



Fortify Health Coaching

Sleep is arguably your biggest weapon when it comes to making training progressions, improving your health and achieving any and all physique goals.

Your body relies on sleep to function. A lack of sleep has downstream effects on all of the body's systems. You may feel the impacts of poor sleep in your ability to think clearly, responsiveness to a fat loss phase, menstrual cycle regularity and fertility ... the list goes on!

At the core of our sleep patterns lies something called the circadian rhythm, which acts like an internal clock guiding when we feel sleepy or awake. This rhythm is influenced by factors like light and darkness, helping our bodies know when it's time to rest. However, when this rhythm gets thrown off track—maybe due to irregular sleep schedules or excessive screen time—it can lead to problems.

Disrupted circadian rhythms have been linked to issues like insulin resistance, making it harder for our bodies to regulate blood sugar, and impaired cognition, affecting our ability to think clearly and focus. By understanding and respecting our circadian rhythms, we can take steps to improve our sleep and overall well-being.

While this is not an exhaustive list, here is a general overview of some of the systems and processes impacted by poor sleep:

The Effects of Inadequate Sleep

Hunger & Appetite

After a night of less sleep, the hunger hormone ghrelin increases and leptin, your satiety hormone, decreases. You likely will notice more hunger, and may have a harder time sticking to your nutrition plan after a night of less sleep.

Cognition & Mood

With less than 8 hours of sleep, you can notice a decreased attention span, impaired working memory and challenges with critical thinking.

Stress

Lack of sleep is a stress point to your body and elevates cortisol (stress hormone). Chronically elevated cortisol or a shifted cortisol patterning negatively affects many bodily systems

Muscle Recovery and Growth

A lack of sleep can hinder your physique progress. In order to grow muscle, we do need inflammation, but a lack of sleep increases the wrong kind of inflammatory response (pro-inflammatory cytokines). This can lead to increased fatigue and symptoms of overtraining if left unchecked in the long term. These changes compromise the ability of the body to synthesize new muscle proteins.

Gym Performance

A lack of quality sleep will eventually lead to decreased strength, sprint times, endurance and impact sport specific skills.

Digestion

A lack of sleep can exasperate previous gastrointestinal issues, making them worse. The gut microbiome may be highly influenced by our circadian rhythm.

Thyroid

Thyroid Stimulating Hormones (TSH) is regulated by the circadian rhythm. Alterations to sleep and wake times, like shift work, can increase the chances of developing autoimmune hypothyroidism.

Reproduction

If you aren't getting adequate amounts of sleep, it can lead to menstrual irregularities and affect ovulation. A lack of sleep is a stressor and when the body senses excess stress it will start to divert resources away from reproduction. Not a good time to be making babies! In both men and women, a lack of sleep can decrease testosterone and libido.

Insulin Sensitivity

With just a single night of poor sleep, there will be impairments to glucose tolerance and insulin secretion. If your body doesn't use sugar properly, it can cause problems with how your body stores fat and builds muscle. In your day-to-day life, this might mean feeling more tired or sluggish, having trouble concentrating in school or at work, and feeling hungrier than usual. It could also make it harder to control your cravings for sugary or unhealthy foods because your body is trying to find quick energy when it's not getting enough rest.

Improving Your Sleep Quality

Sleep is the primary healing time for your body. We certainly recognize that while at certain times in life, your sleep might take a hit (having a new baby, final exams, work deadline etc.) and it will be a struggle to get the recommended 7-9 hours a night. That said, we do know consistent sleep patterns can be just as important as total sleep hours. With our clients who are in a stage of life where the 7-9 hours just isn't happening, we like to work on sticking to a regular sleep and wake time in order to mitigate some of the negative effects of less total sleep. The goal should always be to come back to getting that good quality rest for optimal health and longevity.

Quality is just as important when it comes to quantity. Ensuring adequate time in the stages of deep sleep and REM (rapid eye movement) sleep is a must for brain health and emotional processing. How do we go about ensuring whatever sleep you do get is quality? Doubling down on sleep hygiene is one element.

Sleep hygiene is not just brushing your teeth before bed and washing your sheets...it's all the different habits and practices you might use to get quality rest and support a healthy circadian rhythm.

Our Favorite Sleep Hygiene Practices

- 1. Avoid doing anything stressful/overly stimulating before bed (scary movies, arguments, the news, self help books, bill paying etc.)
- 2. If in a disagreement, try to achieve a resolution or further plan of action before bed.
- 3. Try to stick to a consistent schedule for bedtime and wake times.
- 4. Take a hot shower or Epsom salt bath an hour before bed to cool your core body temperature.
- 5. Keep the bed for sleep and sex only... not working or eating.
- Try implementing 10-15 minutes of mobility/yoga before bed, or meditating for a grounding practice. <u>Insight Timer</u> is a fantastic free app with meditations and guided breath work.
- 7. Keep your room cool, ideally between 60 to 67 degrees Fahrenheit. Use breathable bedding, sleep in cool clothing... or none.
- 8. Wait until you're tired to get into bed. Don't stay in bed more than 30 minutes trying to fall asleep. Read a book or do something relaxing instead.
- Reduce beverages to sips leading up to bed time, aiming to meet your water goals 2 hours before bed. Herbal teas can be a nice thing to sip on to promote sleep.
 <u>Chamomile</u> and <u>passionflower</u> can help lower anxiety and aid sleep.
- 10. A big meal before bed isn't ideal, but a higher protein snack with moderate carbs & fats can help you fall and stay asleep.

- 11. Put the phone away. If you do look at your phone before bed, make it to be to set up a sleep meditation or sleep music to listen to until you fall asleep. See number 5 for recommendations.
- 12. We suggest wearing <u>blue light blocking glasses</u> if you watch TV in the evening or are looking at computer screens.
- 13. Whatever is on your to-do list causing you to avoid winding down for bed, schedule a time within the next few days to address it.
- 14. Consider a <u>Magnesium supplement</u> before bed. 250-400 mg of magnesium glycinate before bed might help you to fall asleep.
- 15. If you struggle to turn your mind off to fall asleep, try brain dump journaling or writing down your to-do list for the next day an hour or so before bed.
- 16. Avoid caffeine -containing beverages or foods late in the afternoon, or ideally abstain at least 6 hours before bed time.
- 17. Dim the lights in your house a few hours before bed to signal to your body that it's time for sleep.
- 18. Try to get sunlight on your eyes as soon as possible after waking to promote wakefulness during the day and better sleep quality at night.

If getting more quality sleep sounds daunting, the last thing we want is anxiety over your ability to fall or stay asleep to impact your sleep. Our recommendation is to start slow. Aim for 7 hours of sleep if you are currently only getting 5. Pick one or two items from the list above to implement to improve your evening routine and sleep environment. It may sound silly, but scheduling your sleep in your day can be a game changer if you struggle to prioritize that beauty rest!

While focusing on evening routine and sleep hygiene are some of the first areas we look at when someone is struggling with getting enough sleep, it isn't the only thing we consider. Just as sleep can impact certain hormones, imbalances in hormones can negatively affect your ability to fall and stay asleep.

For example, progesterone is a sex hormone in females that is <u>produced by the corpus</u> <u>luteum</u> of the ovary following ovulation. Progesterone has many roles, including promoting sleepiness. If progesterone levels are too low, it could disturb your sleep.

In such instances, our approach extends beyond addressing sleep hygiene. We would investigate the underlying causes of progesterone deficiency, as it is the potential main contributing factor to poor sleep. Factors contributing to diminished progesterone include perimenopause, postmenopausal status, irregular ovulation or anovulation. Interventions would be tailored to address these specific circumstances to enhance sleep quality. Whatever the case, getting to the "root cause" is key! When you start to get enough sleep and regulate your circadian rhythm, performance in the gym, cognition mood and overall recovery will improve, as will metabolic and hormonal health. It really is called beauty sleep for a reason. Physique progress is made when we optimize all those internal processes.

If you need guidance to improve your lifestyle habits and routines, or perhaps someone to help you unpack root causes to your poor sleep quality, reach out to as at **info@fortifyhealth.com** for personalized guidance.

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