

WELCOME TO

MODULE SEVEN

# Sleep & Health



# Welcome



## TO WEEK 7!

This week, we're going to be considering a pillar of health that is often overlooked, and that is: sleep.

Sleep influences our health & wellbeing in countless ways – which is something you'll be learning about this week.

It's widely considered an important variable in immune health as increasing evidence suggests that poor sleep quality and quantity may be a driver for the development and progression of inflammatory diseases

You'll also learn about many of the things that can affect the quality of our sleep, and more importantly: what you can do about it.

## LET'S GET STARTED

## THE IMPORTANCE OF SLEEP

Here's the truth: Sleep matters. A lot.

Getting a good night's sleep is one of the most important things people can do for their overall health and well-being.

While sleep is often ignored and taken for granted, there's a lot of research that has shown that it is most definitely a pillar of good health.

It's vital for restoration and renewal for the body and the mind.



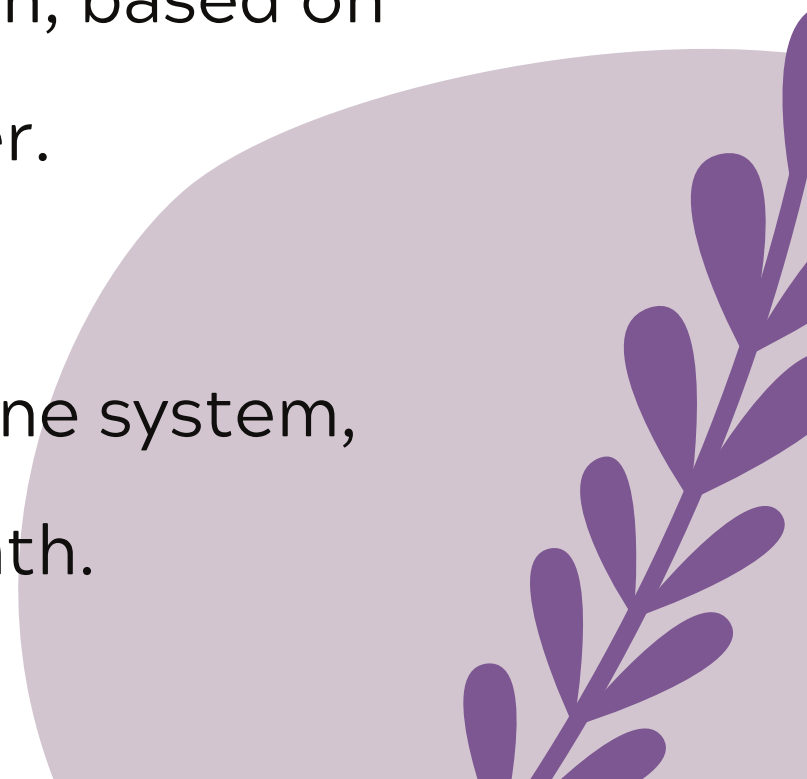
## HOW MUCH SLEEP DO WE NEED?

Several organizations have developed sleep-related recommendations, and most adults need between 7-9 hours of sleep each night.

It's important to note that someone with an autoimmune disease doesn't need more sleep than the average person, per se, but rather they need a better quality of sleep.

In modern society, insufficient sleep, also called chronic partial sleep deprivation, based on sleeping for less than 7 hours per night, may be the most common sleep disorder.

Just as it's been hypothesized that sleep has a restorative function on the immune system, it is likewise believed that decreased sleep is linked to increased illness and death.



## WHY IS SLEEP IMPORTANT?

The short-term impact of insufficient sleep starts with feeling tired, irritable, and sluggish.

- increased sleepiness,
- increased reaction time,
- decreased short-term memory,
- decreased performance on any task that requires memory or response time.



## THE LONG-TERM EFFECTS OF SLEEP DEPRIVATION:

- decreased mental abilities
- places their physical health at substantial risk
- dramatically lowered quality of life.

In fact, research indicates that sleeping less than 6 to 8 hours a night increases the risk of early death by approximately 12%.

## QUESTIONS

Be honest with yourself: are you getting sufficient sleep on a regular basis?

How does it feel whenever you don't?

What do you think your main sleep problem is?



## THE CONNECTION BETWEEN AUTOIMMUNE DISEASE AND SLEEP



The connections between autoimmune diseases and sleep disruptions are vast and varied. Some diseases target areas of the body that function in the regulation of sleep, some cause symptoms that disrupt sleep, while others impact sleep through their treatment methods.

Here are some of the common connections:

- **Fatigue**

- The production of inflammatory cytokines is enhanced in those with autoimmune diseases. These cytokines play a key role in regulating our physiological functions (mood, cognition, sleep). With these constant dysregulations, fatigue is a common outcome. In addition, the overproduction of inflammation forces our bodies to expend more effort to complete otherwise simple tasks and react to stimuli. In a survey conducted by the American Autoimmune and Related Diseases Association, more than two-thirds of respondents reported profound and debilitating fatigue that interfered with their simple everyday tasks. When we experience fatigue of this magnitude, it causes disruptions to our natural circadian rhythms, and thus our quality of sleep diminishes. This leads to more stress which continues to make sleep more challenging to achieve.



- **Insomnia**

- Those with autoimmune diseases often share comorbidity with insomnia. This is usually due to constant chronic pain from the body's impulse to attack our joints and connective tissues. The combination of the inflammation and the targeted tissue's response to the inflammation is simply painful. This chronic pain severely disrupts our sleep, leading to the development of insomnia.

- **Sleep Apnea**

- There was a recent study that found that untreated sleep apnea can actually increase the risk of developing certain autoimmune diseases - such as rheumatoid arthritis and psoriasis. The study showed that those with untreated sleep apnea had abnormal levels of cytokines. This suggests that poor sleep and insufficient levels of oxygen supply can affect our cytokines - which are key players in regulating our mood, cognition, and sleep.

- **Medications**

- Medications and steroid treatments can also trigger sleep issues, as well as restless leg syndrome (which makes sleeping nearly impossible to manage).







## WHAT YOU NEED TO KNOW ABOUT CAFFEINE AND SLEEP THE IMPORTANCE OF SLEEP

### Facts about Caffeine:

- Caffeine is a stimulant. It blocks the effects of a neurochemical called adenosine that makes you feel sleepy. It also increases your dopamine levels so you become more alert.
- Caffeine can disrupt your body clock because it suppresses melatonin.
- Studies show that moderate use boosts your mood and mental performance, and may lower your risk for many serious conditions including certain cancers, diabetes, heart disease, and Alzheimer's.

## HOW TO MONITOR & CONTROL YOUR CAFFEINE INTAKE:

**Be aware of other sources:** While coffee and tea account for more than 90% of the caffeine in the average diet, there are some additional sources that may surprise you, like chocolate, cola, and even some over-the-counter and prescription medications.

**Limit your caffeine consumption** to less than 400 milligrams each day. That's about 4 cups of coffee.

**Pay attention to the size** of those cups. A single giant mug or oversized fast food cup could put you over the limit.






**Caffeine takes about 20 minutes** to go to work, and the effects can last for 6 hours or more.

If you want it out of your system by bedtime, have your last cup of coffee in the early afternoon.

**Avoid energy drinks and caffeine powder** that deliver large amounts of caffeine very quickly. They can contribute to heart conditions and anxiety, especially when combined with alcohol.

**On the other hand, water is a great supplement to coffee drinking.** Drinking a glass of plain water first thing in the morning may help you wake up with less coffee than usual.



# Questions

## FOR REFLECTION:

What are your current habits around caffeine consumption?

Is this something you would like to change?

What is the first step you can take?



## HOW TO IMPROVE YOUR SLEEP HABITS


Try some of these sleep tips so you can get a better night's sleep and wake up feeling energized:

**Make your bedroom your sanctuary.** Keep your bedroom neat and quiet so you feel calm upon entering. Move the television out of the bedroom.

**Keep your room dark.** Your body is designed to sleep when it's dark. Consider using these curtains to fully darken the room.

**Exercise during the day.** Exercising during the day releases stress hormones to help you feel more relaxed. The energy you receive from daytime exercise will give you more restful nights because your body will be less stressed and more relaxed. However, it is important to avoid exercise within three hours of bedtime as this can actually interfere with sleep.





**Make yourself a bedtime routine.** Create a bedtime routine that involves things that make you tired, such as soft music, a warm shower, light reading material, or journaling.

Television stimulates the mind too much, which can cause difficulty sleeping. Try recording your favorite nighttime TV shows to watch the next day, rather than staying up late. Opt for listening to white noise instead.

**Leave daytime stress outside.** In order to rest, you'll want to put aside things that keep your mind whirling. By keeping a calendar of things to do the next day, you can put your mind to rest.

## QUESTION

Which strategy to improve your sleep will you begin to implement this week?



# Homework

FOR THIS WEEK:



Journal about your current sleep habits. Are you getting enough sleep? Do you have daily habits that are not in support of optimal sleep currently? What might need to change?



Start implementing one change to improve the quality and/or quantity of sleep you get each night.



Continue practicing the other healthy habits and lifestyle changes you've been implementing from prior weeks (for example with your nutrition, and stress levels). Are you finding it challenging to incorporate all these new changes? Let's discuss this on our next call.