

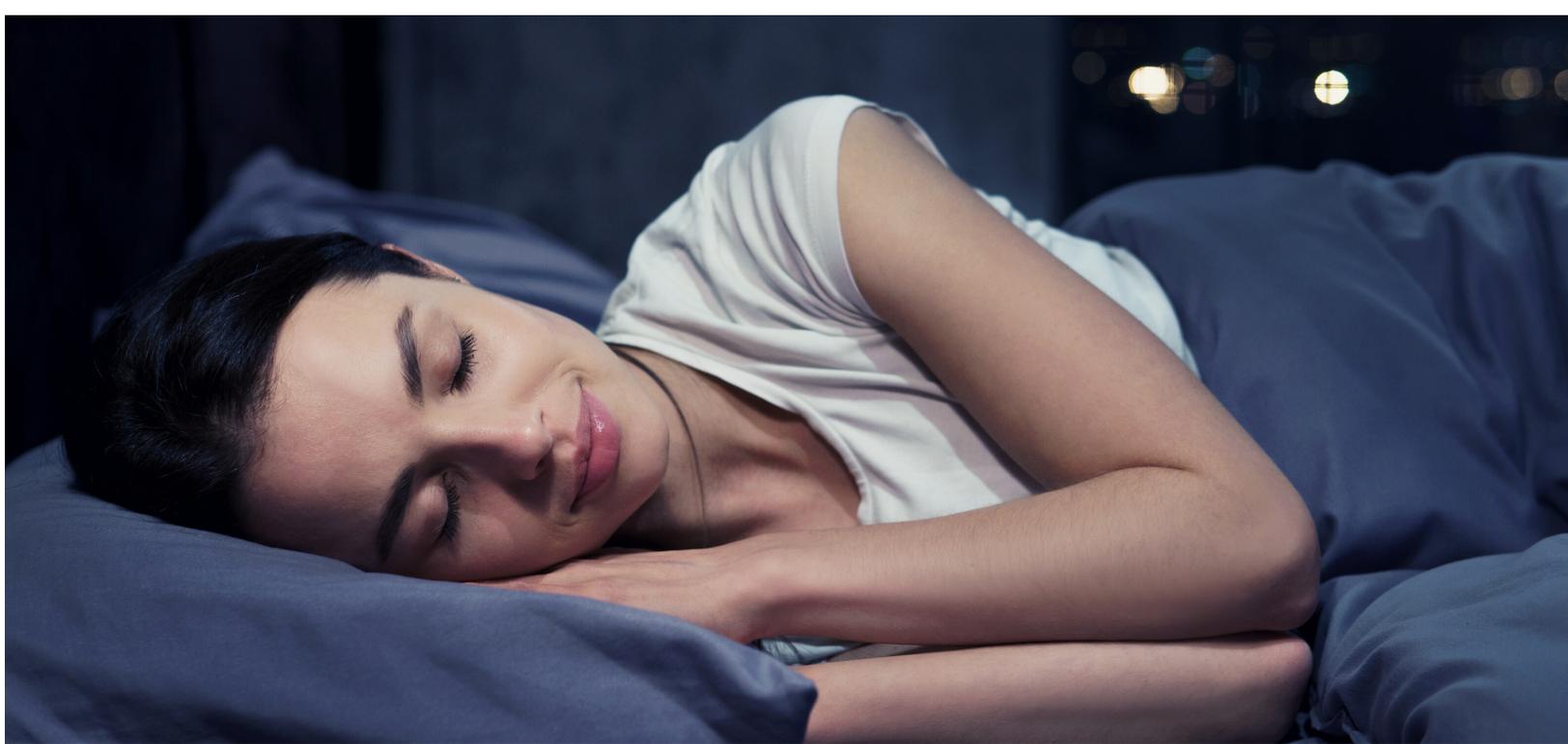


DR. LISA O. BALLEHR DO
Functional Medicine
Orthopedic Sports Medicine / Radiology

GET A GOOD NIGHT'S REST!

Why Sleep Is Essential To Good Health

Your Functional Medicine Guide to Better Sleep



Get Your "ZZZZ"s

Sleep... the thing most of us love, but can't get enough of.

We fight our fatigue and stay up late. We respond to "just a couple" more emails... or watch another couple episodes of Netflix.

We need to stop doing this! Sleep is vital to great health, so why are we sabotaging it?

I've created this guide to give you some tips on how to have a healthy relationship with sleep, so you can feel well rested and help your body reach it's optimal health.

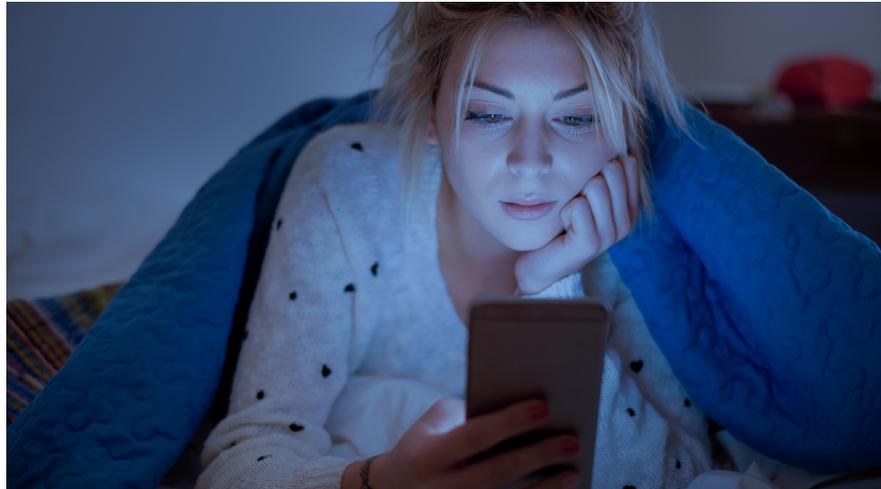


Why Do We Need Sleep?

We spend on average 26 years of our entire life sleeping! There must be crucial evolutionary reasoning for this. When we lay down at night to sleep, our brain is able to process all that we experienced throughout the day. From tastes to sights to smells to emotions. It even integrates our conscious, subconscious, and unconscious experiences as well. This process allows us to understand the world and to help create our reality. The following list highlights why sleep matters. If you brush off the importance of solid sleep, you could be increasing your chance to suffer from one or more of these health issues.

SLEEP DEPRIVATION CAN LEAD TO:

- High Blood Pressure
- Weight Gain
- Cognitive Loss
- Diabetes
- Heart Disease
- Premature Liver Failure
- Memory Loss
- An Unhealthy Gut
- Chronic Inflammation



How Much Sleep Do We Need?

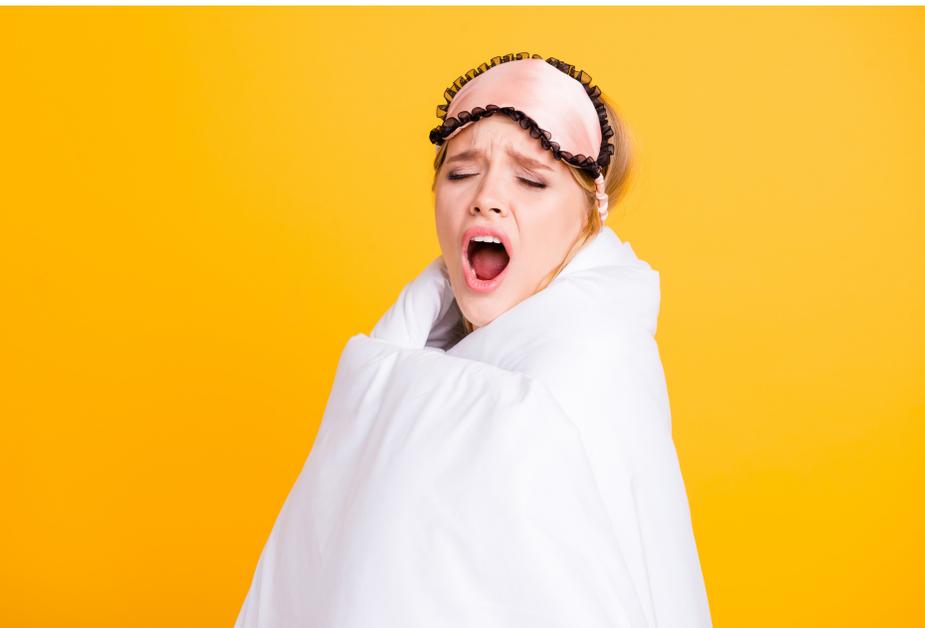
Everyone's body requires a different amount of sleep. However, depending on our age, we might require more or less. Babies and teens require loads of sleep because they are making leaps and bounds in terms of physical and cognitive development. The average adult needs around 7-9 hours. It's essential though, that when you wake up you feel well rested and alert instead of groggy and sluggish. You might require an extra hour or two depending on your body's needs. As you get into a healthy sleep routine and practice, you will feel refreshed on a regular basis and will be ready to face the day.



Importance of Sleep Cycles

When we lay our heads down at night and drift into sleep, our brain goes through different sleep cycles. Each stage of sleep is designed for a specific purpose.

THE STAGES OF OUR SLEEP CYCLES ARE:



- Stage 1
- Stage 2
- Stage 3
- Stage 4
- REM

Stage 1

This stage is when you transition from being awake to falling asleep. Your brain produces alpha and beta waves, and the movement of our eyes start to slow down. You may be woken easily and/or still feel aware of your surroundings. You could also feel the sudden experience of a dream. Many of our “cat naps” are in the stage 1 sleep cycle.

Stage 2

Stage 2 is also a light stage cycle, where our brain wave frequency increases a bit here and there. Your heart rate begins to slow down, and your body temperature decreases a bit. This is a way that your body is preparing to get into a deep sleep. Most of the time you spend sleeping will be in this stage.



Stage 3 & 4

These are the deepest sleep stages you'll experience. It's harder to get woken up when you are in this stage of the sleep cycle. Your brain produces delta waves, which are known as slow waves. Your eyes are still, there is no eye movement. Regeneration of your body occurs in stage 3 and stage 4 as well. Your cells are restored, and muscles as well as tissues repair themselves. Your immune system is boosted at this time, and growth hormones are released from the anterior pituitary gland. This allows your body and brain to develop.



REM

We've all heard of it, but what exactly is the REM sleep cycle? REM stands for Rapid Eye Movement. This occurs about 90 minutes after we fall asleep, and then occurs about every 90 minutes throughout the night.

Our heart rate and breathing increases, and our brain activity increases significantly. It's during this stage that we experience our dreams. Interestingly, our body releases a chemical that paralyzes us so that we don't act out our dreams. However, our eyes are an exception to the paralysis and will move according to what we are dreaming about- back and forth if we are watching a tennis match, up and down if we are going up and down stairs, etc.

This is an extremely vital part of sleep because the REM stage plays a role in our learning and memory function. It's when we process and store all our information from the day.



Does It Matter When I Go To Sleep?

Going to bed at a decent time is a critical factor in getting quality sleep. Early in the night (from 9pm to midnight) is when we are in non-REM sleep, which is the more restrictive period. Earlier in the morning is when the REM cycles get longer and when we experience our lighter sleep. Getting to bed at an earlier time will allow your body to get deeper sleep, so your body has more time to repair and balance out your hormone levels.

This is why people who work on night shift may have poorer health. They don't get as much deep sleep because it's going against our circadian rhythm. Our internal clock has been formed over thousands of years and connects with light and dark (sunrise and sunset). When we experience darkness, our body releases melatonin which helps to make us tired. We can't expect our bodies to adjust to this opposite schedule that doesn't make sense naturally.

How is Sleep Related to Your Well-being?

SLEEP AND MEMORY

When you go to sleep, your mind reprocesses everything you saw, heard, tasted, and smelled. This is vital to your memory formation because it allows our brain to do work without our conscious self knowing that it's doing it. This allows us to wake up in the morning with a new perspective since we had time to process it and store it in our minds.





SLEEP AND MEMORY (CON'T)

If you get stuck on something at work, and there doesn't seem to be a way to solve it, try getting some rest. Your brain will process that information from the day, and you could wake up with a fresh insight. A new solution might be plainly obvious.

SLEEP AND ANXIETY

Anxiety has been correlated to insomnia and additional sleep issues. Actually some studies show that sleep and anxiety have a bidirectional relationship meaning that they both can effect the other. If you aren't getting enough sleep, it could cause an increase in anxiety. If you are dealing with anxiety, it could be keeping you from getting a good night's rest, continuing the cycle. If you focus your efforts on better sleep, it can put a stop to this cycle.

Childhood sleep problems also predict higher levels of anxiety and depression. Making sure your children get the right amount of sleep is vital not just for their moodiness, but for their mental health as well.



SLEEP AND WEIGHT LOSS

Individuals who have disrupted sleep, and therefore reduced sleep, have metabolic effects that lead to weight gain. Women who slept 5 hour or less, gained more weight over 16 years compared to women who slept 7 hours. That means that the sleep you get now could affect your future weight and incidence of obesity.



SLEEP AND MENTAL HEALTH

While many mental disorders may cause sleep disorders, and be labeled as a symptom of a mental disorder, one study shows how sleep can actually be a causative factor for mental health issues. When cognitive behavioral therapy (CBT) was introduced in an attempt to improve sleep, not only did patients see their insomnia decrease, but their paranoia and hallucinations also were reduced.

SLEEP AND MOOD

Lets face it. When you are fully rested, you are more likely to be in a better mood, have more patience, and react better in stressful situations. When we are sleep deprived, we tend to get more moody, and are quicker to snap at other people. Let's do us all a favor and get the rest that we all so desperately need!

If you want to start changing your health and life for the better, start with a good night's rest. Getting enough sleep will do wonders to your mind and body. Don't take for granted what resting up can do for you. Here's a couple tips on how to sleep better naturally, so you can finally get a good nights rest. Give a couple of these a try and see what works best for you.





What Could Be Affecting Your Sleep?

Some immune mediated diseases such as inflammatory arthritis, infections such as lymes and mold toxicity may cause significant sleep disturbances by directly affecting the vagus nerve. There are specific therapies to help alleviate inflammation affecting the vagus nerve including vagus nerve stimulation.

Several other disease processes lead to sleep disorders as well, most commonly, central or peripheral sleep apnea. I test several people for sleep apnea in my practice. If I recommended that you should consult with a sleep specialist it is vital to your health to follow up with that sleep specialist.

If you believe you may have sleep apnea and have not discussed it with me yet, please contact me for an easy at home one night test kit.

What Should I Do If I Have Sleep Issues?

SLEEP APPS

There are some great Apps available that can help you sleep better and help with tracking your sleep so you can better understand your sleep issues.

Give these Apps a try:

- [Relax Melodies – Sleep Sounds](#)
- [Pzizz – Sleep, Nap, Focus](#)
- [Relax & Sleep Well – Hypnosis and Meditation](#)
- [Sleep Cycle – Smart Alarm Clock](#)
- [White Noise Lite](#)





SUPPLEMENTS

There are specific supplements that can help improve sleep. Since many supplement recommendations are based on each individual patient's personal health profile, I will work with you to determine the best supplements and dosage that's right for you.

CORRECT HORMONE IMBALANCES

It's important that we correct your biochemical processes, most importantly circadian rhythm hormone cycles, to help improve your sleep quality and quantity.



If you believe you need additional help with sleep, please contact me. Together we can get to the root cause of your sleep issues to maximize your health.



10 Ways To Better Your Sleep

1

Avoid screen time (tv, phone, electronics) an hour before bed. If you do need to use them, use blue light blocker protectors that come in the form of screens or glasses.

2

Keep your phone on the opposite side of your room or in a different room completely to avoid any temptations of mindlessly scrolling through the night

3

Use soft light in your room (i.e. salt rock lamp)

4

Use black out curtains

5

Meditate or do restorative yoga before bed

6

Write or think about the positive aspects in your life. Practicing gratitude can help ease your mind and relax.

7

Don't exercise right before bed -however light stretching and gentle yoga is beneficial

8

Avoid caffeine after 3 pm (coffee and caffeinated teas will have to wait for tomorrow)

9

Go to sleep and wake up at the same time every day

10

Use essential oils like lavender or chamomile