A Killer In Our Midst

How Sleep Deprivation Can Rob You of Your Health, Happiness, and Peace of Mind

By Marc Gilson

Director of Client Services and Product Development
Centerpointe Research Institute

A Killer In Our Midst

How Sleep Deprivation Can Rob You of Your Health, Happiness, and Peace of Mind

By Marc Gilson
Director of Client Services and Product Development
Centerpointe Research Institute

For further information on products or programs, contact Centerpointe Research Institute here:

Phone: 503-672-7117
Mail: 1600 NW 167th Place, Suite 320, Beaverton OR 97006
Email: support@centerpointe.com
Web: http://www.centerpointe.com

[NOTE: The therapeutic information presented here is of a general nature and is not a substitute for an evaluation or treatment by a competent medical or mental health specialist, nor is anything presented here designed to treat any disease or medical condition.]

A Killer In Our Midst

How Sleep Deprivation Can Rob You of Your Health, Happiness, and Peace of Mind

By Marc Gilson
Director of Client Services and Product Development
Centerpointe Research Institute

There is a dangerous and diabolical killer at work within our world.

It strikes in the night and leaves a trail of suffering in its wake. No, it's not some rare or exotic disease. In fact, it's so frighteningly common that there's a one in three chance that you're dealing with it right now, or will face it at some point in your lifetime. If you're not suffering from it, you surely know those who are. It's a condition of almost pandemic proportions that indiscriminately affects people of all ages, income brackets, education levels, races, and religions.

Unfortunately, it doesn't stop there. This malicious condition can impair your memory and lead to poor decision-making and irritability. This problem is so insidious that it can be active for decades in one's life without ever abating. Many people don't even realize

Its awful symptoms include:

- It can weaken the immune system
- A loss of motor coordination
- Poor cognitive functioning
- High blood pressure
- Digestive problems
- Headaches

It can also make you more susceptible to serious illnesses including:

- Heart disease
- Diabetes
- Cancer

they're dealing with this problem because they've become so accustomed to it that it doesn't grab their attention...

...until something goes very wrong.

The destructive and deadly condition running rampant through every part of the world? It's none other than **sleep deprivation**.

Poor sleeping is so prevalent today that we almost ignore it. But ignoring sleeping problems is a huge, and potentially deadly, mistake.

According to a recent Gallup poll, about 40% of all Americans get less than the recommended minimum of seven hours of sleep per night. And all those sleepless hours are really taking their toll.

As mentioned above, a lack of quality slumber can dull your memory and concentration, affect your mood in negative ways, weaken your immune system, cause unwanted weight gain, and put you at risk for a host of potentially life-threatening illnesses.

But that's not all. Sleep troubles are also implicated in all sorts of deadly and dangerous incidents including airline disasters and traffic accidents. The National Highway Traffic Safety Association says that about 90,000 traffic accidents a year can be blamed on drowsy driving.

In fact, a sleep deprived person can often exhibit the same problems with motor coordination, speech, and slow response times as someone who is over the legal limit to drive after too much alcohol consumption. One Triple-A Traffic Foundation Study estimated that as much as 21% of fatal traffic accidents were due in part to sleepiness. We all know not to drink and drive, but it's worth remembering that driving while sleepy can be every bit as fatal.

But sleep deprivation isn't just making our roads and skies more dangerous. It's also putting us at risk in hospitals and clinics.

According to the National Center for Biotechnology Information, **over 100,000 deaths due to medical errors have been attributable to some form of sleep deprivation over the last decade or so.** And if that terrifying statistic didn't get your attention, how about this: There's nearly a 50% chance that the surgeon performing your next operation didn't get enough sleep the night before your surgery. Doctors and nurses often work long hours under tremendous pressure. Their attention to detail and decision-making can be a matter of life and death. Most of them are heroically good at their jobs despite any sleep challenges they may face. Yet according to a recent poll by Sermo, only about half the doctors polled reported getting the minimum sleep required.

We make bad decisions, we make them slower, and we make them more often when we're sleep deprived. So it's no surprise that after a sleepless night we tend to slip and fall more often, drop things, misplace things, forget things, and are overall just a lot clumsier. There can be no doubt: a sleepy person is an accident waiting to happen.

Newer research, like that conducted by the popular sleep expert and author of the bestselling book, "Why We Sleep" Dr. Matthew Walker puts to bed (no pun intended) any lingering notions that sleep problems shouldn't be taken seriously. Dr. Walker insists that **poor sleep isn't just a minor inconvenience we can compensate for with more coffee and a few naps here and there.** Sleep deprivation can actually lead directly to death's door. He says:

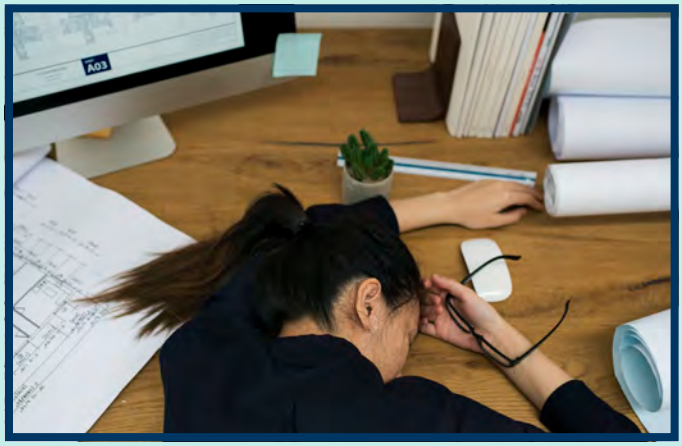
"[At least] 20 large-scale epidemiological studies have tracked millions of people over many decades, all of which report the same clear relationship: ***the shorter your sleep, the shorter your life.*** *The leading causes of disease and death in developed nations... such as heart disease, obesity, dementia, diabetes and cancer - all have recognized causal links to a lack of sleep."*

Dr. Walker goes on to say that poor sleep can cause a 40% deficit in your brain's ability to make new memories due to the detrimental effects on the hippocampus. And your amygdala, primarily responsible for helping to regulate emotions, is, says Walker, about 60% more reactive when you're deprived of sleep.

Poor sleep has been directly linked to poor academic performance. Numerous studies show that students suffering from a lack of sleep score lower on tests, and over the long term earn a full letter grade lower than their counterparts who sleep well. Dr. Lawrence Epstein, medical director of SleepHealth Centers in Brighton Massachusetts said, "After two weeks of sleeping six hours or less a night, students feel as bad and perform as poorly as someone who has gone without sleep for 48 hours straight."

A lack of sleep has also been more recently implicated in a range of serious mental health issues, including **depression, anxiety, bipolar, and an array of learning challenges like ADHD**. In the past, researchers often assumed that sleeping problems were the result of such mental health challenges. But today many mental health experts are suggesting that the sleeping problems themselves may be a contributing factor to such problems.

Sleep deprivation isn't just costing us our health and well-being. It also comes with some very literal and mind-boggling monetary costs. According to Forbes Magazine, sleep deprivation costs the U.S. over $411 billion dollars annually.



Poor sleep can be directly tied to:

- Poor attendance
- Lower productivity
- Costly mistakes on the job

In Japan, a staggering 2.9% of the country's GDP is lost to sleeplessness each year.

That doesn't even count the $40 billion dollars spent on sleep aids by sleep deprived sufferers. Think of the money we'd save if we just got a good night's sleep! And, unfortunately, all of these numbers are climbing.

If you weren't losing sleep before, you probably are now that you've read some of these alarming statistics!

By now it should be clear that there really isn't any area of our lives that isn't negatively affected when our sleep suffers. Our physical health, sex life, decision-making, mental health, learning, memory, focus, equilibrium, even our overall longevity can be negatively impacted by poor sleep. Our world is suffering from an epidemic of poor sleep...

...And it's getting worse, sleepless night by sleepless night.

So what is going on with our sleep? Why are we getting less of it now than we did in the 1940s when Americans averaged 7.9 hours of sleep per night instead of the 6.5 hours per night we average today?

A good night's sleep is becoming rarer by the night, and is itself a kind of endangered species at the brink of extinction. ***How do we save our sleep?***

TWO SUSPECTS THAT AID & ABET

Sleep deprivation might be a killer in our midst, but it isn't acting alone. It has help. To understand how to deal with the problem of sleeplessness we have to understand a bit about its root causes.

While we could point the finger at many factors, including everything from an increase of alcohol use, longer commutes to and from work, staying up later and and rising earlier, to the prevalence of various pharmaceutical drugs, most of our collective woes when it comes to sleeplessness can be pinned on a couple of culprits.

1. Sensory Pollution

The majority of human beings (over 55%) live in an urban area or a city. Cities offer many benefits over rural areas, like more employment opportunities, better infrastructure, and access to more varied cultural resources like museums, libraries, and restaurants.

But cities also generate a lot of pollution. *Not just litter and smog, but sensory pollution as well.* Take noise for example. Get enough human beings together in one area and one thing you can count on is a lot of noise. Those of us who are city-dwellers are often immune (or so we think) to the noises around us. We are so surrounded by noise we barely notice it: the traffic, the air conditioner, TVs, radios, not to mention the myriad of noises that come from our ever-present phones and media devices. Cities are never, ever quiet.

It's not until we find ourselves out and away from the city when we can take a deep breath and realize just how *quiet* life can be. Sure there are sounds in nature, but much of the sound we're exposed to in our daily lives is decidedly not natural, nor soothing. **Cities offer many benefits, but tranquility is not among them.**

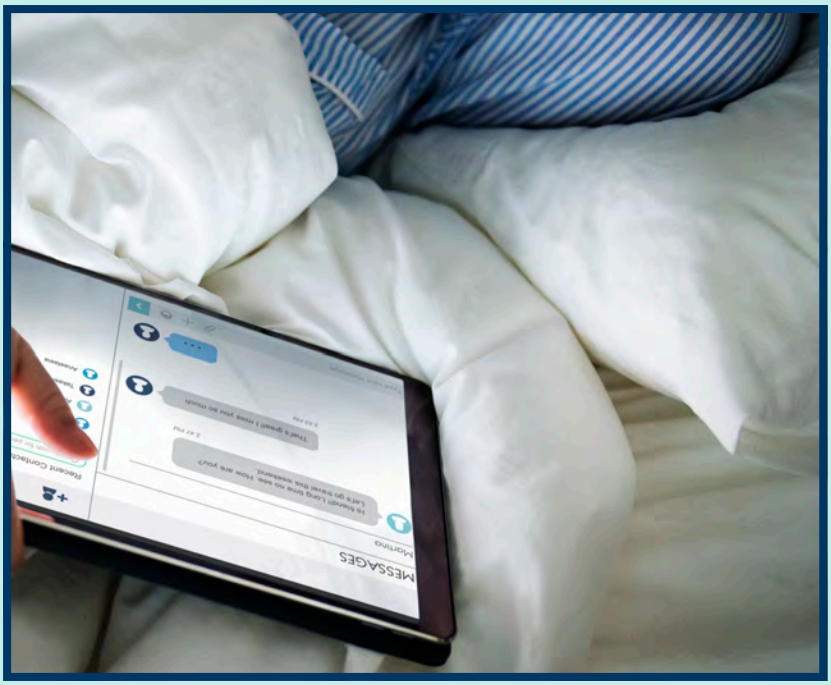
And it's not just noise but also light pollution that can interfere with our sleep. If we could climb into a time machine and travel back only about two or three hundred years, one of the most surprising things we might notice is just how *dark* it was. While lanterns, candles, and torches have been around since 500 BC or before, their effects on the darkness of nighttime was modest by modern standards.

By the late 1800s, public lighting began to illuminate the streets and avenues of cities like Paris, London, and New York. It can be argued that the advent of public lighting reduced problems like crime and travel accidents in the city. But it did not do much to improve our sleep.

Today, nearly 4 million miles of roads and highways in the United States are fully illuminated by street lights. **Cities and towns are brilliantly illuminated with street lights, stop lights, advertisements, billboards, LED and neon in multiple colors, all blinking, flickering, and flashing through the darkest nights.**

If you've ever traveled into a big city at night by road, you may have noticed that the sky above a city often looks like a glowing fog. You can see the illuminative effects of the city before you see the city itself. This is called "skyglow," and while lovely to look at from a distance, it's a reminder that our cities, as bright and welcoming as they can be, *are not ideally suited for getting a good night's rest.*

Once you turn off your light, pull up your covers and go to sleep, it may seem that your room is nice and dark. But give your eyes a few moments to adjust and you may detect ambient light streaming in from outside from a nearby streetlight, or even your neighbor's porch light. This is sometimes called "light trespass." Or you may notice the red or blue light from an alarm clock infusing your room with an electrical glow. These light sources might seem like nothing to worry about, but ***sleep researchers insist that even the faintest of lights can disrupt our fragile sleep.***



Over three-quarters of Americans (including me) check their smartphones, watch TV, or use a laptop or tablet computer while in bed just before sleep. This too can disrupt sleep even if we're not really sleeping yet. ***The light from these devices activate portions of the brain that are normally only active during daylight hours, triggering the brain to be awake and active when all you really want to do is doze off.*** So even after we put the phone down and turn off the laptop, the ambient light in our room can still hinder our sleep.

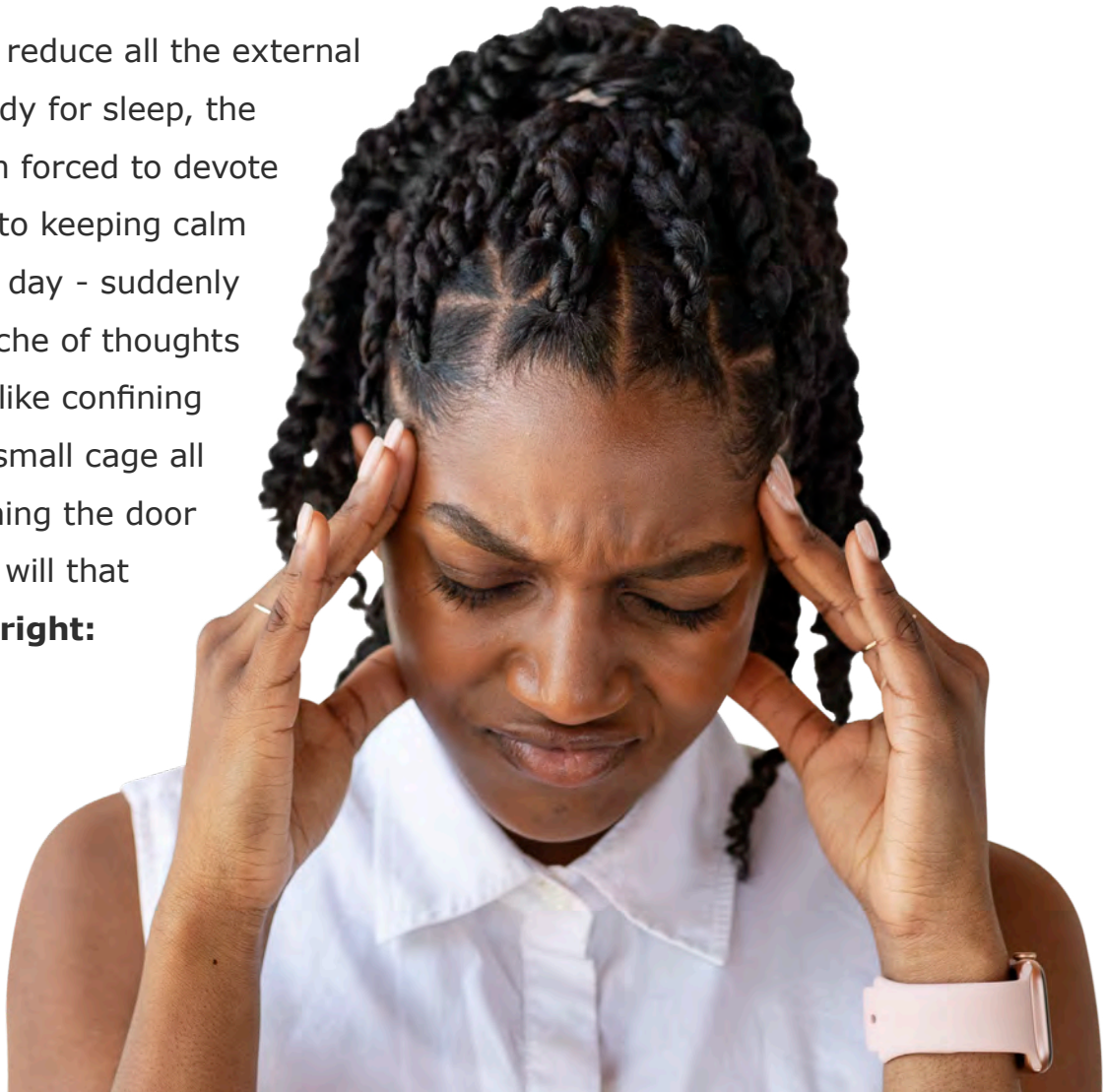
Sleep scientists say that light pollution can interfere with our circadian rhythms; those natural biological cycles that help regulate everything from our sleep cycles to our digestion. Our brains are what largely control these rhythms, **so when we're exposed to too much light too close to bedtime, it's not surprising that getting to sleep turns into a real chore.**

2. Stress

Even children know that "stress is bad." It's also a major contributor to sleep problems. We've all had the experience of lying there in bed, trying to relax into a nice, deep sleep, but then our brain suddenly decides to flood us with worrisome fears, wild fantasies, brilliant plans to save the world, movie script ideas, grocery lists, or virtually anything that comes charging into our minds. **There's really nothing more frustrating than craving a good night's sleep but having your brain erupt in a fountain of restlessness and tension..**

It might not seem like it, but this is actually the result of an overly stressed brain. During stressful times of the day, we often repress these mental exploits. Instead of feeling creative, or working through the problems that we're faced with, we're simply trying to "hold it together," and just get through our day.

So when we finally reduce all the external stimuli and are ready for sleep, the brain - having been forced to devote most of its efforts to keeping calm and carrying on all day - suddenly releases an avalanche of thoughts and emotions. It's like confining a wild animal to a small cage all day, and then opening the door of that cage. What will that animal do? **That's right: it will run wild.**



This is what you might call the "white-washed wall" scenario. Some cities have a real problem with graffiti. And while everyone can support artistic expression, graffiti can prove to be a costly and ongoing problem for building owners. Ongoing because it seems that as soon as a business owner washes his exterior walls clean of the uninvited art, it's back again a night or two later.

The mind is a little like that persistent graffiti artist, just waiting for the canvass to be white-washed and ready once again for a new artistic masterpiece. Meanwhile, we're busy trying to scrub away those distracting images so we can get to sleep. It's a never-ending battle.

Stress causes us to feel constricted, squeezed, compressed. In fact, the word "stress" comes from the Latin, strictus, or "drawn tight." When our days are so stressful and

tight, we sometimes find that the only time of day when we can "loosen up" and relax is just as we are ready to sleep.

But what happens when the mind itself has been constricted and compressed all day long? It's been waiting for night to come so it can release all that pent-up energy, keeping you awake long past your bedtime and contributing to yet another day of stress.

But why are we so stressed out?

The answer to that becomes a little more obvious when you consider just a few of the reasons people give when asked what's keeping them up at night:

- Worries over politics or world affairs
- Too much sugar of caffeine in diet
- Noisy roommates or neighbors
- Stressful working environment
- School-related stress or too much homwork
- Too many decisions to make
- Recent divorce or break-up
- Dealing with medical issue
- Recent loss of a loved one
- Faced with financial crisis
- Irregular working hours
- Lost or changed jobs
- A sick child or pet
- Long work hours
- Moved house
- Had a baby

Have you experienced any of these challenges? Personally speaking, I cannot think of a time in my life when I wasn't coping with one or more of these factors. And I have a feeling I'm in good company. It's hard to imagine many people who are not, at any given time, dealing with at least one of these sleep-stealing stressors.

HOW TO TRADE THE VICIOUS CYCLE FOR A SLEEP CYCLE

All of this can seem like the quintessential vicious cycle. Our fast-paced and stressful lifestyles, our lights and noise, our ubiquitous screen-based technologies, and even our very brains, all seem to conspire to keep us perpetually deprived of our precious sleep.

But there is a way to break this cycle, and ironically it involves another kind of cycle. A sleep cycle. In fact the key to solving many of our sleep problems involves employing some healthy sleep hygiene methods in order to re-establish the ideal brain states for deep, restorative sleep.

In order to get a good night's sleep, your brain needs to produce a certain series of neuro-electrical patterns called a **sleep cycle**. Let's briefly follow the path of a healthy sleep cycle, and then we'll explore three simple ways you can break the cycle of sleepless nights and replace it with restful and rejuvenating healthy sleep.

Your brain is a kind of bio-electrical power plant. All brain activity, whether solving a complex math problem, choosing what to eat for lunch, or keeping your heart pumping, involves the firing of very tiny micro-electrical impulses. The speed or frequency of these impulses can tell us a lot about what the brain is up to at any given moment.

For example, if you're reading this article in a normal wakeful state, your brain is likely in a "beta" brain wave pattern right now. To check and make sure that's the case, we could hook you up to an EEG machine which measures brain wave activity. If your EEG session shows that the neuroelectrical impulses in your brain are firing at about 12 to 30 times per second (Hertz/Hz), we would know for sure that you are in beta; a normal, wakeful state of consciousness.

When it's time for sleep, we don't want to be in that wakeful beta state. We want our brain waves to gradually slow down. As we relax, we slowly drift from the alert beta state into a brain wave pattern with slower neuroelectrical fluctuations called alpha (from about 8Hz to 12Hz). ***This is known as Stage 1 sleep*** and is characterized by a feeling of relaxation and drowsiness. Alpha is sometimes called the "twilight" state since it's between wakefulness and sleep.

After a few minutes in Stage 1 alpha, we drop even lower, into ***Stage 2 theta***. Theta is marked by a slowing heart rate, a decrease in body temperature, and, of course, slower brain wave patterns (about 4Hz to 8Hz).

But there's an even slower brain wave pattern called delta (0.1Hz to 4Hz) which is associated with the deepest, most restorative sleep. Delta waves are considered ***Stage 3 sleep*** and are characterized by a loss of body awareness and very deep, dreamless slumber. It's in the delta state that we experience the most restorative

and healing benefits of sleep. When we're stressed, it makes it much harder for the brain to get into this deep and healing sleep state.

There is a ***Stage 4th sleep*** which is characterized by multiple brain wave patterns called Rapid Eye Movement or REM sleep. REM sleep makes up about 20% of sleep time in a healthy sleep cycle. REM is associated with dreaming, and according to some researchers plays an important role in learning and memory management, although how exactly REM sleep works is still something of a mystery.

This is just a cursory description of a sleep cycle. And even if brain waves aren't your idea of fascinating information, the important point to remember here is that it is this cycle of brain wave activity we've just explored that sleep scientists say is necessary for a healthy and deep sleep. When this cycle is disrupted - by too much stress, noise light, etc. - our sleep, and our health and happiness, suffers.

So now we know how dangerous and pervasive sleeping problems are. We know at least a couple of things that cause or contribute to sleeplessness. And we've just seen that good sleep depends on a healthy sleep cycle within the brain itself. Which brings us to our final and most important question...

...what can we do about it?

THREE SLEEP HYGIENE TIPS FOR A GOOD NIGHT'S SLEEP

If I had enough time and space in this article, I could list around 500 or more ways people have tried to get some shut-eye. The sleep industry is a multi-billion dollar one, offering a plethora of supplements, aromatherapies, special pillows, herbal teas, weighted blankets, and of course an array of pharmaceuticals. According to NBC News, 9 million Americans take prescription drugs to help them fall asleep. Sleep aids abound, and while some are more effective than others, most fail to make much of a difference, which means we're still sleepy and sluggish, yawning through our day.

So instead, let's focus on three simple and drug-free ways you can improve your "sleep hygiene regimen" and start enjoying a better night's sleep (and it's countless benefits) tonight!

1. Practice Light & Noise Abstinence

Earlier we noted how detrimental light and noise pollution can be when it comes to our sleep. While some sounds can be soothing and actually help us sleep (such as quiet, non-vocal music, or white noise like rainfall or ocean waves), noises that distract or grate on our nerves only make it harder for our brain to get into a natural sleep cycle. And when it comes to light, almost any glow, even from a simple alarm clock, can be enough to keep our brains alert and attentive to the external environment.

So this tip is a simple one:
At least an hour before bed, abstain from excessive light and noise. This means no radio, TV, tablets, or - gasp - smartphone usage at all an hour before bedtime. No newscasts, podcasts, social media, movies, or youtube videos. In order to do this, youmay have to actually turn your devices all the way off or leave them in another room. I actually had to put my TV remote on the dresser, out of reach, and turn my phone completely off.

Remember that your bed is best used for sleeping, not checking the news online or reading company emails. Your behaviors are what train and condition your brain to respond appropriately to what you want it to do. Refusing the temptation to engage in online media will train your brain to understand that when it's silent and the lights go out, it's time to commence the sleep cycle. Once in bed, leave the TV and other media off. A little reading is fine, but set a time limit so that a thrilling page-turner doesn't leave you bleary-eyed and exhausted in the morning! Keep the lights low before bed, and once it's time for slumber, turn out all lights, cover your alarm clock and keep your room as dark as you can.

It can take some discipline and practice, but even just an hour spent free of extraneous noise and screen time can give our brain a head start toward a steady sleep cycle and a tranquil night.

2. The "One" Way to Fall Asleep

Okay, there isn't only "*one way to fall asleep.*" But as you'll see, this technique combines the ancient practice of clearing the mind using a softly spoken word with the proven effectiveness of a simple breathing technique. During your hour of abstinence from your devices and distractions you may be wondering what to do with the time. Practicing this technique for just three to five minutes can help relax you, clear your mind, and prompt the brain to shift into a healthy sleep cycle.

Here's what you do:

1. Get into a comfortable seated position (or lie downif you prefer).

2. Close your eyes for a moment and relax the muscles in your face, neck, shoulders, back, and legs.

3. When you feel ready, take a long, deep breath, inhaling through the nose, all the while repeating the word "one" in your mind. Usually you'll find you can repeat the word "one" three to five times on a single inhale.

4. Hold that breath for one more count of "one," and then exhale through the mouth while saying or whispering the word "one" outloud. As you do, you might make a sound like a long, breathy "Onnnnneeeeee…." as you empty your lungs.

5. Repeat this a few more times - inhaling through the nose while repeating "one" in your mind, and exhaling through the mouth as you speak or whisper the word "one" all at once.

If you begin to feel lightheaded, begin breathing normally (shallowly) but continue to softly recite the word "one" slowly and gently until you feel drowsy.

The word "one" is considered a perfect "mantra word." There are no hard consonants, and the word itself conveys a sense of groundedness and centeredness.

This method is ideal for calming and centering the mind, while relaxing the body and allowing your natural sleep cycle to begin. Try it. It works!

3. Use Sound Waves for Sleep Waves

Most of us would prefer to avoid using sedatives or pharmaceuticals to get to sleep. What many people don't know is that there is an alternative method of getting to sleep using nothing but sound waves, no pill required.

Through the use of binaural beat brainwave entrainment, it's possible to induce sleep by replicating the very same sleep cycles produced by your brain. This remarkable sound technology not only adjusts brainwaves to match those of deep sleep, it can actually retrain the brain over time to produce normal, stable sleep cycles leading to optimal sleep.

Centerpointe Research is the industry leader when it comes to effective neuro-audio technologies (like binaural beat entrainment) for everything from stress reduction and meditation, to super-learning and self-enhancement.

Given how severe and rampant sleeping problems are in the world today, it's no surprise that over the last decade or so, one of Centerpointe's most popular audio products is called **The Sleep Suite**, a package of three audio soundtracks designed to help improve sleep. One of the soundtracks, called "*Restful Night*," is specifically designed to help recondition the brain to produce a natural and healthy sleep cycle. "*Restful Night*" is ideal for those who want a quick, effective, no-nonsense, and inexpensive approach to getting a good night's sleep. All you need to do is put the soundtrack on (with earbuds or

headphones) lie back, and listen until you feel drowsy. That's it.

Centerpointe's **Sleep Suite** has improved the sleep quality of thousands of people worldwide since its release. It is considered by many to be one of the most effective tools available today for those interested in an easy and drug-free way to improve the quality of sleep.

For more on how this unique and remarkable product works and how you can download the Sleep Suite and begin using it tonight, click the link below.

Click Here to Download the Sleep Suite

Poor sleep is a serious and widespread problem. It will, if we let it, rob us of our energy, vitality, health, and creativity. If we want to thrive and grow, or simply be as healthy and as happy as we can be, we owe it to ourselves to prioritize a healthy sleep cycle. To practice good sleep hygiene, we can reduce sensory pollution, lessen the effects of stress, and train our brains to provide us with deep, restorative sleep each and every night. With good sleep comes a healthy and resilient body, a clear and creative mind, and a positive and peaceful demeanor. Don't let sleeplessness destroy your quality of life. Seek out resources like those mentioned here and give yourself the indispensable gift of a good night's sleep, beginning tonight. ***Sweet dreams!***