

## LONGEVITY PILLAR \#1 - SLEEP

Why is sleep Longevity Pillar \#1? Most people believe that nutrition and exercise are the most important factors to longevity. Although this cannot be dismissed, I believe that all five pillars are important and influence each other tremendously. You see, if your nutrition and exercise plans are spot on, but you are getting poor sleep, you won't benefit optimally from your food choices and increased mobility. This reduces your chances of an extended healthspan. The stress and toxicity that come with poor sleep may be what kills you in the end, even though you eat broccoli and hit the treadmill every day!

## THE BIG PROBLEM

Dealing with your sleep management is an excellent place to start, and it is something that we can control with a little more ease than the other five pillars.

We spend a third of our lives sleeping, so there must be something special about it. There's no doubt that getting an adequate amount of good quality sleep is important. Almost all animals need sleep to keep their bodies functioning properly, both physically and mentally. We all know how we look and feel after a bad night's sleep. No need for scientific study here! When we are sleep deprived we are irritable, feel down, falter on our memory and cognitive skills, become dangerous drivers and look like crap. What studies have confirmed, is that there may even be a higher risk for obesity, cardiovascular disease, and cancer when we get insufficient amounts of sleep.

The Centers for Disease Control and Prevention states that each year there are 40 million people in the U.S. suffering from chronic long-term sleep disorders, while an additional 20 million people experience occasional sleep issues. That's practically the entire population of Italy! Perhaps even more Americans are suffering from sleep deprivation based on the spending of an estimated $\$ 41$ billion on sleeping pills and other sleep aids ( 2015 stats). At this rate, that would approximate to $\$ 1,000$ per person! If that many people are not getting proper sleep, our healthcare system will be sorely stretched in the future.

What concerns me is the attitude many people have about sleep. How many times have you heard from an over-energetic workaholic "'ll sleep when I am dead?" Or your own college kids who pull all nighters and wear it as a badge of honor? Or your neighbor who proudly boasts he can function perfectly well on 5 hours of sleep a night.

I am just as guilty of formerly perceiving sleep as simply an unproductive part of the day. I saw it as getting in the way of my life and all the things I wanted to do, from running a successful website to enjoying late night dinners with my friends. Of course, I still wanted to wake up early in the morning to reap the benefits of exercise. I thought I was taking full advantage of my life, but little did I realize I was likely shortening my lifespan and compromising practically every major system in my body from my brain to my immune system

## WHY WE NEED GOOD SLEEP

The good news is that sleep is a lifestyle quality we can control. Understanding the overwhelming evidence linking quality rest to longevity and healthspan facilitates any habits we need to change. It may be hard at first, but understanding WHY we need good sleep helps a lot.

So, why do we need to sleep anyway? Well, we quite literally, need a good brain drain. It's like cleaning up your house. Our brains accumulate debris, and we need to get rid of it. Imagine what your kitchen would look like if you didn't wash the dishes for a month. Yikes!

All the while I thought sleep was an entirely oblivious state of mind and a waste of time, I didn't realize that actually, a LOT happens while I am asleep and that the brain is active on a molecular level.

## So, where's the party?

There's a party and then there's the clean up. Let me explain. The brain uses $25 \%$ of the entire energy supply in the body but only accounts for $2 \%$ of the body's mass. Yep, it's a little powerhouse, and just like you, it gets exhausted and stressed out. So, the question is, "How does the brain receive and rid itself of nutrients and toxins?" Most of the body's other organs use the lymphatic system to carry out this task. However, the lymphatic system does not even reach the brain. Oh no, the brain is much clever than that! The brain has its own unique parallel system of vessels that flow throughout the body. Cerebrospinal fluid (CSF) uses this system to fill the space around the brain, which gathers up proteins and other waste from the spaces in between brain cells and then dumps them into the bloodstream to be disposed of. The AMAZING thing is that this happens in the sleeping brain. - When we are asleep, brain cells can shrink, opening up spaces in between them to allow the fluid to rush through and clear out the toxins. Like late night garbage collectors!

What's interesting to note is that the beta-amyloids ("sticky" protein clumps) in the spaces between the brain cells of Alzheimer's patients are not being cleared away like they're supposed to. This leads to a plaque buildup that is believed to be one of the key steps in the development of Alzheimer's disease. When scientists measure how fast beta-amyloids are cleared from the awake brain versus when we are asleep, they find that the sleeping brain removes beta-amyloids much more quickly. Although this does not prove that lack of sleep or poor sleep to be the cause of Alzheimer's, it does suggest that the brain's failure to clear toxins like be-ta-amyloids may contribute to the development of the disease. See how important it is to sleep? - And this is just the tip of the iceberg.

If we are struggling with our sleep, we're not allowing our body and mind to do the work needed to sort out vital problems during our downtime. We're not giving our brain the chance to "take out the garbage," so it ends up accumulating and leading to some major problems.

There are also emotional issues related to lack of sleep. Matthew Walker, a UCBerkeley sleep scientist, says "We sleep to remember and we sleep to forget. I call it overnight therapy." Processing our emotions takes time, and when we sleep deeply and consistently each night, we can deal with a lot of.... uh, crap. That's why when you shortchange yourself from a good night's sleep you cannot completely disentangle yourself from the emotional baggage from memories.

Chronic inflammation is also connected to lack of sleep. We all know now that many diseases like cancer, cognitive decline, heart disease, and type 2 diabetes are related to the process of chronic inflammation. And one of the main driving forces of chronic inflammation is a lack of sleep!

## HORMONE REGULATION

There's so much that the brain regulates and we cannot possibly cover all these issues, but hormone regulation is a pretty big one for us women. The brain continually runs checks on itself to ensure the balance of enzymes, hormones, and proteins.

Research has shown that a lack of sleep disrupts the metabolic pathways in charge of regulating appetite. When we don't get enough sleep, we tend to eat more foods with a high glycemic index, like sweets and dessert. Too much of this going on and we have an increased risk of obesity, type 2 diabetes, high blood pressure, increased cholesterol, yadda yadda yadda. And, of course, you know what else happens when we overeat - we get fat.

So what happens while we sleep? Well, our hunger hormone (ghrelin) increases and our satiety hormone (leptin) lowers and they get crazy angry when we don't get enough good quality shut-eye. It also sets up an unhealthy gut microbiome. When ghrelin is up, and leptin is down, there is no amount of food that satisfies us. It's that beast inside us that demands more cake, and we have absolutely no control over it. So put that beast to sleep and hit the hay on time!

## OTHER FACTORS

Evidence suggests that our cholesterol levels also take a beating as a result of both too little and too much sleep. Other research shows that a lack of sleep may increase cortisol (stress hormone) levels causing inflammation and contributing to heart disease. Scientists also believe that we also lose antioxidants and suffer from a weak immune system when we don't get our Z's.

## IDEAL AMOUNT OF SLEEP

"Okay, okay! I'm convinced!" You say. So, how much sleep is enough? I'll get to that in a sec. First, I want to let you know that if you're an American, you are already sleeping two hours less each night than you did a century ago... if you were alive then. You can thank your smart phone and computer for that!

After a rigorous 2002 American Cancer Society study of over one million men and women, experts suggest that the perfect amount of sleep was SEVEN hours a night. Older people may need less and younger people need more.

Although this may not be surprising, keep in mind that just because sleep is a good thing, it doesn't mean that more of it is better. According to research from Japan, scientists found that sleeping four hours or less had about a 1.5 fold increased mortality risk and sleeping ten hours or longer ALSO increased mortality risk, almost two-fold! So, the proper amount of sleep for most people is a bell shaped curve where seven to eight hours is the ideal amount of time. Personally, I shoot for eight but usually wind up getting about seven, so reach for the stars and set the bar high! You can probably figure out your own ideal number of hours for sleeping based on how you feel in the morning. Are you energized? Can you function without your morning cup of joe?

Although there is no need to be a beauty for longevity purposes, I like to take care of myself and get my beauty sleep, not only for the health benefits but I simply look a lot better when I get a good night's sleep. All the free radicals that are responsible for premature aging are attacked and destroyed while I sleep, leaving me feeling rejuvenated and looking fresh. My skin is being repaired while I sleep, cells are turning over and sloughing off my face, leaving a new fresh layer to be exposed. Any skin damage from the sun and stress is stripped away with every "Z," so I make sure I get my fair share of them. - They don't call it beauty sleep for nothing!

## QUALITY SLEEP

The big unsung hero in all of this sleep talk is the deepest phase of sleep - REM. When discussing the important aspects of sleep research, we used to talk a lot about REM, but now, a focus on the amount of sleep we need has taken its place. Quality of sleep is still just as important as quantity of sleep. The most intense neural activity occurs while we are in REM sleep: blood circulation and oxygen levels increase, while brain tissue absorbs more amino acids, all the while keeping us thinking sharply and decreasing our risk of neurological diseases like Alzheimer's.

## TIPS FOR OPTIMAL SLEEP

So you say, "Alright, alright! I'm doubly convinced. What have I got to do?"
Follow these tips to get the best sleep ever, leaving you ready to take on the world the next morning. Your genes and hormones will be reset and balanced, telomeres stretched, and mitochondria bursting at the cell's seams, giving you loads of energy, mental clarity, and calmness the whole day long. When sleep is optimized, my Longevity Pillars \#'s 2-5 fall much easier into place and aging is not a battle, but rather a pleasure to go through as you live the life you want to live, without any limits.

Some of these tips are scientifically proven (see resources), and some of them are anecdotal from my own experiences. Flip through them and test out a few of the simpler and more cost-effective basic protocols before moving on to the more advanced ones.

Some of these hacks may work for you, some of them not so much. No big deal. If it's not working, try something new. You can either swap one for another or add on to it. What works for some may or may not work for you. Most of these techniques and tips are pure and natural so take time. This is not a quick fix, so you need to be patient and really give things a good go - from a few weeks to a few months.

## MOVEMENT

Exercise is good any time you can fit it in, but morning hours (before noon) is optimal. If you must train during post-work hours, aim to finish any vigorous activity four hours before you go to bed.

10 minutes of progressive muscle relaxation is something you can practice throughout the day, but try it in bed if you can't fall asleep. Tense the following muscle groups for 20 seconds and then slowly relax them:

01 Eyebrows, eyes
02 Lips, cheeks, and jaw

03 Shoulders to ears

04 Upper arms (biceps)

05 Forearms

06 Chest and abdomen (breathe in, tense chest and abdomen, then exhale slowly)

07 Back (arch)

08 Hips and buttocks

09 Legs

10 Feet (flex)
11 Toes (curl)

Yoga, tai chi or stretching is great any time of day, but particularly relaxing to practice right before bedtime. Try a 15 -minute session to start.

Keep your circadian rhythm happy. Go to bed and wake up at the same time every day (including weekends!). Our bodies have a natural sleep-wake cycle called a circadian rhythm. It is optimal to be consistent and not disrupt the rhythm. It's a challenge when traveling, but not impossible.

Social jet lag. No, you cannot make up for sleep on the weekend! It actually makes it harder to fall asleep on Sunday evening and disrupts your circadian rhythm, similar to jet lag. If you don't want to have a hard time getting up on Monday morning, skip the late nights and long sleep-ins. Don't worry, shifting your normal bedtime and wake time by up to an hour will not disrupt the sleep-wake cycle.

Vibrating alarm. Do you share a bed with someone on a different morning schedule? Wear a Fitbit or other exercise/sleep tracking device on your wrist set to vibrating mode, so as to not disturb the other person.

Wear earplugs. Cheaper than a tracking device (and perhaps safer from magnetic pollution), earplugs may not only help you get a more restful sleep if you are sharing the bed with a snorer, but will block out noise when you need your Z's and your partner needs to shower.

Meditation. One of the most powerful antidotes to insomnia, I like to practice meditating right when I wake or just before I go to bed. You can get started with a simple guided meditation on YouTube, enroll in a class to learn the basics, download the app, Headspace, or use the Muse brain sensing headband to help you control your mind. Meditation boosts melatonin levels (by $98 \%$ on average), increases alpha, theta, and delta brainwave patterns (the calming and pleasurable brainwaves) and lowers cortisol stress hormones related to inflammation, cardiovascular disease, and many age related problems.

## DAYTIME

Get outdoors before noon. Getting out in the sunlight for about 30 minutes every morning can have a significant effect on sleep. Studies show those who regularly get daylight before noon fall asleep easier, have fewer disrupted sleep patterns, reduced depression, and less stress.

Sunlight exposure increases the release of serotonin, a hormone that makes you happy, calm and focused. Without a healthy dose of sun exposure, our bodies cannot produce optimal levels of melatonin. Note: artificial light doesn't cut it. - Sorry!

Take a power nap. Try a 20 to 30 -minute nap once or twice a week to improve sleep. But don't go longer than 30 minutes and don't take it too close to bedtime.

## NUTRITION

Carbs, proteins, and sleep, oh my! Eating your carbs at night is not something I recommend for weight loss, but if you make them a healthy carb choice like quinoa or lentils, you may not only benefit from activating the fat burning gene that signals leptin and ghrelin (satiety and hunger hormones) to behave, but also gain better sleep. Both carlbs and protein boost tryptophan and serotonin, two chemicals in the brain that promote sleep. Choose quinoa and steamed fish over a burger and fries, please!

Drink milk before bed. Tryptophan found in cow's milk promotes sleep. Remember your mom offering you a glass of milk before bed? - Try my Sleepytime Golden Millk (Package 3 only).

Avoid heavy meals at night. Although a protein and carb rich meal at night may help promote sleep, if it is too heavy it will have the opposite effect, as your body is occupied in digestion and not focused on rest.

Stop eating three hours before bed. Whether you have a heavy meal or a light one, avoid eating just before bed. Giving your body a good three hours to digest before hitting the hay is optimal for your beauty sleep.

Avoid caffeine. You know you have the CYPla2 gene if caffeine is keeping you up at night. Try a few days totally caffeine-free and monitor your sleep pattern. This includes green tea, matcha, coffee, diet pills and chocolate.

Avoid alcohol. A glass of wine or nightcap may make you sleepy, but studies show it disrupts sleep patterns, primarily affecting the most beneficial rapid eye movement (REM) sleep. Keep in mind, the more you drink before bedtime, the worse it is. Give up all alcohol for a week and see how you feel.

Get your magnesium. Higher magnesium levels are associated with better sleep. You can get your fill of magnesium from whole foods like bananas and spinach. Alternatively, you can also take magnesium as a supplement and see how that works for you. Dr. Axe from draxe.com recommends 400 mg magnesium before bed or with dinner.

Boost vitamin D. The easiest and most cost-effective way to increase your vitamin D levels is sun exposure (without sunscreen). You don't need much sunshine to get things ramped up, plus you don't want to expose your skin to too much UV rays, so 15 minutes is the recommended amount.

A 2017 study shows "the use of vitamin D supplements improves sleep quality, reduces sleep latency, raises sleep duration and improves subjective sleep quality in people of 20-50 years-old with sleep disorders."

How much do you need? Well, it depends on your own vitamin D levels. Get a blood test from your doctor and check if your levels reach approximately 60 nanograms per liter of blood. Consult with your physician or nutritionist on how much you need. I spend a lot of time in Hong Kong and am not exposed to much sunlight, so I take 2,000 units per day.

Eat B9 (folic acid) foods. Eat food that contains more vitamin B9, such as kale, okra, garbanzo beans, liver, lentils, spinach, asparagus, beets, broccoli and black eyed peas.

Take your vitamins. There is nothing better than getting your vitamins and minerals from whole foods, which contain cofactors and co-nutrients in just the right amounts for optimal health - you don't need to worry about overdosing! However, adding a high-quality supplement in addition to a healthy diet may be beneficial and a little easier (not to mention cost-effective) than trying to find just the right balance between magnesium, vitamin D and calcium, which can have synergistic effects when combined... and not entirely for the best. Consult your doctor or a nutritionist for the optimal dose and recommendations if you feel you could benefit.

Experiment with herbs. With the legalization of medical marijuana in certain countries, there has been a lot of "experimenting" going on, but apparently, hemp CBD oil (cannabidiol) may improve sleep. Don't worry, CBD has no psychoactive component, meaning it cannot render you "high." According to the herb.com website, CBD oil is taken in drops under the tongue (sorry, no smoking), and they recommend $40-160 \mathrm{mg}$ CBD by mouth daily to treat sleep disorders. Regardless, please speak with your doctor before deciding to try out CBD oil.

You can also try one to two capsules of the herb valerian, half an hour before you go to bed. Dr. Andrew Weil from drweil.com recommends an occasional dose ( 2.5 mg ) of sublingual melatonin just as you go to bed. If you use it regularly, lower the dose to 0.25 mg . Check with your doctor, pharmacist or herbal specialist before trying it.

Check your progesterone levels. Taking oral progesterone may have a sedative effect that can promote better quality sleep. Check your levels in a blood test and consult your doctor for the appropriate dosage.

Avoid sleeping pills. As tempting as it may be, avoid sleep medication as they can become habit forming and have negative side effects, such as diarrhea, constipation, headaches, memory and cognitive problems, uncontrollable shaking, stomach pain and weakness just to name a few. I'm talking about drugs like benzodiazepines (Xanax, Valium), barbiturates, and various hypnotics. - Just say no!

Consider Hormone Replacement Therapy (HRT). Hormone Replacement Therapy has changed a lot in the last few decades. However, it is still recommended to avoid HRT if it is not strictly necessary. That being said, if your sleep is disrupted due to night sweats and hot flashes, the benefits may well be greater than the risks. Consult your doctor to see if the lowest dose of this therapy may be a solution, enabling you to get a full night's sleep.

Test your melatonin levels. Melatonin is the sleep hormone, and if it is not at the optimal level, you may want to consider taking about 0.4 mg four hours before bedtime. Consult your doctor or pharmacist before going this route. You should look into testing out tryptophan supplements before melatonin. With tryptophan, there are no side effects, and melatonin is not recommended to take long-term anyway. Learn more about the differences between melatonin and tryptophan here.

No liquids after 8:00 pm. If you have a weak bladder, you are surely waking up at least once or twice per night to pee. Start by restricting yourself from drinking water, alcohol, tea, soup and any liquids beyond 8:00 pm. If you still wake at night, stop an hour earlier, say at 7:00 pm, and then at 6:00 pm until you find the optimal level of hydration for you. Be sure to get enough liquids in you in the morning and daytime.

Quit smoking. Apart from all the other negative effects smoking has on your health, it contains nicotine, which is a stimulant just like coffee. Smoking a cigarette is like having a cup of coffee before bed. Just one more reason to quit.

## EVENING/BEDROOM

Get to bed between 8:00 pm-12:00 am. According to Dr. Matt Walker, head of the Sleep and Neuroimaging Lab at the University of California, Berkeley, "When it comes to bedtime, there's a window of several hours - roughly between 8:00 pm and 12:00 am - during which your brain and body have the opportunity to get all the non-REM and REM shut-eye they need to function optimally."

Get rid of Artificial Light At Night (ALAN). Turn off all electronics such as TV, computers, iPads, phones and any other devices one hour before bed. They not only rob you of sleep by tempting you to stay up later than you should, but the screens emit a blue-light that tricks your body into thinking it is still daytime, thus decreasing melatonin production and disrupting your normal circadian sleep rhythm.

Read real books. I get it and am guilty of reading e-books too. It is convenient to have the iPad when you travel to avoid lugging around a heavy book but put down the tablet and read paperback books at least when you are at home.

Wear your blue blockers. If you must stay up on your computer, wear blue light blocking goggles while on your electronics. I even wear mine after the sun goes down. The goggles not only block the blue light to avoid decreases in melatonin but also help to keep the production of this sleep hormone up while you are indoors and exposed to the artificial light being emitted from light bulbs.

No room for negativity. Avoid conversations with anxious, negative people before you go to bed. If you seem to always argue with your mom, save those debates for the morning. Your fury will keep you up at night!

Create bedtime rituals. Soak in a hot bath, enjoy your skincare routine, read a calm, positive book, practice meditation, stretch out with yoga and do your breathing exercises. Whether it's five minutes or one hour, take the time to give respect to the temple you live in. Your body will thank you overnight.

Create a spa atmosphere. How do you feel when you walk into a spa? What do you notice? Dim lighting, the calming scent of lavender, a comfy bed, tasty tea and relaxing music. All the senses are taken care of - sight, smell, touch, taste and hearing. Do you ever fall asleep during a massage or facial? I do, and that's because all of these elements are manipulated to make me calm and relaxed. Why not make your bedroom the same? Two hours before bed, do the following:

Close the shades, dim the lights, and light candles (electric ones are safer)

02 Diffuse lavender essential oil in a diffuser, or use incense sticks or a scented candle

03 Make your bed comfy. Invest in a good quality mattress and pillow

04 Enjoy a chamomile or herbal tea

05 Use Spotify and speakers to listen to chanting music, Tibetan singing bowls, white noise, the sound of waterfalls or any music that relaxes you

Change your light bulbs. Switch to 15 -Watt bulbs in your home, particularly if you read the last hour before bed.

Change the wall color. Reinforce calmness by painting your bedroom walls a relaxing shade of blue or warm yellow.

Deal with the snoring. If you share your bed with someone who snores, resolve the problem with a specialist who may recommend weight loss, surgery or various other techniques. In the meantime, try sleeping with earplugs in.

Pick up the noise. Is it deathly quiet? Sometimes we can't sleep when it's too quiet. In this case, consider playing white noise through your speakers, or invest in a white noise machine. Avoid falling asleep in front of the TV.

- Remember the blue light?

Get a good mattress. There's nothing like falling asleep on the perfect mattress. But even the best ones need to be changed every five to ten years, according to Consumer Reports.

Don't nap too close to bedtime. Taking a snooze too close to your bedtime may prevent you from falling asleep at your regular time and disrupt your natural circadian rhythm. Take a 20 -minute power nap at midday or simply call it an early night if you just can't keep your eyes open.

Use separate bedding. If your partner has a different internal thermostat than yours, consider separate sheets and duvets or try layering. One may sleep with a sheet while the other uses the duvet. Or change spouses (not recommended unless absolutely necessary) - just kidding!

Aromatherapy it up. The Wall Street Journal reported a 2008 study finding women with insomnia fell asleep more easily with the scent of lavender. Spray water infused with a few drops of lavender essential oil on a pillow. Alternatively, diffuse lavender scent in the air using a diffuser or candle. You can also rub lavender essential oil in between your hands so you can appreciate the smell before you go to bed, or add lavender essential oil in your body cream and give yourself a good hydrating massage before bedtime.

Indulge in a hot bath. Warm water raises your temperature, but the post cool-down period creates a relaxing sensation, promoting deeper sleep.

Turn up the AC. Although the bath may relax you with heat, our bodies actually sleep better at cooler temperatures, particularly for women suffering from hot flashes and night sweats. Keep the temperature in the bedroom in the upper 60 s - low 70 s $\left(16^{\circ} \mathrm{C}-21^{\circ} \mathrm{C}\right)$. Ideally for women aged $40+$, put the thermostat at $64^{\circ} \mathrm{F}\left(18^{\circ} \mathrm{C}\right)$.

Put electronics far away. Smart phones and tablets on your bedside table are a distraction and an invitation to answer every beep and message. Turn your devices to airplane mode and keep them five feet away from your bed. If you keep looking at your alarm clock, put that away in a drawer.

Monitor your sleep. Keep a journal or use an app to track your sleep patterns. Take notes on what time you go to bed, what time you wake up, rate your sleep on a scale of $1-5$, jot what exercises, food and tips you try here in the journal or the "notes" section of your app. Look for patterns and try to identify what is working best for you. I am having fun testing out the app SleepBot.

Sleep on your side. Recently, scientists have discovered the brain detoxifies itself through what's called the glymphatic system. While we sleep, the glymphatic system removes proteins and toxins and distributes glucose, lipids and amino acids to and from the brain so we can function the next day. It also stops the accumulation of beta-amyloids (like plaque) in the brain. Poor glymphatic drainage and increased beta-amyloids in the brain are markers of cognitive aging and diseases like Alzheimer's. In studies with rodents, it was revealed that glymphatic drainage worked best when sleeping on your side... without a pillow.

Chuck the pillow. Glymphatic drainage of toxic waste is at its best without a pillow, however, if you must use a pillow, get one that is most comfortable.

Practice 4-7-8 before falling asleep. A technique used to relax the body and encourage you to fall asleep quickly, the 4-7-8 method allows your lungs to fill with oxygen, which then circulates throughout the body promoting a relaxing effect. The 4-7-8 method supports the quick removall of carlbon dioxide and better preservation of the bicarbonate pool, maintaining an appropriate pH ballance. Cards on the table - whether this is a bunch of "hoo ha" or not, you've nothing to lose in giving it a try!

Put the tip of your tongue against the ridge of tissue just behind your top, front teeth. Keep it there throughout the whole exercise.

01 Start by completely exhaling all the air out through your mouth (make a swoosh sound! Ignore the smirks from your partner)

02 Inhale slowly through your nose while keeping your mouth closed and counting to 4

Hold your breath for 7 seconds

Slowly exhale through your mouth (make the swoosh sound) and counting to 8

Take care of your mattress and pillow. Your mattress can fill with mold, dust, bugs and other "curiosities" that make you sneeze and itch. It is recommended that you change your mattress every 5-10 years, or seal it for proper beauty sleep. Pillows need to be replaced every 12 to 18 months... unless you've found the optimal one, then never give it up!

Don't stress. If you are stressing every 30 minutes that you haven't fallen asleep yet, get rid of the clock, get out of bed and tell yourself to relax. No biggie. Breathe.

Read something boring. Reading a calming book is relaxing, but reading a boring book is a surefire way to knock you out! Avoid reading thrillers and books that are so gripping you must get to the next chapter. Save your favorite books for the plane, the mornings or weekends.

Oust Fido! We love our furry friends, but animals in the bed can be a real disrupter to a good night's sleep. Dogs and cats snore, scratch, sneeze and do all the things that humans do that may needlessly keep you up at night.

Keep a journal. When we lie down in bed, we often rehash the day in our minds. If you have something weighing you down or a complicated issue to deal with, write it down in a journal, close it and let it go for the night.

Get out of bed. If you cannot fall asleep within 30 minutes, get out of the bedroom and do something that relaxes you. Avoid television, your phone, lights, and electronics that will stimulate you even more. The moment you feel sleepy, get back in bed.

Set a bedtime alarm. We set our alarms to wake us up, but you can also set your alarm to remind yourself to go to bed. We often get so distracted by last minute emails or engaged in the news we don't realize time is passing. Remind yourself that sleep is more important.

Find a rhythm with your partner/roommate. If you share a room with someone else, try to coincide your schedules so that you both hit the hay at the same time. If you are an early riser and your partner is a night owl, find a compromise by going to bed slightly earlier and waking slightly earlier or vice versa. If that's not possible, learn to be respectful of each other's sleep by keeping things as quiet as possible.

Mild movements before bed. An hour before bed, spend time stretching out sore muscles. Try using a foam roller to work out any stressed areas of your body or practice slow tai chi movements.

Get in the zone. Adopting the right mindset about sleep and bedtime may help you fall asleep easier and get better quality sleep. Don't sweat the little stuff, and also, leave the big problems until the next day. Try not to focus so much on the importance of sleep; otherwise, it can prevent you from getting a good night's rest in the first place. Chill.

Hypnosis. No harm in trying alternative therapies to promote better sleep. Find a recommended practitioner from someone who has had a good experience.

Organize your day. Before you go to bed, take the time to sort the issues of the day and create a plan for the following day. You may find that it helps if you write things down so you can let go of these thoughts while you are lying in bed. Having a clear state of mind just as you lie down frees you up to just sleep.

Visualization. Our monkey minds take us through the whole day while we are lying in bed, bringing up memories of an argument from that morning, a deadline that we missed or financial worries. Clear your mind of these thoughts with positive visualization. Start dreaming before you fall asleep think about your next vacation, dream home or fun weekend plans. Imagine anything you like as long as it is positive. Believe it or not, 'boring' visualization also helps me fall asleep. The moment I think about what I should wear the next day, it knocks me out in two seconds!

## TRAVEL

Set your clock to a new time zone. Jet lag hits most of us when we travel, but we can fight it by adapting to the new time zone a few days ahead of the big day. For example, traveling to New York from Los Angeles on Monday morning? The three-hour time difference means that on Saturday night you should try to go to bed an hour earlier than you normally do. Sunday night, go to bed two hours before you normally do. This puts you on schedule for New York time, getting you to bed at 10:30 pm (NY time) when you are really in Los Angeles at 8:30 pm.

Behave in the new time zone. So, you are flying to London from New York at 6:00 pm. Everyone in the new time zone in London is asleep while you are just boarding the plane for a seven-hour flight. Skip the airplane meals and get some shut eye. If you must, just have a small snack of almonds instead of a meal, skip the free glasses of wine and resist staying up to catch up on Game of Thrones. Getting even a few hours of sleep on the plane will help a lot when you arrive at the new time zone, leaving you more refreshed and better equipped to deal with jet lag.

Avoid taking naps. Long-haul flights to a new time zone really can mess up your circadian rhythm. It's why everyone must close the shades, and the lights go off in the cabin on overnight flights. When you arrive at your destination, you are exhausted from a long flight, and your body wants nothing more than to lie down. Resist the temptation and go out for a walk to discover the city or prepare for the next day's meeting. Falling asleep during the day only sets you up to wake in evening hours, futzing around until 5:00 am, when you finally feel groggy. Waking up at noon the next day only extends jet lag longer. What I do is fight the sleepy head, get outdoors in the daylight to stop melatonin production, grab some food and stay up until at least 9:00 pm.

## EXTRA

See a doctor. Sleepless nights lasting over one month should be addressed more seriously, and the issue should be taken up with your doctor or a sleep specialist. You may have an underlying condition such as depression, anxiety, sleep apnea, reflux, asthma... the list can go on and on. Check on it!

Cognitive behavior therapy. Many alternative treatments are non-invasive and much safer than sleeping pills. Search for a specialist with whom you can meet weekly, someone who can help you change sleep habits and organize your self-assessment with sleep diaries and recommended changes in behavior. Kind of like a personal trainer for sleep.

Alternative therapy. Less invasive treatments such as acupuncture, NLP, osteopathic manipulative therapy and aromatherapy with recommended trained professionals is something to investigate as a next step when you have tried it all. Do your due diligence and find a qualified professional.

Sauna bath. No large scale studies are proving the effects of sauna use on sleep, but I take regular 20-minute saunas, 4 to 5 times a week. This helps me with relaxation and lowers cortisol levels, and I am sure this also has a positive effect on my sleep. Try it both in the morning and the evening to see when you will have the most beneficial effects.

## RESOURCES

Click here to find the resources used in the writing of this book.

