## Sleep Deprivation Is Killing You and Your Career

The next time you tell yourself that you'll sleep when you're dead, realize that you're making a decision that can make that day come much sooner. Pushing late into the night is a health and productivity killer.

According to the Division of Sleep Medicine at the Harvard Medical School, the short-term productivity gains from skipping sleep to work are quickly washed away by the detrimental effects of sleep deprivation on your mood, ability to focus, and access to higher-level brain functions for days to come. The negative effects of sleep deprivation are so great that people who are drunk outperform those lacking sleep.

## Why You Need Adequate Sleep to Perform

We've always known that sleep is good for your brain, but new research from the University of Rochester provides the first direct evidence for why your brain cells need you to sleep (and sleep the right way-more on that later). The study found that when you sleep your brain removes toxic proteins from its neurons that are by-products of neural activity when you're awake. Unfortunately, your brain can remove them adequately only while you're asleep. So when you don't get enough sleep, the toxic proteins remain in your brain cells, wreaking havoc by impairing your ability to think-something no amount of caffeine can fix.

Skipping sleep impairs your brain function across the board. It slows your ability to process information and problem solve, kills your creativity, and catapults your stress levels and emotional reactivity.

## What Sleep Deprivation Does to Your Health

Sleep deprivation is linked to a variety of serious health problems, including heart attack, stroke, type 2 diabetes, and obesity. It stresses you out because your body overproduces the stress
hormone cortisol when it's sleep deprived. While excess cortisol has a host of negative health effects that come from the havoc it wreaks on your immune system, it also makes you look older, because cortisol breaks down skin collagen, the protein that keeps skin smooth and elastic. In men specifically, not sleeping enough reduces testosterone levels and lowers sperm count.

Too many studies to list have shown that people who get enough sleep live longer, healthier lives, but I understand that sometimes this isn't motivation enough. So consider this—not sleeping enough makes you fat. Sleep deprivation compromises your body's ability to metabolize carbohydrates and control food intake. When you sleep less you eat more and have more difficulty burning the calories you consume. Sleep deprivation makes you hungrier by increasing the appetite-stimulating hormone ghrelin and makes it harder for you to get full by reducing levels of the satiety-inducing hormone leptin. People who sleep less than 6 hours a night are $30 \%$ more likely to become obese than those who sleep 7 to 9 hours a night.

## SIDE EFFECTS FROM MISSING SLEEP

- Irritability
- Cognitive impairment
- Memory lapses or loss
- Impaired moral judgement
- Decreased creativity
- Increased stress
- Symptoms similar to ADHD
- Impaired immune system


## - Risk of diabetes Type 2

- Decreased testosterone

- Increased heart rate variability Risk of heart disease and stroke
- Increased reaction time
- Decreased accuracy
- Tremors
- Aches

Other:

- Growth suppression
- Risk of obesity
- Decreased
temperature

Most people need 7 to 9 hours of sleep a night to feel sufficiently rested. Few people are at their best with less than 7 hours, and few require more than 9 without an underlying health condition. And that's a major problem, since more than half of Americans get less than the necessary 7 hours of sleep each night, according to the National Sleep Foundation.

For go-getters, it's even worse.

A recent survey of Inc. 500 CEOs found that half of them are sleeping less than 6 hours a night. And the problem doesn't stop at the top. According to the Centers for Disease Control and Prevention, a third of U.S. workers get less than 6 hours of sleep each night, and sleep deprivation costs U.S. businesses more than $\$ 63$ billion annually in lost productivity.

## Doing Something about It

Beyond the obvious sleep benefits of thinking clearly and staying healthy, the ability to manage your emotions and remain calm under pressure has a direct link to your performance.
TalentSmart has conducted research with more than a million people, and we've found that 90\% of top performers are high in emotional intelligence (EQ). These individuals are skilled at understanding and using emotions to their benefit, and good sleep hygiene is one of the greatest tools at their disposal.

High-EQ individuals know it's not just how much you sleep that matters, but also how you sleep. When life gets in the way of getting the amount of sleep you need, it's absolutely essential that you increase the quality of your sleep through good sleep hygiene. There are many hidden killers of quality sleep. The 10 strategies that follow will help you identify these killers and clean up your sleep hygiene. Follow them, and you'll reap the performance and health benefits that come with getting the right quantity and quality of sleep.

## 1. Stay Away from Sleeping Pills

When I say sleeping pills, I mean anything you take that sedates you so that you can sleep. Whether it's alcohol, Nyquil, Benadryl, Valium, Ambien, or what have you, these substances greatly disrupt your brain's natural sleep process. Have you ever noticed that sedatives can give you some really strange dreams? As you sleep and your brain removes harmful toxins, it cycles through an elaborate series of stages, at times shuffling through the day's memories and storing or discarding them (which causes dreams). Sedation interferes with these cycles, altering the brain's natural process.

Anything that interferes with the brain's natural sleep process has dire consequences for the quality of your sleep. Many of the strategies that follow eliminate factors that disrupt this recovery process. If getting off sleeping pills proves difficult, make certain you try some of the other strategies (such as cutting down on caffeine) that will make it easier for you to fall asleep naturally and reduce your dependence upon sedatives.

## 2. Stop Drinking Caffeine (at Least after Lunch)

You can sleep more and vastly improve the quality of the sleep you get by reducing your caffeine intake. Caffeine is a powerful stimulant that interferes with sleep by increasing adrenaline production and blocking sleep-inducing chemicals in the brain. Caffeine has a 6-hour half-life, which means it takes a full 24 hours to work its way out of your system. Have a cup of joe at 8 a.m., and you'll still have $25 \%$ of the caffeine in your body at 8 p.m. Anything you drink after noon will still be near $50 \%$ strength at bedtime. Any caffeine in your bloodstream-the negative effects increasing with the dose-makes it harder to fall and stay asleep.

When you do finally fall asleep, the worst is yet to come. Caffeine disrupts the quality of your sleep by reducing rapid eye movement (REM) sleep, the deep sleep when your body recuperates most. When caffeine disrupts your sleep, you wake up the next day with a cognitive and emotional handicap. You'll be naturally inclined to grab a cup of coffee or an energy drink to try to make yourself feel more alert, which very quickly creates a vicious cycle.

## 3. Avoid Blue Light at Night

This is a big one—most people don't even realize it impacts their sleep. Short-wavelength blue light plays an important role in your mood, energy level, and sleep quality. In the morning, sunlight contains high concentrations of this "blue" light. When your eyes are exposed to it directly (not through a window or while wearing sunglasses), the blue light halts production of the sleep-inducing hormone melatonin and makes you feel more alert. This is great, and exposure to a.m. sunlight can improve your mood and energy levels. If the sun isn't an option for you, try a blue light device.

In the afternoon, the sun's rays lose their blue light, which allows your body to produce melatonin and start making you sleepy. By the evening, your brain does not expect any blue light exposure and is very sensitive to it. The problem this creates for sleep is that most of our favorite evening devices-laptops, tablets, televisions, and mobile phones-emit shortwavelength blue light. And in the case of your laptop, tablet, and phone, they do so brightly and right in your face. This exposure impairs melatonin production and interferes with your ability to fall asleep as well as with the quality of your sleep once you do nod off. Remember, the sleep cycle is a daylong process for your brain. When you confuse your brain by exposing it in the
evening to what it thinks is a.m. sunlight, this derails the entire process with effects that linger long after you power down. The best thing you can do is avoid these devices after dinner (television is okay for most people as long as they sit far enough away from the set). If you must use one of these devices in the evening, you can limit your exposure with a filter or protective eye wear.

## 4. Wake Up at the Same Time Every Day

Consistency is key to a good night's sleep, especially when it comes to waking up. Waking up at the same time every day improves your mood and sleep quality by regulating your circadian rhythm. When you have a consistent wake-up time, your brain acclimates to this and moves through the sleep cycle in preparation for you to feel rested and alert at your wake-up time. Roughly an hour before you wake, hormone levels increase gradually (along with your body temperature and blood pressure), causing you to become more alert. This is why you'll often find yourself waking up right before your alarm goes off.

When you don't wake up at the same time every day, your brain doesn't know when to complete the sleep process and when it should prepare you to be awake. Long ago, sunlight ensured a consistent wake-up time. These days, an alarm is the only way most people can pull this off, and doing this successfully requires resisting the temptation to sleep in when you're feeling tired because you know you'll actually feel better by keeping your wake-up time in tact.

## 5. No Binge Sleeping (In) on the Weekend

Sleeping in on the weekend is a counterproductive way to catch up on your sleep. It messes with your circadian rhythm by giving you an inconsistent wake-up time. When you wake up at the same time during the work week but sleep past this time on the weekend, you end up feeling groggy and tired because your brain hasn't prepared your body to be awake. This isn't a big deal on your day off, but it makes you less productive on Monday because it throws your cycle off and makes it hard to get going again on your regular schedule.

## 6. Learn How Much Sleep You Really Need

The amount of sleep you need is something that you can't control, and scientists are beginning to discover the genes that dictate it. The problem is, most people sleep much less than they really need and are under-performing because they think they're getting enough. Some discover this the hard way. Ariana Huffington was one of those frantic types who underslept and overworked, until she collapsed unexpectedly from exhaustion one afternoon. She credits her success and well-being since then to the changes she's made to her sleep habits. "I began getting 30 minutes more sleep a night, until gradually I got to 7 to 8 hours. The result has been transformational," Huffington says, adding that, "all the science now demonstrates unequivocally that when we get enough sleep, everything is better: our health; our mental capacity and clarity; our joy at life; and our ability to live life without reacting to every bad thing that happens."

Huffington isn't the only one. Jeff Bezos, Warren Buffet, and Sheryl Sandberg have all touted the virtues of getting enough sleep. Even Bill Gates, an infamous night owl, has affirmed the benefits of figuring out how much sleep you really need: "l like to get 7 hours of sleep a night because that's what I need to stay sharp and creative and upbeat." It's time to bite the bullet and start going to bed earlier until you find the magic number that enables you to perform at your best.

## 7. Stop Working

When you work in the evening, it puts you into a stimulated, alert state when you should be winding down and relaxing in preparation for sleep. Recent surveys show that roughly $60 \%$ of people monitor their smartphones for work emails until they go to sleep. Staying off blue lightemitting devices (discussed above) after a certain time each evening is also a great way to avoid working so you can relax and prepare for sleep, but any type of work before bed should be avoided if you want quality sleep.

## 8. Eliminate Interruptions

Unfortunately for those with small children, the quality of your sleep does suffer when it is interrupted. The key here is to eliminate all the interruptions that are under your control. If you have loud neighbors, wear earplugs to bed. If your mother likes to call at all hours of the night,
make certain you silence your ringer before you go to bed. If you had to wake up extra early in the morning, make sure your alarm clock is back on its regular time when you go to bed. Don't drink too much water in the evening to avoid a bathroom trip in the middle of the night. If your partner snores . . . well, you get the idea. If you think hard enough, there are lots of little things you can do to eliminate unnecessary interruptions to your sleep.

## 9. Learn to Meditate

Many people who learn to meditate report that it improves the quality of their sleep and that they can get the rest they need even if they aren't able to significantly increase the number of hours they sleep. At the Stanford Medical Center, insomniacs participated in a 6-week mindfulness meditation and cognitive-behavioral therapy course. At the end of the study, participants' average time to fall asleep was cut in half (from 40 to 20 minutes), and $60 \%$ of subjects no longer qualified as insomniacs. The subjects retained these gains upon follow-up a full year later. A similar study at the University of Massachusetts Medical School found that $91 \%$ of participants either reduced the amount of medication they needed to sleep or stopped taking medication entirely after a mindfulness and sleep therapy course. Give mindfulness a try. At minimum, you'll fall asleep faster, as it will teach you how to relax and quiet your mind once you hit the pillow.

## 10. When All Else Fails: Take Naps

One of the biggest peaks in melatonin production happens during the 1:00 to 3:00 p.m. time frame, which explains why most people feel sleepy in the afternoon. Companies like Google and Zappos are capitalizing on this need by giving employees the opportunity to take short afternoon naps. If you aren't getting enough sleep at night, you're likely going to feel an overwhelming desire to sleep in the afternoon. When this happens, you're better off taking a short nap (even as short as 15 minutes) than resorting to caffeine to keep you awake. A short nap will give you the rest you need to get through the rest of the afternoon, and you'll sleep much better in the evening than if you drink caffeine or take a long afternoon nap.

## Bringing It All Together

I know many of you reading this piece are thinking something along the lines of "but I know a guy (or gal) who is always up at all hours of the night working or socializing, and he's the number one performer at our branch." My answer for you is simple: this guy is underperforming. We all have innate abilities that we must maximize to reach our full potential. My job is to help people do that-to help the good become great by removing unseen performance barriers. Being number one in your branch is an accomplishment, but I guarantee that this guy has his sights set on bigger things that he isn't achieving because sleep deprivation has him performing at a fraction of his full potential. You should send him this article. It just might shake something loose.

After all, the only thing worth catching up on at night is your sleep.

