EMPOWERED SLEEP STRATEGIES



Sleep Strategies

The circadian rhythm is a 24 hour sleep-wake cycle that is primarily regulated by 4 things:

- 1. Light stimulus
- 2. Movement
- 3. Nutrition
- 4. Temperature

These 4 things will be the primary targets we will look at when trying to regulate our sleep-wake cycle, naturally increase our melatonin levels in our bodies and regulate our hormones.

LIGHT STIMULUS RESET STRATEGIES

Bright Light Within 30 Minutes of Waking

When trying to reset your circadian rhythm this is one of the most important things to do first. Getting bright light, preferably from the sun, within the first 30 minutes of waking up sends a very strong "daytime" message to your brain and circadian center.

Aim for 10 - 30 minutes outside in natural sunlight within 30 minutes of waking, even on a cloudy day. Get yourself your favorite morning fertility friendly drink and go sit outside to enjoy it while doing some gratitude journaling.

If you live in a climate where this is not possible to do year rouond OR you wake before the sun rises then you can get the same effect by buying a **Bright Light Therapy Lamp at 10,000 LUX.**

Blackout Your Room

Cover any light source in your room during nghttime or sleep time hours. This includes any small dot of light coming from devices, fans, air purifiers, charging cords, etc. Research shows that even small amounts of light can lessen melatonin production and release by more than 50%.

You can cover these light sources with tape, aluminum foil, paper, cardboard, or you can get fancy with buying special <u>light blocking covers</u>.

Blacking out your room includes blackout curtains as well, and making sure that no light from cars or outside lights can stream in through a window and disrupt your sleep.

If it's not possible to blackout your room completely you can also use a **light blocking mask**.

Block Light From Devices And Optimize Nighttime House Light

Our modern world is the perfect environment to disrupt our circadian rhythm - not only do we not get enough bright light during the daylight hours but we also get too much light input in the evening and nighttime hours. Most of this light exposure is from our home devices like televisions, computers, phones, and tablets.

You can set your phones and tablets to automatically lower the light settings during evening and nighttime hours. Many phones and tablets have "night mode" or "night light" settings you can use.

For home computers, you can download the free light modulating software from <u>f.lux</u> or <u>iristech</u>.

In terms of optimizing your home lighting, incandescent edison bulbs in side lamps give you warm lighting in the yellow, orange, and red spectrum. This more closely resembles the lighting of fires and is much less stimulating to the brain.

Use Blue Light/Green Light Blocking Glasses 2 Hours Before Bedtime

In order to best protect our brain from the high amounts of blue light and green light that we're exposed to at night we should ideally stop using devices 1–2 hours before bedtime. However, this is not possible for the vast majority of us. Even looking at a device for a few seconds is enough to lessen the amount of melatonin your brain releases. I recommend getting yourself at least a pair of blue light blocking glasses and putting them on at least 2 hours before bedtime. A pro of the most commonly found blue light glasses are that they more stylish however a con is that they do not provide 100% blocking of light input to the brain and they only block blue light, not green light.

If your circadian rhythm is really suffering and you're having an immense amount of trouble sleeping, I recommend getting <u>blue light and green light wraparound glasses</u> that block all of the light input. They do look a little sillier than your average blue light blockers, but they will help you regulate your circadian rhythm better.

MOVEMENT STIMULUS RESET STRATEGIES

Increase Movement During Day Light Hours

You want to do the majority of your physical activity during daylight hours to help reemphasize the daytime message to your brain. Exercising outside is a double whammy of light and movement reset strategies.

End Exercise 3-4 Hours Before Bedtime

Exercising raises your body's temperature for around 3-4 hours before returning to normal. This warming effect sends a clear dytime signal to the brain, so if you do exercise later in the day or in the evening then make sure you finish the exercise at least 3 or 4 hours before bed.

Stand More During The Day

This one can be hard to do especially if you work in an office or have a job that requires a lot of sitting. My best recommendation for this is to set a timer on your phone and make sure you get up and move around at least every hour but preferably every 20 minutes. If you work from home, get up and run up the stairs a few times, do some squats, or invest in a standing or walking desk so that you can stand while you work.

Use Up Your Daily Energy

Our body is designed to expend energy and when we live a sedentary life with little activity or no exercise this can set us up for not being tired enough when nighttime rolls around. While we emphasize the importance of exercise for overall health, using it as an important way to reegulate our circadian rhyhm frequently gets overlooked. Aim to get at least 15–30 minutes of exercise time daily.

NUTRITION STIMULUS RESET STRATEGIES

Regular and Consistent Meal Times

This is by far one of the best ways to help set your internal body clock. Having regular meal times gives the body something it really likes – predictability. Aim to eat meals and snacks around the same time every day. It's ok if there is some variability but if you can keep it consistent 80-90% of the time that will be a powerful way to regulate our sleep-wake cycle.

Fasting Time of 12-14 Hours

Research has shown that eating all of our food and calories within a set eating window of 8-12 hours is helpful in regulating our circadian rhythm. For our purposes in helping fuel our fertility, we want to aim for a fasting time of between 12 and 14 hours.

While "intermittent fasting" has become trendy in the weight loss and blood sugar management arenas, we're mainly using our fasting window to help our body increase the amount of melatonin it makes naturally.

Start Fasting 3-4 Hours Before Bedtime

We want our stomach to be empty and our digestion to be done with by the time we hit the sack for bed, so we ideally want to start our fasting window 3-4 hours before bedtime. This means if we want to get in bed at 10pm then we want to eat our last food around 6-7pm.

Melatonin Supporting Foods

An easy way to help naturally increase our melatonin without the side effects of a supplement is to eat foods containing a high amount of it. Nuts, tart cherry juice, bananas, fatty fish, all have good amounts however the food with the highest amount is pistachios. A small handful of pistachios after dinner is enough to give your body a significant amount of natural melatonin to jump into the circadian cycle. With a small amount of nuts like this there is no need to soak them.

TEMPERATURE STIMULUS RESET STRATEGIES

Temperature Between 60°-68° F (~16-20 C)

With our brain being biologically primed to regulate our sleep-wake cycle according to the rise and fall of the sun, it makes sense that a rise and fall of temperature would also be a powerful way to help us regulate our sleep.

Ideally we want the temperature in our bedroom to be between 60°-68° F (~16-20 C) at night. If you have a programmable thermostat you can program your home to cool down to this temperature range about an hour before you want to go to sleep.

If this is difficult to do, one great way to help send your body this temperature signal is to take a hot shower 60-90 minutes before you'd like to go to bed. A hot shower will increase your body's temperature quickly but then quickly cools your body after getting out. This rapid cooling will send the same type of message to your brain that the temperature has fallen and it's nighttime.

If you don't have air conditioning and live in a hot or humid climate, using the hot shower method along with some fans at night will help send this temperature signal to the body.

WHITE NOISE

Outside or environmental noise has been shown to decrease amount and time of deep sleep, increased wakeful periods, and less total sleep time. One of the best ways to combat noise from a passing car, a pane flying overhead, noisy neighbors, a barking dog, etc. is to add white noise to your overnight sleep routine.

White noise is a low-level constant noise that can help you fall asleep faster and stay asleep. You can get a noise machine, or use the higher settings on an air purifier or fan. Some people like the rhythmic sound of falling rain while others prefer a constant, steady noise that doesn't change (like from an air purifier).

It is a personal preference which type of device you would like to use, but if you don't have a source of white noise already I do recommend getting something to provide this. It will help you stay asleep for the night, and get a more restful, deeper sleep.

CONSISTENT SLEEP SCHEDULE

Setting yourself a sleep schedule is incredibly important! Much like a consistent eating schedule can help you regulate your circadian rhythm, setting a consistent sleep schedule can also help.

The ideal scenario is setting a schedule that you stick to during the week and weekends. Many people deprive themselves of sleep during the week and trying to "catch up" on the weekends. This type of pattern won't allow you to gain the benefit of a balanced circadian rhythm that gives your mitochondria the right amount of melatonin.

Most research points to 10pm to 6am being the best timing for a sleep schedule. It can be a little earlier or later for you if necessary but it should be a schedule that you set and then stick to as best you can.

SLEEP JOURNAL

If you're someone who has a very active mind at night then a sleep journal will be a good addition to your nighttime routine. If you have ever said "I can't turn my brain off at night" then this is something I recommend. Use this journal to write down all the thoughts, to-do lists, and random musings your brain is swirling around as you're trying to wind down for sleep.

The act of writing these things down relieves the pressure your brain feels to keep thinking them, especially if it's a list of things to do. Once these things are written down on paper your brain no longer needs to think about them.

TIME IN BED + SLEEP TIME

Most people when asked how much they sleep at night will say "I got in bed at 11 and woke up at 6 so I slept 7 hours" but a really important thing to understand is that our sleep time is not the same as our time in bed. It takes us a little while to fall asleep and time to come out of it as well, so we want to aim for spending an hour more in bed than sleep time we want.

An average ideal time for sleep is 7-8 hours. Some people may need a little less or some might need more, but this is a good target to aim for. If we want to get 7 hours of sleep then we should plan for at least 8 hours of time in bed.

SPEND TIME TO WIND DOWN

We can't simply go from awake to asleep immediately. We need an interim period when we're winding down and preparing our bodies to get into a drowsy, sleep-ready state. The best way to do this is to build in 30-60 minutes each night to get ready for bed.

During this time you should spend 15 minutes getting ready for the next day, 15 minutes on your nighttime personal hygiene like washing your face and brushing your teeth, 15 minutes taking a hot shower if this is something you want or need to do before bed, and then 15 minutes in bed doing graittude journaling, sleep journaling, meditating, or reading.

This type of nighttime routine will help your brain prepare itself with increasing melatonin which will help us fall asleep faster and stay asleep all night.