

30-Day Sleep Challenge

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Sleep Challenge Basics

You've probably noticed that a good night's sleep makes you feel good, while a poor night's sleep can make you feel anxious, foggy, irritable, or even downright sick. And, in fact, it's true that sleep is linked to a number of health factors. People who get enough sleep typically maintain and lose weight more easily, have better memory, cognition, and productivity, and reduce their risk of depression, heart disease, stroke and diabetes as compared to those who do not get enough sleep. Sleep is so important that the United States Centers for Disease Control and Prevention (CDC) recognizes insufficient sleep as a 'public health problem'.

If you're not getting enough sleep, you're not alone. According to the CDC, more than a third of American adults are not getting enough sleep on a regular basis. Here in Dallas, we're tracking pretty closely to the national average. The 2017 American Fitness Index report showed that only 67% of Dallas area residents were getting seven or more hours of sleep per day -- a factor contributing to Dallas ranking 38th of 50 on the index, which measures health and community fitness at the metropolitan level in the United States.

The good news is that most people can meet their sleep needs by practicing good sleep hygiene. Often, a few behavioral and environmental changes are all that's needed to turn a poor sleeper into a sound sleeper. And that's what this challenge is all about. Over the next 30 days, we'll guide you through a series of guidelines and challenges designed to help you create a more sleep-friendly environment, tweak your diet and exercise program to support your sleep needs, and introduce a consistent, healthy bedtime routine that promotes quality sleep.

How Much Sleep Do You Need?

The average American adult needs a minimum of seven hours of sleep every 24-hour period. As you might expect, individual needs vary from person-to-person, and change with age.

National Sleep Foundation: Recommended Sleep

Age	Hours of Sleep
65+ years	7 - 8
26 - 64 years	7 - 9
18 - 25 years	7 - 9
14 - 17 years	8 - 10
6 - 12 years	9 - 11
3 - 5 years	10 - 13
1 - 2 years	11 - 14
4 - 11 months	12 - 15
0 - 3 months	14 - 17

If on average your sleep duration falls within the “normal” range, this simple alarm clock test can help you assess whether you’re getting enough sleep to meet your own personal needs.

- If you typically wake without the aid of an alarm clock, or naturally wake up ahead of your alarm, you’re probably getting enough sleep. Congratulations!
- If you rely on your alarm clock to wake you and then struggle to wake up, you may not be getting enough sleep, or may need to adjust your sleep schedule to better fit your personal rhythm.

What Sleep Does For Your Body

Sleep can be thought of as the ultimate maintenance opportunity for your body. Your heart rate, respiration, and blood flow all begin to slow as you sink more deeply into slumber. As you fall further into deep REM sleep, your “muscle tone” (contraction of your muscles) reaches almost zero – none of your muscles are engaged in activity.

This period of rest gives your body the time it needs to repair damage to tissue and muscles, and rebuild stamina in your body. Human growth hormone, which is secreted in its highest quantities during sleep, plays a key part in the optimization of muscle and tissue recovery and growth.

Further physiological impacts include low respiration, blood flow, and heart rate, which allows your cardiovascular system time to rest. These hours of prolonged, lowered heart rate are extremely valuable to maintaining a healthy heart.

What Sleep Does For Your Brain

Sleep is also hugely beneficial to your brain. Most predominant scientific theories involve “consolidation” – the idea that the brain uses the restful times of sleep to categorize, organize, and store thoughts and memories in the mind.

Current research indicates that sleep may be a way in which memories and other important information can be moved from “short-term” storage in the brain into stronger, long-term memory banks. This allows the mind to empty itself of what it has processed during the course of the day and store important information for long-term retrieval.

Essentially, what happens in the brain during sleep can be thought of as similar to what happens in the body – a long period of rest allows the brain to restore itself and prepare for another day.

Improving Your Sleep

So how can you optimize your own sleep to achieve the physical and mental benefits enjoyed by those who regularly get enough sleep? During this challenge, we'll focus on evaluating and adjusting a series of environmental and behavioral factors that have a significant impact on sleep. Each week, we'll assign a mini-challenge to help you address the issues that most find hardest to change or overcome. Starting on January 13, and for each week of the challenge, you can expect to receive several emails per week from us including tips related to our primary areas of focus during the challenge.

Weekly Mini-Challenge Schedule

Week 1: Creating Your Ideal Sleep Environment & Routine

Week 2: Mindfulness & Exercise for Quality Sleep

Week 3: Strategic Consumption of Caffeine & Alcohol

Week 4: Tech-Free Bedtime

To track your personal sleep changes throughout the challenge, you'll need a notebook in which to track the following information each day:

Bedtime	Time of day
Wake Time	Time of day
Total Hours of Sleep	Duration in hours/minutes
Sleep Quality	Your personal rating of your sleep quality on a scale of 1 - 10, with 10 being the best.
Mood During Day	In particular note any moodiness, anxiety, sleepiness
# of Caffeine Drinks/Food	Include a tally of your intake of coffee, tea, soft drinks, energy drinks, chocolate milk, or chocolate
Time of Last Caffeine Consumption	Time of day
# of Alcoholic Drinks	Include a tally of your total number of servings of alcohol
Time of Last Alcohol Consumption	Time of day
Notes	Include notes regarding any changes you've made that you feel have impacted your sleep positively or negatively

We encourage you to track this information daily throughout the challenge; however, some changes to your sleep behaviors will take some time to impact your sleep duration and quality, so don't give up if you don't experience a change overnight.

While we won't be focusing as a group on every factor that influences sleep quality, we've collected the most current overarching guidelines here for your review before we officially kick off the challenge. So, read on to learn more about the four "big kahunas" in the sleep ecosystem:

- Sleep Environment
- Bedtime Routine
- Diet
- Exercise

Important note before you continue reading: The goal of the Sleep Challenge is to **strive for progress, not perfection**. As with a workout or diet change, it's **small changes and consistency that make a big difference**.

Sleep Environment

As silly as it may sound, your bedroom should be treated as your sleep sanctuary - a haven of peace and relaxation. Creating the ideal sleep environment involves creating a space for both physical and mental rest.

- **Keep it cool** - The average optimal sleep temperature is a cool 65 degrees, and a range between 60 - 67 degrees works for most. If you regularly wake up sweaty or shivering, try adjusting the temperature in the room, adding or removing blankets, or changing your pajamas. Cotton sheets and pajamas are breathable and can help prevent you from overheating.
- **Limit lighting** - Light and dark have an effect on sleep. Light stimulates alertness, and light exposure affects your body's sleep rhythms. All artificial light -- including light emitted by your digital devices such as your alarm clock, your phone, or other device dials, sensors and displays -- can make it hard to fall and stay asleep.

- **Choose a bed that's just right** - Your mattress should be supportive and comfortable, and your pillow should be as well. Your own body is your best guide to whether a firm or soft mattress and pillow is right for you. Your head, neck and back should feel supported, and your bed should be free of lumps and sags. If you experience acid reflux, elevating your upper body while you sleep may help to reduce symptoms. A wedge inserted under the top portion of your mattress may help, or consider an adjustable bed. If your mattress is more than 10 years old or your pillow is older than 2 years, it may be time for a new one. If a new mattress or pillow is not currently in the budget, that's okay. Work on adjusting other environmental elements to optimize your sleep.
- **Reduce noise** - Turn off your TV, radio or other streaming device and, for new parents, lower the sound on the baby monitor. While you likely have the ability to control sound within your home, outside noises can be harder to manage. Some find it useful to have white noise machines, fans, or other sources of static background noise to cover up noises like neighbors, dogs barking, and other distractions.
- **Make your bedroom about sleep** - Work and entertainment are important, but ideally, your office, computer, and television all stay out of the bedroom.

Bedtime Routine

Over time, it can be easy to develop a nightly routine that inhibits your natural ability to unwind from the hustle and bustle of daily life. Having a glass of wine just before bed, staying up late watching television, or powering through those last few emails on your phone are just a few of the habits that can severely impede your brain's ability to slow down and prepare for slumber. Creating a consistent, sleep-promoting evening or bedtime routine is important to helping you achieve better sleep. After all, small children have a very routine bedtime ritual, and they (generally) sleep very well. Why would adults be any different?

Sleep schedule

First and foremost, going to bed and rising at a consistent time each day helps your body know what to expect, and can help you fall asleep more easily and wake up without aid.

You should ideally maintain the same schedule, plus or minus 20 minutes, every day of the week, including weekends.

If your job, school or personal commitments are flexible, you may be able to design a schedule that works seamlessly with your personal sleep rhythms. However, not everyone will be so lucky. Much like children respond well to a consistent bedtime, assigning yourself a specific bedtime hour creates a signal to your body that it's time to wind down, and ultimately helps you fall asleep more quickly and sleep more soundly. Even if your daytime commitments move you away from your ideal sleep rhythm, it's possible to create a consistent sleep schedule that will support quality sleep.

If you regularly have trouble sleeping, it is advisable to avoid napping (though some exceptions apply, as in the case of some shift work schedules). As we've discussed, each person needs only a certain amount of sleep each day. If you nap during the day but are having trouble sleeping at night, this could be the result of your body having achieved as much sleep as it needs throughout the day. Eliminating naps could help you sleep longer in one stretch.

Shift workers who need to manage between different day and night schedules will have the hardest time identifying and maintaining a sleep-supportive schedule. The UCLA Health article [Coping with Shift Work](#) includes detailed guidance for workers following a variety of different shift schedules.

Pre-sleep routine

Get yourself in the mood for rest by creating a calming and relaxing pre-bedtime routine. This may include taking a warm bath or shower, sipping a cup of herbal tea (though not too much, or it could cause you to wake to empty your bladder), read a book, listen to a podcast, meditate, or stretch. Adjust your lighting to dim, and set your thermostat to your preferred sleep temperature.

You may have noticed that neither watching TV nor catching up on Facebook are included in this set of recommended pre-sleep activities. That's purposeful.

Avoid TV, tablets and phones before bed to protect yourself from the stimulating blue light they emit. Many advise avoiding screens for at least a full hour before bedtime.

Don't force it

If you've lain in bed for 20 minutes and can't fall asleep, try getting up and engaging in a restful activity such as reading, listening to music or listening to a podcast. Keep the lighting dim, and return to bed when you feel more drowsy.

Diet

You may be familiar with the age-old debate: does a balanced diet allow you to sleep better, or is it sufficient sleep that motivates you to eat a healthy, balanced diet? Ok, so it's not really an age-old debate, but it should be because the two are very much related and dependent on each other. The answer to both questions above is a resounding "YES!" The fact of the matter is that a reciprocal relationship exists between sleep and diet.

Let us explain:

Sleep is vital for our body—its biological and metabolic processes—as well as our mind to function efficiently and effectively. When we are sleep deprived, we suffer memory problems, immune system issues, and we experience fatigue and inflammation in the body. Furthermore, our levels of the important mood and energy regulating hormones norepinephrine, dopamine, and serotonin, which are secreted during sleep, are significantly impacted. In an attempt to compensate for the lack of energy and hormones, our brain triggers cravings for specific foods, and generally, those foods are high in fat and sugar. Additionally, sleep deprivation increases hunger signals to our brain and reduces our ability to feel satiated.

In complementary fashion, what you eat greatly impacts your ability to fall and stay asleep. Our diet provides us with nutrients necessary for the production of sleep-inducing hormones. Melatonin, a powerful hormone that controls our sleep-wake cycles, is a derivative of tryptophan, an amino acid found in eggs, bananas, dairy, nuts, and certain meats. Tryptophan breaks down into serotonin and, eventually, into melatonin.

So the bottom line is this:

By eating a healthy, balanced diet, you're providing your body with the nutrients it needs to sleep well, and by sleeping well, you avoid the energy crash-and-burn that leads to eating unhealthy foods. There are many diets on the market that can provide you with more detailed guidelines for foods to eat and to avoid and when to eat them, and we encourage you to select and follow one - or meet with a dietician or nutritionist - if you feel you would benefit from more structured and specific nutritional guidance.

All things being equal, if you only make two dietary changes during the 30-Day Sleep Challenge, these two will have the most significant near-term impact on your sleep quality:

1. Avoid alcohol prior to bed

There is a catch-22 relationship between sleep and alcohol. While, on the one hand, it may aid in relaxation and allow you to fall asleep quicker and easier, studies have shown that alcohol causes you to sleep less deeply and wake more frequently. You may also experience night sweats, headaches, or nightmares when consuming alcohol too close to bedtime.

2. Avoid caffeine and nicotine

Both caffeine and nicotine are stimulants, which means it is their job to stimulate or inhibit sleep. Consuming either substance too close to bedtime may make it difficult to fall and stay asleep. Also, be careful about hidden caffeine sources, such as in chocolate, protein bars, decaf coffee, and even some medications.

Exercise

Yes, just as exercise can help positively impact your health overall, it can also positively impact your sleep. Adding just one 10-minute walk per day could be enough to improve your sleep. As with diet, there are a myriad of guided exercise programs and sporting opportunities available in most communities to get involved in if you feel it will help you stick to a regular exercise routine. You should select a program that fits your schedule, your ability, your current health level and your age.

Yoga

With its focus on breath and attention to the body, yoga - particularly restorative yoga poses - can be a good way to prepare for sleep.

Relaxation techniques

While perhaps falling outside of the regular definition of exercise, incorporating relaxation techniques in your routine are recommended to reduce anxiety and stress, two common emotions that can greatly inhibit your ability to fall asleep. The goal of relaxation techniques is to calm the mind and eliminate preoccupations by focusing solely on sensations within your body and your breath. Training your mind through meditation to get rid of noise, literally and figuratively, will have a profound effect on your sleep habits.

Still Experiencing Sleep Issues?

If, after completing the 30-Day Sleep Challenge and following the guidance provided throughout, you're still unable to achieve quality sleep - or wake feeling lethargic or fatigued - a disorder such as narcolepsy, sleep apnea, or restless leg syndrome may be to blame. Sleep disorders are surprisingly common, yet often go undiagnosed. Happily, sleep disorders are also treatable, usually through a combination of behavioral changes like those we explore in the sleep challenge, along with medical intervention.

A sleep specialist can diagnose sleep disorders utilizing a sleep study, which measures various biological, neurological, and physiological processes that occur during sleep. The study determines if there is an abnormality that could indicate the presence of a sleep disorder. In the case of sleep apnea, for example, the study will measure how many times the patient stops breathing for 10 seconds or longer per hour, which indicates not only the presence of the disorder, but also its severity.

There are two types of sleep studies used to diagnose sleep disorders: polysomnogram (PSG) and home sleep apnea testing (HSAT). Both types of studies are non-invasive and virtually painless.

A polysomnogram (PSG) is an in-lab sleep study that requires an overnight stay in a testing facility. PSGs are performed by registered polysomnographic technologists (RPSGT). The technologist utilizes a series of strategically placed monitors and electrodes to track the brain, eyes, heart, breathing patterns, carbon dioxide and oxygen levels, and other biological functions.

Home sleep apnea testing (HSAT) is a portable monitor that allows the patient to test in the comfort of his/her home. The healthcare professional overseeing the patient will give a demonstration on proper usage of the device, then the patient will complete the study at home and send or physically transport the device back to the office for analysis. After your sleep study is completed, the data will be reviewed to identify any prevalent sleep issues that need to be addressed. If a sleep disorder or problem is uncovered, your doctor will discuss treatment options with you.

If you believe you may have a sleep disorder, consult with a sleep specialist for proper diagnosis and treatment.