



25 Hacks to Get Your Sleep Back

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Getting a good night's sleep is mandatory for great performance, faster recovery, and proper brain function, amongst other things. When I work with clients, no matter if they are a high ranked athlete or a regular employee, I start their journey to "Faster, Leaner, and Stronger" with their sleep.

Nothing replaces a good night of sleep.

It's not a secret that optimal sleep will help you to be healthier and optimize every metabolic process in the body. Sleep optimizes your growth hormone and testosterone production, improves insulin sensitivity, decreases inflammation, and promotes better recovery. Unfortunately, it seems that it is getting harder for people to fall asleep and to maintain that state of mind and body. According to Phillips annual global sleep survey of adults from 12 countries, 8 out of 10 adults in 2019 were facing challenges to getting a good night's sleep (1).

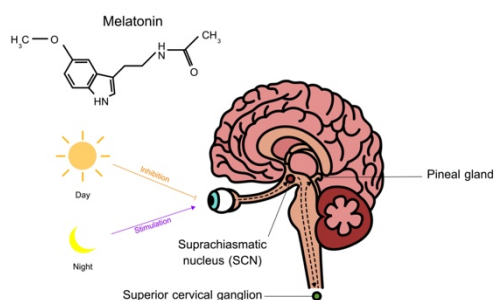
Unhealthy sleep and sleep deprivation are linked to a lot of health problems, including heart disease, depression, brain damage, and lower life expectancy. Every year there are more studies showing direct correlation between short sleep duration and obesity in people of all ages. (2-9)

25 HACKS TO ACHIEVE BETTER SLEEP QUALITY

While a lot of people are suffering from insomnia, not many can find a solution to achieve a restful night of sleep. Here are 25 hacks to get your sleep back on track. I strongly encourage you to explore and apply them in your practice.

1. Start in the morning!

Getting exposed to an outdoor light right after waking up and during the day is crucial for a good quality sleep! The light is a primary signal that is guiding all biological programs in the body. Your circadian rhythm is set by light exposure during the day and darkness during the night. (10, 11) When the suprachiasmatic



nuclei (SCN), which is the master clock in the brain, receives that early morning light, it “tells” the whole body on the cellular level what time of the day it is. The outdoor light is important to get that morning cortisol spike and to properly shut down the melatonin production in the pineal gland. During the day, light intensities outside can reach illuminances up to 100,000 lux in direct sunlight and 25,000 lux in full daylight. Light intensities in a standard office are considerably lower and produce ~500 lux, which leads many people to a state of "light deficiency." Make sure to spend 20-30 min outdoor in the morning and as much as possible, but at least 30 minutes more during the day. Blue-light emitter gadgets can be useful during winter when it's harder to get outdoors and there are less natural light hours during the day.

2. **No screens before bed!**

Exposure to short wave light (blue light) delays and suppresses melatonin production. One study on twelve healthy young adults showed that exposure to screen light at night delays melatonin production by 90 min. (12) Those individuals who used an iPad for reading before going to bed produced less melatonin, by as much as 50%, with an average delay of 1.5 hours. They also had significantly less rapid eye movement during the night and reported being more tired in the morning compared to those who read a book before sleep. If you can't avoid using electronic devices, blue light blocking glasses or applications like iris.com or f.lux are great options. However, I highly suggest to stay away from all gadgets for at least an hour before bed time.

3. **Control indoor lighting**

Nowadays we're experiencing a lot less darkness within a 24-hour period of time than our ancestors. According to a 2011 study, room light (<200 lux) compare to dim light (<3 lux) suppresses melatonin production in 99% of the individuals. (13) Blue LED bulbs have a double harmful effect as they create short wavelength light, which is close to day light. As the sun sets, make sure to monitor your indoor lighting environment. Provide the spectrums of red, orange, and yellow colors to induce sleep and melatonin production. Dim your lights with dimmer switches and turn off unneeded lights. Blue light blocking bulbs, salt lamps, and candles do not affect melatonin production.

4. **Sleep in a cave**

The pineal gland releases greater amounts of melatonin when it is dark. Even a small amount of light at night can disrupt the circadian rhythm and melatonin production. (14) Your red blood cells (RBC) are sensitive to light and if you receive light on your skin, it will reduce the amount of melatonin secreted. Install cotton blackout curtains to block the light from outside. Remove all light sources, including light coming from TVs, alarm clocks, LEDs, fire alarm boxes, etc. Don't turn on lights if you get up to go to the bathroom. The tiniest light sources or just one pulse of light can suppress melatonin production, wake you up, and ruin your sleep pattern. Your bedroom should be as dark as a cave. Do a simple test: a few minutes after turning off the light, put your hand in front of your eyes, with your eyes opened, if you can see it, it's not dark enough.

5. **Vitamin-D**

Optimum levels of Vitamin-D are crucial for good quality sleep. (15-17) Vitamin-D together with B vitamins and Choline are important components to produce sufficient amounts of acetylcholine. Acetylcholine is a neurotransmitter that helps with maintaining alertness during the day and allowing you to fall asleep and move through the various sleep stages at night. It's also part of what allows your body to be paralyzed during deep sleep. To optimize your Vitamin-D, I recommend to get regular sun exposure on large portions of your body. If for whatever reason you cannot be under the sun, consider taking vitamin D3+K2 supplements in a dose of 5,000-10,000IU per day.

6. **Set the right room temperature**

Most of us sleep in rooms that are too warm, which is neither healthy nor natural. When you sleep, your body's internal temperature drops to its lowest level about four hours after you fall asleep. Being overly warm or cold at night inhibits melatonin synthesis and affects sleep quality. A temperature between 60-68 degrees F (15.5-20 degrees C) has been found to be the optimal temperature for a restful sleep. If you are using AC at your home, make sure to give it a professional cleaning, as AC is a perfect host for mold, which will drastically increase your toxins exposure.

7. **Detoxify your environment**

Nowadays, the indoor environment often is much more polluted than the outdoor. If your bedroom has synthetic carpet, fake leather fabrics, paint, a mattress with a flame-retardant cover, and scented candles, you are more likely to have poor overnight recovery or experience sleep problems. Insomnia related to toxin exposure is genetically dependent. Very often from all family members only one will experience its severe effects. Females are generally more likely to experience a greater response to toxin exposure. Sleeping in a toxin-free bedroom is essential for everyone's proper recovery, as during the night our bodies go through a lot of detoxification and regenerating processes. Make sure to remove all synthetic materials and any artificial smells from the bedroom. Choose the right mattress and organic cotton bedding. Keep your home free of mold, as it affects the central nervous system (CNS), keeping your body in a constant "fight or flight mode." Books, plants, paper walls, carpets, and AC are favorite places for mold to grow. You can also clean the air in your bedroom before sleep with air-purifiers. The greatest quality air purifiers are Air Doctor and Austin Air.

8. **Choose a non-toxic mattress**

People spend about 1/3 of their life in bed. When you think about this number, investing in a good sleep environment becomes non-negotiable. Two factors to keep in mind when choosing the right sleeping place. First, you want to avoid metal, whether it is springs inside your mattress or a bed frame. It attracts more Electro Magnetic Field (EMF). Secondly, you want to be surrounded by 100% certified organic materials. Getting exposed to massive amounts of chemicals all night long for years is a recipe for disaster. Since the mid to late 60s, most mattresses have been made of polyurethane foam, a petroleum-based material that emits volatile organic compounds (VOC) that can cause respiratory problems and skin irritation. A lot of mattresses have cotton pesticides, glue solvents, and flame-retardant chemicals. Some memory-foam models have been found to emit 61 chemicals, including the carcinogens benzene and naphthalene. When it comes to a choice of your mattress spend time investigating it. What the mattress is made out of, how does it smell, what skin reactions do you get when touching it. Sheets made with formaldehyde, which include all permanent-press sheets, are also shown to cause insomnia. Invest in a high-quality organic cotton bedding that can absorb sweat and toxins

that you release overnight.

9. Reduce EMF exposure

One factor affecting people's sleep quality is the exposure to EMF. All electronics have electric and magnetic fields and radio frequencies. When you're connected to the Internet, your phone or computer are communicating with nearby cell towers or other electrical devices, which means they're also emitting low levels of radiation. When you have high EMF exposure, your body experiences micro-contractions all night long, which doesn't allow it to fully get into a parasympathetic state, in order to be able to detoxify, repair, and regenerate itself. According to the leading EMF expert, Brian Hoyer, (18) a typical bedroom will have voltage anywhere between 500 millivolts at the lowest and up to 15,000 millivolts. In order for your body to achieve a parasympathetic state your bedroom should have voltage below 30 millivolts. I highly suggest not to keep any electric or electronic devices in your bedroom, switch off your Wi-Fi router at night and if possible, shield your bedroom to protect yourself from foreign EMF exposure.

10. Keep a routine

You may have a watch on your wrist and be aware of what time it is, but your organs and glands do not. If you go to bed later during the weekend, your organs and cells might miss what they should be doing during the sleeping time. The best way is to keep your bedtime exactly the same whether it is a weekend or a weekday, so your body can follow the same routine and do all processes accordingly, including the time of melatonin release.

11. Increase GABA

GABA is short for gamma aminobutyric acid, which is your most major relaxing neurotransmitter. Normalization of GABA levels in the brain leads to a reduction of stress, anxiety, nervousness, and depression, and an improvement in insomnia symptoms, resulting in a more restful night's sleep. Supplementation with Magnesium Threonate, Theanine, Chamomile extract, Valerian root, and Taurine promote relaxation and enhance GABA production. GABA supplementation has been widely used, however it does not affect GABA levels in the brain, as the molecule of GABA is unable to cross a healthy blood-brain barrier. (19) Having optimal levels of magnesium is crucial for GABA production.

12. **Optimize Magnesium levels**

Magnesium plays an important role in muscle relaxation and calming the nervous system. It has been labeled as “the most powerful relaxation mineral available” by experts such as Dr. Mark Hyman. (20-23) People who are magnesium deficient often experience migraines, muscle twitching, high blood pressure, interrupted sleep, and insomnia. In many clinical trials most of those symptoms were successfully treated with magnesium supplementation. For optimal levels of magnesium, I suggest you take between 1,200-2,400mg of elemental magnesium for females and 2,400-4,000mg for males daily. Magnesium Glycinate from NutriDyn, Magnesium Buffered Chelate from DFH, or Synermag from ATP are the best options for lunch and dinner intake. Take Magtein from NutriDyn, Mind Mag from ATP, or Neuromag from DFH before bed to relax your CNS. Applying topical magnesium directly on your skin and taking baths with Epsom salt are other great ways to provide muscle relaxation and increase levels of this crucial mineral.

13. **Magnesium baths**

Having a warm bath followed by exposure to a cooler environment has been shown to improve sleep quality, (24) Adding Epsom salts (magnesium sulfate) to a bath can enhance the relaxation effect. Add 2-3 cups to the bath and soak for 20 min or more. The magnesium and sulfate is easily absorbed through the skin (25) and helps to improve blood flow and relax muscles and extremities. If a bathtub is not available, a footbath can be another option to increase magnesium levels and help to relax before bed.

14. **Exercise regularly**

Any type of exercise from walking to resistance training has a positive effect on sleep quality and quantity. (26) According to scientists, it helps people to fall asleep faster and spend more time in a deep sleep. However, avoid doing high intensity training close to bed time as it might wire your CNS and prevent you from falling asleep. (27)

15. **Essential oils**

Oils like roman chamomile or lavender, are excellent for relieving stress and anxiety and promoting sleep. Apply a drop or two of these essential oils on temples, wrists, or neck before bedtime.

16. Address adrenal fatigue

People with adrenal fatigue have low energy levels due to insufficient amounts of cortisol production. Even though it sounds paradoxical, they cannot stay asleep at night. Low cortisol levels cause inability to properly regulate blood sugar. In order to mobilize glucose levels while being asleep the body will release epinephrine and norepinephrine. These substances play an important role in your body's fight or flight response, which means they will naturally wake you up. Depending on the type of stress, you can address this condition with different nutrients, herbs, and adaptogens.

17. Cut out caffeine

Caffeine is the most common brain-boosting substance used and abused. Its chronic usage in our society is often related to adrenal issues. The half-life of caffeine is six hours, which means a good majority of it will stay in your system many hours later. Any consumption after 2pm is likely to interfere with sleep. People who don't metabolize caffeine efficiently, will feel the effect much longer. Be aware that some medications contain caffeine as well (fat burner pills are one of them).

18. Avoid drinking alcohol

While alcohol may help you relax and fall asleep faster, it will negatively affect the sleep quality. According to the study it reduces the total amount of REM sleep, increases sleep disruption in the second part of the night, and leaves you feeling tired in the morning. (28) Since alcohol is a potent muscle relaxant, it can also increase your risk of snoring, leading to sleepiness and difficulty concentrating during the day.

19. Don't eat close to bed time

A common cause of waking up at the beginning of the night is a big meal or meal high in refined carbohydrates. It spikes insulin production after the food, causing hypoglycemia or low blood sugar at night. When you have low blood sugar, the body releases cortisol to lift it up, which therefore naturally wakes you up. Don't eat at least three hours before going to sleep. And don't be afraid of being catabolic. In fact, if you want to get lean faster, make 16-hour fasting windows overnight.

20. Increase serotonin

Including complex carbohydrates, like rice, beans, or potatoes with your dinner will decrease cortisol and increase the production of Serotonin. This neurotransmitter of happiness and wellbeing plays an important role in sleep. Serotonin is one of the precursors to melatonin. It is involved in the sleep-wake cycles and the body's internal clock. People with low serotonin levels have lower levels of melatonin and experience poor quality sleep. A high protein diet is important for serotonin synthesis. Supplementing with 5-HTP and B vitamins can also help with serotonin production.

21. Improve gut health

There is strong evidence showing that the gut microbiome not only affects the digestive, metabolic, and immune functions but also regulates sleep and mental states through the microbiome-gut-brain axis. (29-31) On top of that, approximately 80% of serotonin is produced in the gastrointestinal tract. People with irritable bowel syndrome, SIBO, and dysbiosis are more likely to experience sleep issues. Supplementing with probiotics and prebiotic fiber shows an improvement in sleep and decreases the time that it takes to fall asleep even under stressful circumstances. (32, 33) However, if you are diagnosed with SIBO you should avoid using probiotics and fiber until you fix the condition.

22. Be grateful

Changing the quality of your thoughts right before going to bed is a great way of improving your sleep. All you need is a pen and paper. (34) Every day, before going to bed, list at least three things you are grateful for. This simple exercise has a powerful calming effect and makes your life more enjoyable. (35)

23. Listen to music

Music has a direct effect on the parasympathetic nervous system, which helps your body relax and prepare for sleep. (36, 37) Music has the power to slow your heart rate and breathing while also lowering blood pressure. Listening to relaxing music, classical music, or music with sounds of nature before bed can help you fall asleep faster, wake up less during the night, and feel more rested in the morning. Look for a rhythm of about 60 to 80 beats per minute (BPM), which you can easily find among classical music.

24. Melatonin supplementation

Supplementing with melatonin can be very useful if you are experiencing jet-lag, working shifts, or facing a very stressful period in your life. I recommend melatonin supplementation only for the short term, a maximum of one week. As natural production of this powerful antioxidant declines gradually over the life-span, people over 60 might benefit from continuous supplementation.

25. Practice relaxation techniques

Meditation, yoga, breathing, and tapping techniques reduce cortisol and anxiety and increase the parasympathetic tone of the CNS. According to several studies these practices increase production of the calming neurotransmitter, GABA, in the brain. (38-40)

Introduce these guidelines into your life and enjoy restful sleep, better health, and great recovery!

References:

(1) Philips global sleep survey shows we want better sleep, but only if it comes easily
<https://www.philips.com/a-w/about/news/archive/standard/news/press/2019/20190307-philips-global-sleep-survey-shows-we-want-better-sleep-but-only-if-it-comes-easily.html>

(2) Mechanisms of sleep deprivation-induced hepatic steatosis and insulin resistance in mice
<https://journals.physiology.org/doi/full/10.1152/ajpendo.00072.2018>

(3) Sleep Debt and Obesity

<https://pubmed.ncbi.nlm.nih.gov/25012962/>

(4) How Sleep Loss Adds to Weight Gain

<https://well.blogs.nytimes.com/2013/08/06/how-sleep-loss-adds-to-weight-gain/>

(5) Insufficient sleep raises type 2 diabetes risk in children

<https://www.medicalnewstoday.com/articles/318991#Just-1-hour-less-of-sleep-raises-risk>

(6) Sleep duration is associated with body fat and muscle mass and waist-to-height ratio beyond conventional obesity parameters in Korean adolescent boys.

<https://www.ncbi.nlm.nih.gov/pubmed/28220585>

(7) Lack Of Deep Sleep May Increase Risk Of Type 2 Diabetes

<https://www.sciencedaily.com/releases/2008/01/080101093903.htm>

(8) Patel SR, Hu FB. Short sleep duration and weight gain: a systematic review. *Obesity* (Silver Spring). 2008 Mar;16(3):643-53. doi: 10.1038/oby.2007.118. Epub 2008 Jan 17. Review. PubMed PMID: 18239586; PubMed Central PMCID: PMC2723045.

(9) Patel SR, Malhotra A, White DP, Gottlieb DJ, Hu FB. Association between reduced sleep and weight gain in women. *Am J Epidemiol*. 2006 Nov 15;164(10):947-54. Epub 2006 Aug 16. PubMed PMID: 16914506; PubMed Central PMCID: PMC3496783.

(10) Circadian rhythm

<https://www.nigms.nih.gov/education/fact-sheets/Pages/circadian-rhythms.aspx>

(11) The effect of light on human circadian rhythms, sleep and mood

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6751071/>

(12) Evening use of light-emitting eReaders negatively affects sleep, circadian timing, and next-morning alertness

<https://www.pnas.org/content/112/4/1232>

(13) Exposure to Room Light before Bedtime Suppresses Melatonin Onset and Shortens Melatonin Duration in Humans

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3047226/>

(14) <http://www.ncbi.nlm.nih.gov/pubmed/23929553>

(15) The world epidemic of sleep disorders is linked to vitamin D deficiency.

<https://www.ncbi.nlm.nih.gov/pubmed/22583560>

(16) The Importance of Vitamin D and B5 for Optimal Sleep

<https://articles.mercola.com/sites/articles/archive/2020/03/01/gominak-vitamin-d.aspx>

(17) Sleep and Vitamins

<https://drgominak.com/sleep/vitamin-d-hormone/>

(18) <https://shieldedhealing.com>

(19) Blood-brain barrier to H³-γ-aminobutyric acid in normal and amino oxyacetic acid-treated animals

<https://www.sciencedirect.com/science/article/abs/pii/002839087190013X?via%3Dihub>

(20) Nielsen, Forrest H., LuAnn K. Johnson, and Huawei Zeng. "Magnesium supplementation improves indicators of low magnesium status and inflammatory stress in adults older than 51 years with poor quality sleep*."

<https://www.ncbi.nlm.nih.gov/pubmed/21199787>

(21) Held K, Antonijevic IA, Künzel H, et al. Oral Mg(2+) supplementation reverses age-related neuroendocrine and sleep EEG changes in humans.

<https://www.ncbi.nlm.nih.gov/pubmed/12163983>

(22) Abbasi B, Kimiagar M, Sadeghniaat K, et al. The effect of magnesium supplementation on primary insomnia in elderly: A double-blind placebo-controlled clinical trial.

<https://www.ncbi.nlm.nih.gov/pubmed/23853635>

(23) Durlach J, Pagès N, Bac P, Bara M, Guiet-Bara A. Biorhythms and possible central regulation of magnesium status, phototherapy, darkness therapy and chronopathological forms of magnesium depletion.

<https://www.ncbi.nlm.nih.gov/pubmed/12030424>

(24) Nighttime Drop in Body Temperature: A Physiological Trigger for Sleep Onset?" *Sleep* 20.7 (1997): 505-11.

Web. <http://www.ncbi.nlm.nih.gov/pubmed/9322266>

(25) 6 Reasons Why 'The Doctor to the Stars' Recommends Soaking in Epsom Salt

<https://www.epsomsaltcouncil.org/health/6-reasons-to-soak-in-epsom-salt/>

(26) Exercise as a Treatment to Enhance Sleep

<https://journals.sagepub.com/doi/abs/10.1177/1559827610375532>

(27) Does exercising at night affect sleep?

<https://www.health.harvard.edu/staying-healthy/does-exercising-at-night-affect-sleep>

(28) Alcohol and sleep I: effects on normal sleep.

<https://www.ncbi.nlm.nih.gov/pubmed/23347102>

(29) The Role of Microbiome in Insomnia, Circadian Disturbance and Depression

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6290721/#s5title>

(30) Gut microbiome diversity is associated with sleep physiology in humans

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6779243/>

(31) From gut dysbiosis to altered brain function and mental illness: mechanisms and pathways

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4879184/>

(32) Dietary Prebiotics and Bioactive Milk Fractions Improve NREM Sleep, Enhance REM Sleep Rebound and Attenuate the Stress-Induced Decrease in Diurnal Temperature and Gut Microbial Alpha Diversity

<https://www.frontiersin.org/articles/10.3389/fnbeh.2016.00240/full>

(33) Beneficial effects of *Lactobacillus casei* strain Shirota on academic stress-induced sleep disturbance in healthy adults: a double-blind, randomised, placebo-controlled trial

<https://www.wageningenacademic.com/doi/10.3920/BM2016.0150>

(34) Turn Pain to Joy: 11 Tips for a Powerful Gratitude Journal

<https://tinybuddha.com/blog/turn-pain-to-joy-11-tips-for-a-powerful-gratitude-journal/>

(35) Gratitude influences sleep through the mechanism of pre-sleep cognitions.

<https://www.ncbi.nlm.nih.gov/pubmed/19073292>

(36) Music improves sleep quality in older adults.

<https://www.ncbi.nlm.nih.gov/pubmed/15660547>

(37) Can Music Improve Sleep Quality in Adults With Primary Insomnia? A Systematic Review and Network Meta-Analysis

https://pubmed.ncbi.nlm.nih.gov/29100201/?from_term=sleep+music&from_pos=1

(38) Yoga Asana Sessions Increase Brain GABA Levels: A Pilot Study

<https://www.liebertpub.com/doi/abs/10.1089/acm.2007.6338>

(39) Meditation-Related Increases in GABA_B Modulated Cortical Inhibition

<https://www.sciencedirect.com/science/article/abs/pii/S1935861X12001532>

(40) Effects of mental relaxation and slow breathing in essential hypertension.

<https://www.ncbi.nlm.nih.gov/pubmed/16765850?dopt=Abstract>