doi:10.1093/sleep/14.1.24
- <sup>20</sup> Giannotti F, Cortesi F, Sebastiani T, Ottaviano S. Circadian preference, sleep and daytime behaviour in adolescence. *J Sleep Res*. 2002;11(3):191-199. doi:10.1046/j.1365-2869.2002.00302.x
- <sup>21</sup> Drake C, Roehrs T, Shambroom J, Roth T. Caffeine effects on sleep taken 0, 3, or 6 hours before going to bed. *J Clin Sleep Med*. 2013;9(11):1195-1200. Published 2013 Nov 15. doi:10.5664/jcsm.3170
- <sup>22</sup> Ekman AC, Vakkuri O, Ekman M, Leppäluoto J, Ruokonen A, Knip M. Ethanol decreases nocturnal plasma levels of thyrotropin and growth hormone but not those of thyroid hormones or prolactin in man. *J Clin Endocrinol Metab*. 1996;81(7):2627-2632. doi:10.1210/jcem.81.7.8675588
- <sup>23</sup> Taasan VC, Block AJ, Boysen PG, Wynne JW. Alcohol increases sleep apnea and oxygen desaturation in asymptomatic men. *Am J Med*. 1981;71(2):240-245. doi:10.1016/0002-9343(81)90124-8
- <sup>24</sup> Asplund R. Nocturia, nocturnal polyuria, and sleep quality in the elderly. *J Psychosom Res*. 2004;56(5):517-525. doi:10.1016/j.jpsychores.2004.04.003
- <sup>25</sup> Jalilolghadr S, Afaghi A, O'Connor H, Chow CM. Effect of low and high glycaemic index drink on sleep pattern in children. *J Pak Med Assoc*. 2011;61(6):533-536.
- <sup>26</sup> Beccuti G, Monagheddu C, Evangelista A, et al. Timing of food intake: Sounding the alarm about metabolic impairments? A systematic review. *Pharmacol Res*. 2017;125(Pt B):132-141. doi:10.1016/j.phrs.2017.09.005
- <sup>27</sup> Kinsey AW, Ormsbee MJ. The health impact of nighttime eating: old and new perspectives. *Nutrients*. 2015;7(4):2648-2662. Published 2015 Apr 9. doi:10.3390/nu7042648
- <sup>28</sup> [sleepfoundation.org/articles/how-medications-may-affect-sleep](https://sleepfoundation.org/articles/how-medications-may-affect-sleep)
- <sup>29</sup> Lemoine P, Nir T, Laudon M, Zisapel N. Prolonged-release melatonin improves sleep quality and morning alertness in insomnia patients aged 55 years and older and has no withdrawal effects. *J Sleep Res*. 2007;16(4):372-380. doi:10.1111/j.1365-2869.2007.00613.x